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

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): December 7, 2022

AMCI ACQUISITION CORP. II

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

Securities registered pursuant to Section 12(b) of the Act:

001-40282 (Commission File Number) 86-1763050 (IRS Employer Identification No.)

600 Steamboat Road Greenwich, Connecticut (Address of principal executive offices)

06830 (Zip Code)

(203) 625-9200

(Registrant's telephone number, including area code)

Not Applicable

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Units, each consisting of one share of Class A common stock and	AMCIU	The Nasdaq Stock Market LLC
one-half of one redeemable warrant		
Class A common stock, par value \$0.0001 per share	AMCI	The Nasdaq Stock Market LLC
Redeemable warrants, each warrant exercisable for one share of	AMCIW	The Nasdaq Stock Market LLC
Class A common stock, each at an exercise price of \$11.50		

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ⊠

|X|

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box

Item 1.01. Entry into a Material Definitive Agreement.

Amendment to the Merger Agreement

As previously announced, on March 8, 2022, AMCI Acquisition Corp. II, a Delaware corporation ("AMCI"), entered into an Agreement and Plan of Merger with AMCI Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of AMCI ("Merger Sub"), and LanzaTech NZ, Inc. ("LanzaTech"), a Delaware corporation (the "Merger Agreement"). If the Merger Agreement and the transactions contemplated thereby (the "Business Combination") are approved by AMCI's stockholders and LanzaTech's stockholders, and the closing conditions in the Merger Agreement are satisfied or waived, then, among other things, upon the terms and subject to the conditions of the Merger Agreement and in accordance with Delaware General Corporation Law, Merger Sub will merge with and into LanzaTech, with LanzaTech surviving the merger as a wholly owned subsidiary of AMCI). Any capitalized terms used herein and not otherwise defined have the meaning ascribed to them in the Merger Agreement, as amended by the Merger Agreement Amendment.

On December 7, 2022, AMCI, Merger Sub and LanzaTech entered into Amendment No.1 to the Merger Agreement (the "Merger Agreement Amendment"). The Merger Agreement Amendment amends the Merger Agreement to provide for, among other things, (i) the inclusion of the aggregate net proceeds from each of the AM SAFE and Brookfield SAFE in the Acquiror Closing Cash Amount, (ii) the reduction of the Minimum Acquiror Closing Cash Amount from \$250,000,000 to \$230,000,000, (iii) to the extent that the Brookfield SAFE remains unexercised at the closing of the Business Combination (the "Closing"), it will be assumed by AMCI, remain in effect on the same terms and conditions as are in effect prior to the Closing and thereafter entitle the holder thereof to be issued shares of common stock in AMCI after the Closing, (iv) in the event that it becomes reasonably apparent to the parties that the Acquiror Closing Cash Amount will be less than the Minimum Acquiror Closing Cash Amount, AMCI will use commercially reasonable efforts to enter into non-redemption agreements, or similar agreements, as may be necessary such that the Acquiror Closing Cash Amount will not be less than the Minimum Acquiror Closing Cash Amount, (v) the extension of the outside date applicable to the Closing from December 7, 2022 to February 28, 2023 and (vi) the elimination of LanzaTech's right to terminate the Merger Agreement if AMCI fails to enter into additional subscription agreements or non-redemption agreements prior to July 7, 2022 such that the amount equal to (a) the PIPE Investment Amount plus (b) the amount equal to (I) the aggregate number of shares of AMCI's class A common stock subject to non-redemption agreements multiplied by (II) \$10.00 plus (c) the net proceeds from the AM SAFE to LanzaTech minus (d) the Company Transaction Expenses minus (e) the Acquiror Transaction Expenses minus (f) any other amount with respect to which AMCI has liability for payment at the Closing is less than the Minimum Acquiror Closing Cash Amount.

Other than as expressly modified pursuant to the Merger Agreement Amendment, the Merger Agreement, which was previously filed as Exhibit 2.1 to the Current Report on Form 8-K filed with the U.S. Securities and Exchange Commission ("SEC") by AMCI on March 8, 2022, remains in full force and effect. The foregoing description of the Merger Agreement Amendment is not complete and is qualified in its entirety by reference to the full text of the Merger Agreement Amendment, a copy of which is filed as Exhibit 2.1 hereto and is incorporated herein by reference. The Merger Agreement contains representations, warranties and covenants that the parties to the Merger Agreement made to each other as of the date of the Merger Agreement or other specific dates as expressly set forth therein. The Merger Agreement has been incorporated by reference herein to provide investors with information regarding its terms and is not intended to provide any other factual information about AMCI, LanzaTech, Merger Sub or any other person. In particular, the representations, warranties, covenants and agreements contained in the Merger Agreement were solely for the benefit of the parties to the Merger Agreement, may be subject to limitations agreed upon by the contracting parties (including being qualified by confidential disclosures made for the purposes of allocating contractual risk between the parties to the Merger Agreement instead of establishing these matters as facts) and may be subject to standards of materiality applicable to the contracting parties that differ from those applicable to investors and documents filed with the SEC. Investors should not rely on the representations, warranties, covenants and agreements, or any descriptions thereof, as characterizations of the actual state of facts or condition of any party to the Merger Agreement. In addition, the representations, warranties, covenants and agreements and other terms of the Merger Agreement may be subject to subsequent waiver or modification. Moreover, information concerning the subject matter of the representations and warranties and other terms may change after the date of the Merger Agreement, which subsequent information may or may not be fully reflected in AMCI's public disclosures.

Amendment to the Sponsor Support Agreement

As previously announced, on March 8, 2022, AMCI entered into a Sponsor Support Agreement with AMCI Sponsor II LLC, a Delaware limited company (the "Sponsor"), and LanzaTech (as amended, the "Sponsor Support Agreement").

On December 7, 2022, the Sponsor, AMCI and LanzaTech entered into the Amendment No. 1 to the Sponsor Agreement (the "Sponsor Agreement Amendment"). The Sponsor Agreement Amendment reduces the number of Promote Shares subject to forfeiture by the aggregate number of Promote Shares subject to transfer to any holder of AMCI Class A common stock subject to a non-redemption agreement. Any capitalized terms used herein and not otherwise defined have the meaning ascribed to them in the Sponsor Support Agreement.

Other than as expressly modified pursuant to the Sponsor Agreement Amendment, the Sponsor Support Agreement, which was previously filed as Exhibit 10.4 to the Current Report on Form 8-K filed with the SEC by AMCI on March 8, 2022, remains in full force and effect. The foregoing description of the Sponsor Agreement Amendment is not complete and is qualified in its entirety by reference to the full text of the Sponsor Agreement Amendment, a copy of which is filed as Exhibit 10.1 hereto and is incorporated herein by reference.

Amendments to the Subscription Agreements

As previously announced, on March 8, 2022, AMCI entered into subscription agreements (the "Initial Subscription Agreements") with certain accredited investors and qualified institutional buyers (collectively, the "Initial PIPE Investors"), including certain current stockholders and partners of LanzaTech and an affiliate of the Sponsor. As previously announced, on October 18, 2022, AMCI entered into additional subscription agreements (the "Additional Subscription Agreements," and, together with the Initial Subscription Agreements, the "Subscription Agreements") with certain accredited investors (collectively, the "Additional PIPE Investors," and, together with the Initial PIPE Investors, the "PIPE Investors").

On December 7, 2022, AMCI entered into an Amendment and Consent with each PIPE Investor with respect to such investor's Subscription Agreements (each, a "PIPE Amendment and Consent"). Each PIPE Amendment and Consent includes an extension of the outside date of the applicable Subscription Agreement from December 7, 2022 to February 28, 2023, and provides the applicable PIPE Investor's consent to the Merger Agreement Amendment.

Other than as expressly modified pursuant to the applicable PIPE Amendment and Consent, each of the Initial Subscription Agreements, the form of which was previously filed as Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC by AMCI on March 8, 2022, and the Additional Subscription Agreements, the form of which was previously filed as Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC by AMCI on October 24, 2022, remain in full force and effect. The foregoing description of the PIPE Amendment and Consent is not complete and is qualified in its entirety by reference to the full text of the forms of PIPE Amendment and Consent, copies of which are filed as Exhibits 10.2 and 10.3 hereto and are incorporated herein by reference.

Important Information About the Business Combination and Where to Find It

The Business Combination will be submitted to stockholders of AMCI for their consideration. AMCI has filed a registration statement on Form S-4 (as amended, the "Registration Statement") relating to the Business Combination, which includes both a preliminary prospectus with respect to the combined company's securities to be issued in connection with the Business Combination and a proxy statement to be distributed to AMCI's stockholders in connection with AMCI's solicitation of proxies for the vote by its stockholders in connection with the Business Combination and other matters as described in the Registration Statement. AMCI urges its investors, stockholders and other interested persons to read the preliminary proxy statement/prospectus and any amendments thereto and, when available, the definitive proxy statement/prospectus, as well as other documents filed by AMCI with the SEC, because these documents will contain important information about AMCI, LanzaTech and the Business Combination. After the Registration Statement is declared effective, AMCI will mail the definitive proxy statement/prospectus to its stockholders as of a record date to be established for voting on the proposed Business Combination. Stockholders will also be able to obtain a copy of the Registration Statement, including the preliminary proxy statement/prospectus, as well as other documents filed with the SEC regarding the Business Combination and other documents filed by AMCI with the SEC, without charge, at the SEC's website located at www.sec.gov or by directing a request to: AMCI Acquisition Corp. II, 600 Steamboat Road, Greenwich, CT 06830.

Participants in the Solicitation

AMCI and LanzaTech and their respective directors and executive officers may be considered participants in the solicitation of proxies with respect to the Business Combination described in this Current Report under the rules of the SEC. Information about the directors and executive officers of AMCI is set forth in the Registration Statement (and will be included in the definitive proxy statement/prospectus). Information regarding the persons who may, under the rules of the SEC, be deemed participants in the solicitation of AMCI stockholders in connection with the Business Combination is set forth in the Registration Statement (and will be included in the definitive proxy statement/prospectus). Stockholders, potential investors and other interested persons should read the proxy statement/prospectus carefully before making any voting or investment decisions. These documents can be obtained free of charge from the sources indicated above.

Non-Solicitation

This Current Report shall not constitute a proxy statement or solicitation of a proxy, consent or authorization with respect to any securities or in respect of the Business Combination and shall not constitute an offer to sell or a solicitation of an offer to buy any securities, nor shall there be any sale of securities, in any state or jurisdiction in which such offer, solicitation, or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. No offer of securities shall be made except by means of a prospectus meeting the requirements of the Securities Act.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
<u>2.1</u>	Amendment No. 1 to Agreement and Plan of Merger, dated as of December 7, 2022, by and among AMCI Acquisition Corp. II,
	AMCI Merger Sub, Inc. and LanzaTech NZ, Inc.
<u>10.1</u>	Amendment No. 1 to Sponsor Support Agreement, dated as of December 7, 2022, by and among AMCI Sponsor II LLC, AMCI
	Acquisition Corp. II, and LanzaTech NZ, Inc.
<u>10.2</u>	Form of Amendment and Consent of Initial PIPE Investors.
<u>10.3</u>	Form of Amendment and Consent of Additional PIPE Investors.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

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 hereunto duly authorized.

AMCI ACQUISITION CORP. II

By: /s/ Nimesh Patel

Name: Nimesh Patel

Title: Chief Executive Officer

Date: December 12, 2022

AMENDMENT NO. 1

TO

AGREEMENT AND PLAN OF MERGER

This AMENDMENT NO. 1 TO AGREEMENT AND PLAN OF MERGER (this "<u>Amendment</u>") is made and entered into as of December 7, 2022, by and among (i) AMCI Acquisition Corp. II, a Delaware corporation ("<u>Acquiror</u>"), (ii) AMCI Merger Sub, Inc., a Delaware corporation and a direct, wholly owned subsidiary of Acquiror ("<u>Merger Sub</u>"), and (iii) LanzaTech NZ, Inc., a Delaware corporation (the "<u>Company</u>"). Acquiror, Merger Sub and the Company are sometimes collectively referred to herein as the "<u>Parties</u>", and each of them is sometimes individually referred to herein as a "<u>Party</u>".

WHEREAS, the Parties have entered into that certain Agreement and Plan of Merger, dated as of March 8, 2022 (the "Agreement"), pursuant to which, among other things and subject to the terms and conditions set forth therein, Merger Sub will merge with and into the Company, with the Company surviving the Merger as a wholly owned subsidiary of Acquiror; and

WHEREAS, the Parties desire to amend certain provisions of the Agreement.

NOW, THEREFORE, in consideration of the foregoing and the representations, warranties, covenants and agreements set forth in this Agreement, the Parties, intending to be legally bound, agree as follows:

- 1. Capitalized terms used in this Amendment but not otherwise defined herein have the meanings ascribed thereto in the Agreement, and this Amendment shall be governed by the provisions of Section 1.1 and Section 1.2 of the Agreement, *mutatis mutandis* (and in each case as the same are modified or amended in this Amendment).
- 2. Each of the definitions of "Acquiror Closing Cash Amount," "Minimum Acquiror Closing Cash Amount" and "SAFE Shares" in Section 1.1 of the Agreement is hereby amended and restated in its entirety to read, respectively, as follows:

"Acquiror Closing Cash Amount" means an amount, calculated as of the Closing, equal to the sum of (a) the amount of cash available in the Trust Account after deducting the Acquiror Share Redemption Amount, the amounts of Acquiror Transaction Expenses and Company Transaction Expenses and any other amount with respect to which Acquiror has Liability for payment at the Closing, plus (b) the PIPE Investment Amount, to the extent actually received and held by Acquiror as of the Closing, plus (c) the aggregate net proceeds from each of the SAFEs to the Company; provided that, other than as provided in the foregoing clause (c), Acquiror Closing Cash Amount shall not take into account any amount of cash or cash equivalents available and held by the Company or any of its Subsidiaries as of the Closing.

"Minimum Acquiror Closing Cash Amount" means \$230,000,000.

- "SAFE Shares" means any Company Share issued or that may be issuable under either SAFE or the SAFE Warrant, or with respect to which either SAFE is convertible or the SAFE Warrant is exercisable.
- 3. Section 1.1 of the Agreement is hereby amended to include the following additional defined terms, inserted in alphabetical order among the remaining defined terms set forth therein:
 - "AM SAFE" means that certain LanzaTech NZ, Inc. SAFE (Simple Agreement for Future Equity) issued by the Company to ArcelorMittal XCarb S.à r.l. and dated December 8, 2021.
 - "Brookfield SAFE" means that certain LanzaTech NZ, Inc. SAFE (Simple Agreement for Future Equity) issued by the Company to BGTF LT Aggregator LP and dated October 2, 2022.
 - "SAFE" means each of the AM SAFE and Brookfield SAFE.
- 4. Section 1.1 of the Agreement is hereby amended to delete the defined term "SAFE Note," and each of the references to the term "SAFE Note" (a) in Sections 5.6(e) and 6.14 of the Agreement is hereby amended and replaced with a reference to the term "AM SAFE" and (b) in Section 7.1(d) is hereby amended and replaced with a reference to "applicable SAFE."
 - 5. Section 3.2(b) of the Agreement is hereby amended and restated in its entirety, to read as follows:
 - (b) Not less than three (3) Business Days prior to the Closing Date, Acquiror shall prepare and deliver to the Company a statement setting forth Acquiror's good faith determination of (i) the Acquiror Share Redemption Amount, (ii) the Acquiror Closing Cash Amount, (iii) Acquiror Transaction Expenses as of the Closing Date, (iv) the PIPE Investment Amount based on the Subscription Agreements in effect as of such time and (v) the aggregate number of Acquiror Class A Shares subject to Non-Redemption Agreements in effect as of such time multiplied by \$10.00 (in each case, in reasonable detail and with reasonable supporting documentation to enable a review of such statement by the Company), including the respective amounts and wire transfer instructions for the payment of all Acquiror Transaction Expenses, together with corresponding invoices therefor.
 - 6. Section 4.3(e)(ii) of the Agreement is hereby amended and restated in its entirety, to read as follows:
 - (ii) if the number of Acquiror Common Shares that would be subject to any Assumed Warrant pursuant to Section 4.4(b) or the Brookfield SAFE pursuant to Section 4.4(c), in each case in the absence of this Section 4.3(e), is not a whole number, then such number shall be (A) rounded down to the nearest whole number in the event that the fractional Acquiror Common Share that otherwise would be so received is less than five-tenths (0.5) of an Acquiror Common Share and (B) rounded up to the nearest whole number in the event that the fractional Acquiror Common Share that otherwise would be so received is greater than or equal to five-tenths (0.5) of an Acquiror Common Share;

- 7. Section 4.4 of the Agreement is hereby amended to (a) modify its heading to read "Treatment of Convertible Company Securities" and (b) include therein a new Section 4.4(c), to read as follows:
 - (c) To the extent the right of BGTF LT Aggregator LP to be issued Company Shares under the Brookfield SAFE remains unexercised thereunder immediately prior to the Effective Time, the Brookfield SAFE shall be assumed by Acquiror as of the Effective Time and shall remain in effect on the same terms and conditions (including as to vesting and exercisability) as are in effect immediately prior to the Effective Time and, subject to Section 4.3(e)(ii), the Brookfield SAFE shall thereafter entitle BGTF LT Aggregator LP to be issued such number of Acquiror Common Shares as is determined pursuant to the second sentence of Section 3(c)(ii) of the Brookfield SAFE, subject to the remaining terms and conditions set forth in the Brookfield SAFE.
 - 8. Section 5.6(e) of the Agreement is hereby amended and restated in its entirety, to read as follows:
 - (e) Except for the AM SAFE and, as of the Closing Date, the Brookfield SAFE, or as otherwise set forth in this Section 5.6 or in Section 5.6(e) of the Company Disclosure Letter, as of the date hereof, the Company has no outstanding (i) Equity Securities of the Company, (ii) subscriptions, calls, options, warrants, rights (including preemptive rights), puts or other securities convertible into or exchangeable or exercisable for Equity Securities of the Company or any other Contracts to which the Company is a party or by which the Company is bound obligating the Company to issue or sell any Equity Securities of the Company, (iii) equity equivalents, stock appreciation rights, phantom stock ownership interests or similar rights in the Company, (iv) Contracts to which the Company is a party or by which the Company is bound obligating the Company to repurchase, redeem or otherwise acquire any Equity Securities of the Company, other than any Company Stockholder Agreement, the Company Incentive Plans, or any Company Equity Award, or (v) bonds, debentures, notes or other indebtedness of the Company having the right to vote (or convertible into, or exchangeable for, Equity Securities of the Company having the right to vote) on any matter on which the Company's stockholders may vote.

- 9. Section 9.3 of the Agreement is hereby amended and restated in its entirety, to read as follows:
 - Section 9.3. <u>Support of Transaction</u>. Without limiting any covenant contained in <u>Article VII</u> or <u>Article VIII</u>, Acquiror and the Company shall each, and each shall cause its Subsidiaries to, (a) use reasonable best efforts to obtain all material consents and approvals of third parties that any of Acquiror, or the Company or their respective Affiliates are required to obtain in order to consummate the Merger, and (b) take such other action as may be reasonably necessary or as another Party may reasonably request to satisfy the conditions of Article X or otherwise to comply with this Agreement and to consummate the transactions contemplated hereby as soon as practicable. In furtherance, and not in limitation, of the foregoing, in the event that it becomes reasonably apparent to the Parties that the condition set forth in <u>Section 10.3(d)</u> will not be satisfied, Acquiror shall use commercially reasonable efforts to enter into Non-Redemption Agreements or similar agreements, as may be necessary to satisfy the condition set forth in <u>Section 10.3(d)</u>. Notwithstanding anything to the contrary contained herein, (i) no action taken by the Company under and in furtherance of this <u>Section 9.3</u> will constitute a breach of <u>Section 7.1</u>, (ii) no action taken by Acquiror or Merger Sub under and in furtherance of this <u>Section 9.3</u> will constitute a breach of <u>Section 8.5</u> and (iii) in no event shall Acquiror, Merger Sub or the Company be obligated to bear any expense or pay any amount (except for any filing or registration fee with a Governmental Authority) or grant any concession in connection with obtaining any such consents or approvals.
- 10. Section 11.1(b)(ii) of the Agreement is hereby amended to modify the date defined as the "Outside Date" therein, to read as follows:
 - (ii) if the Closing has not occurred before 5:00 p.m., Eastern Time, on February 28, 2023 (the "Outside Date"); provided that (A) if any Action for specific performance or other equitable relief by the Company with respect to this Agreement or any Ancillary Agreement or any of the transaction contemplated hereby or thereby is pending in a court specified in Section 12.14(a) as of the Outside Date, then the Outside Date shall be automatically extended until 5:00 p.m., Eastern Time, on the date that is the earlier of (x) 30 days after the date on which a final, non-appealable Governmental Order has been entered with respect to such Action and (y) the Business Combination Deadline Date, and such extended time shall be the "Outside Date" for all purposes under this Agreement, and (B) the right to terminate this Agreement pursuant to this Section 11.1(b)(ii) shall not be available to a Party if such Party's breach of any of its obligations under this Agreement is the primary cause of the failure of the Closing to have occurred before the Outside Date; or
- 11. Each of Sections 3.2(c) and 11.1(c)(ii) of the Agreement is hereby deleted in its entirety.
- 12. Except as expressly amended hereby, the Agreement is not amended, modified or affected by this Amendment, and the Agreement, and the rights and obligations of the Parties thereunder, remain in full force and effect in all respects.
- 13. In the event of any conflict between the terms of this Amendment and the terms of the Agreement, the terms of this Amendment shall prevail. Upon the effectiveness of this Amendment, each reference in the Agreement to "this Agreement," "hereunder," "hereof," "herein," or words of like import shall mean and be a reference to the Agreement as amended hereby, and each reference to the Agreement in any other document, instrument or agreement executed or delivered in connection with the Agreement shall mean and be a reference to the Agreement as amended hereby.

- 14. This Amendment, and all claims or causes of action based upon, arising out of, or related to this Amendment (whether based on contract, tort, equity or otherwise), shall be governed by, and construed in accordance with, the Laws of the State of Delaware, without giving effect to principles or rules of conflict of Laws (whether of the State of Delaware or of any other jurisdiction) to the extent such principles or rules would require or permit the application of Laws of a jurisdiction other than the State of Delaware.
- 15. Any Action based upon, arising out of or related to this Amendment shall be finally resolved pursuant to Section 12.14 of the Agreement, which is hereby incorporated by reference and shall apply to this Amendment as if set forth herein in its entirety, *mutatis mutandis*.
- 16. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Amendment by facsimile, e-mail, or scanned pages shall be effective as delivery of a manually executed counterpart to this Amendment.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have caused this Amendment to be duly executed as of the date first written above.

AMCI ACQUISITION CORP. II

By: /s/ Nimesh Patel

Name: Nimesh Patel

Title: Chief Executive Officer

AMCI MERGER SUB, INC.

/s/ Nimesh Patel By:

> Name: Nimesh Patel Title: President

LANZATECH NZ, INC.

By: /s/ Jennifer Holmgren

Name: Jennifer Holmgren Title: Chief Executive Officer

[Signature Page of Amendment No. 1 to Agreement and Plan of Merger]

AMENDMENT NO. 1

TO

SPONSOR SUPPORT AGREEMENT

This AMENDMENT NO. 1 TO SPONSOR SUPPORT AGREEMENT (this "Amendment") is made and entered into as of December 7, 2022, by and among (i) AMCI Sponsor II LLC, a Delaware limited liability company (the "Sponsor"), (ii) AMCI Acquisition Corp. II, a Delaware corporation ("Acquiror"), (iii) LanzaTech NZ, Inc., a Delaware corporation (the "Company"), and (iv) the Persons identified on Schedule I attached to the Agreement (as defined below) (together with the Sponsor, the "Insider Holders"). Acquiror, the Insider Holders and the Company are sometimes collectively referred to herein as the "Parties", and each of them is sometimes individually referred to herein as a "Party".

WHEREAS, the Parties have entered into that certain Sponsor Support Agreement, dated as of March 8, 2022 (the "Agreement"); and

WHEREAS, the Parties desire to amend certain provisions of the Agreement.

- **NOW, THEREFORE**, in consideration of the foregoing and the representations, warranties, covenants and agreements set forth in this Agreement, the Parties, intending to be legally bound, agree as follows:
- 1. Capitalized terms used in this Amendment but not otherwise defined herein have the meanings ascribed thereto in the Agreement, and this Amendment shall be governed by the provisions of Sections 3.1 and 3.2 of the Agreement, *mutatis mutandis* (and in each case as the same are modified or amended in this Amendment).
- 2. The definition of "Forfeited Promote Shares" in Section 3.1 of the Agreement is hereby amended and restated in its entirety to read as follows:
 - "Forfeited Promote Shares" means a number of the Promote Shares equal to: (i) the product of (A) one third (1/3) of the Promote Shares multiplied by (B) a percentage equal to the product of (I) the Redemption Percentage minus 50% multiplied by (II) two (2); minus (ii) the aggregate number of Promote Shares subject to Transfer to holders of Acquiror Class A Shares pursuant to the Non-Redemption Agreements; provided that the number of Promote Shares counted in the foregoing clause (ii) shall not exceed 1,250,000 in the aggregate. An illustrative example setting forth the calculation of the Forfeited Promote Shares (assuming that no Promote Shares are subject to Transfer to holders of Acquiror Class A Shares pursuant to the Non-Redemption Agreements) is set forth on Exhibit A attached hereto.
- 3. Except as expressly amended hereby, the Agreement is not amended, modified or affected by this Amendment, and the Agreement, and the rights and obligations of the Parties thereunder, remain in full force and effect in all respects.

4.	In the event of any conflict between the terms of this Amendment and the terms of the Agreement, the terms of this Amendment shall
prevail. Upon the effe	ectiveness of this Amendment, each reference in the Agreement to "this Agreement," "hereunder," "hereof," "herein," or words of like
import shall mean ar	nd be a reference to the Agreement as amended hereby, and each reference to the Agreement in any other document, instrument of
agreement executed of	or delivered in connection with the Agreement shall mean and be a reference to the Agreement as amended hereby.

- 5. This Amendment, and all claims or causes of action based upon, arising out of, or related to this Amendment (whether based on contract, tort, equity or otherwise), shall be governed by, and construed in accordance with, the Laws of the State of Delaware, without giving effect to principles or rules of conflict of Laws (whether of the State of Delaware or of any other jurisdiction) to the extent such principles or rules would require or permit the application of Laws of a jurisdiction other than the State of Delaware.
- 6. Any Action based upon, arising out of or related to this Amendment shall be finally resolved pursuant to Section 3.9 of the Agreement, which is hereby incorporated by reference and shall apply to this Amendment as if set forth herein in its entirety, *mutatis mutandis*.
- 7. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Amendment by facsimile, e-mail, or scanned pages shall be effective as delivery of a manually executed counterpart to this Amendment.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have caused this Amendment to be duly executed as of the date first written above.

INSIDER HOLDERS

SPONSOR:

AMCI SPONSOR II LLC

By: /s/ Nimesh Patel

Name:Nimesh Patel

Title: Sole Managing Member

AMCI Group, LLC Series 35

By: /s/ Hans Mende

Name: Hans Mende

Title: Authorized Signatory

/s/ Nimesh Patel

Name: Nimesh Patel

/s/ Brian Beem

Name: Brian Beem

/s/ Patrick Murphy

Name: Patrick Murphy

/s/ Walker Woodson

Name: Walker Woodson

/s/ Kate Burson

Name: Kate Burson

/s/ Adrian Paterson

Name: Adrian Paterson

/s/ Mark Pinho

Name: Mark Pinho

/s/ Jill Watz
Name: Jill Watz
/s/ Morgan Holmes
Name: Morgan Holmes

/s/ Henry Copses
Name: Henry Copses

ACQUIROR:

AMCI ACQUISITION CORP. II

By: /s/ Nimesh Patel

Name: Nimesh Patel
Title: Chief Executive Officer

COMPANY:

LANZATECH NZ, INC.

By: /s/ Jennifer Holmgren
Name: Jennifer Holmgren
Title: Chief Executive Officer

AMENDMENT AND CONSENT

This Amendment and Consent (this "Amendment and Consent") is entered into on	, 2022, by and between AMCI
Acquisition Corp. II, a Delaware corporation (the "Company"), and the undersigned subscriber ("Subscriber").	

WHEREAS, the Company and Subscriber entered into that certain Subscription Agreement, dated as of March 8, 2022 (the "<u>Subscription Agreement</u>"), pursuant to which Subscriber agreed to subscribe for and purchase from the Company, and the Company agreed to issue and sell to Subscriber, that number of shares of the Company's Class A common stock, par value \$0.0001 per share (the "<u>Class A Common Stock</u>"), set forth on the signature page thereto (the "<u>Subscribed Shares</u>"), for a purchase price of \$10.00 per share (the "<u>Per Share Price</u>" and the aggregate of such Per Share Price for all Subscribed Shares being referred to herein as the "<u>Purchase Price</u>");

WHEREAS, on March 8, 2022, the Company entered into a definitive agreement with LanzaTech NZ, Inc., a Delaware corporation ("<u>LanzaTech</u>"), and the other parties thereto, providing for a business combination between the Company and LanzaTech (the "<u>Merger Agreement</u>" and the transactions contemplated by the Merger Agreement, the "<u>Transaction</u>");

WHEREAS, the Company desires to amend the Merger Agreement in the form attached hereto as <u>Annex A</u> (the "<u>Merger Agreement Amendment</u>") and, pursuant to Section 2(e) of the Subscription Agreement, the consent of Subscriber in writing is required in order to amend certain provisions of the Merger Agreement; and

WHEREAS, the Company and Subscriber desire to amend the Subscription Agreement in order to align its terms with the proposed amendment to the Merger Agreement.

NOW, THEREFORE, in consideration of the foregoing and the mutual representations, warranties and covenants, and subject to the conditions, herein contained, and intending to be legally bound hereby, the Company and Subscriber hereto hereby agree as follows:

- 1. Capitalized terms used in this Amendment and Consent but not otherwise defined herein have the meanings ascribed thereto in the Subscription Agreement.
- 2. Subscriber hereby consents, for all purposes under the Subscription Agreement, to the Merger Agreement Amendment, in the form attached hereto as <u>Annex A</u>.
- 3. Effective as of the effective date of the Merger Agreement Amendment, the first recital of the Subscription Agreement shall be amended to include the words "as amended, amended and restated or supplemented from time to time" immediately before the words "the 'Merger Agreement'".
- 4. Effective as of the effective date of the Merger Agreement Amendment, Section 6 of the Subscription Agreement shall be amended to replace "December 7, 2022" with "February 28, 2023".
- 5. Except as expressly amended hereby, the Subscription Agreement shall not be amended, modified or affected by this Amendment and Consent, and the Subscription Agreement, and the rights and obligations of the Company and Subscriber thereunder, shall remain in full force and effect in all respects.

6.	In the event of any conflict between the terms of this Amendment and Consent and the terms of the Subscription Agreement, the
terms of this Amenda	nent and Consent shall prevail. Upon the effectiveness of this Amendment and Consent, each reference in the Subscription Agreement
to "this Agreement,"	"hereunder," "hereof," "herein," or words of like import shall mean and be a reference to the Subscription Agreement as amended
hereby, and each refe	rence to the Subscription Agreement in any other document, instrument or agreement executed or delivered in connection with the
Subscription Agreem	ent shall mean and be a reference to the Subscription Agreement as amended hereby.

- 7. This Amendment and Consent shall be governed by, and construed in accordance with, the laws of the State of Delaware, without regard to the principles of conflicts of laws that would otherwise require the application of the laws of any other state.
- 8. Any Action based upon, arising out of or related to this Amendment and Consent shall be finally resolved pursuant to Sections 8(q)-(r) of the Subscription Agreement, which are hereby incorporated by reference and shall apply to this Amendment and Consent as if set forth herein in their entirety, *mutatis mutandis*.
- 9. This Amendment and Consent may be executed and delivered in one or more counterparts (including by electronic mail, in .pdf or other electronic submission) and by different parties in separate counterparts, with the same effect as if all parties hereto had signed the same document. All counterparts so executed and delivered shall be construed together and shall constitute one and the same agreement.

[Signature Page Follows]

above.		and Subscriber have caused this	Amendment and Consent to be duly executed as of the date first written
		AMC	CI ACQUISITION CORP. II
		By:	
			Name: Title:
SUBS	CRIBER		
Name	of Subscriber:		
By:			
	Name: Title:		
		[Signature Page to Amendm	ent and Consent]

AMENDMENT AND CONSENT

This Amendment and Consent (this "Amendment and Consent") is entered into on	, 2022, by and between AMCI
Acquisition Corp. II, a Delaware corporation (the "Company"), and the undersigned subscriber ("Subscriber").	

WHEREAS, the Company and Subscriber entered into that certain Subscription Agreement, dated as of October 18, 2022 (the "Subscription Agreement"), pursuant to which Subscriber agreed to subscribe for and purchase from the Company, and the Company agreed to issue and sell to Subscriber, that number of shares of the Company's Class A common stock, par value \$0.0001 per share (the "Class A Common Stock"), set forth on the signature page thereto (the "Subscribed Shares"), for a purchase price of \$10.00 per share (the "Per Share Price" and the aggregate of such Per Share Price for all Subscribed Shares being referred to herein as the "Purchase Price");

WHEREAS, on March 8, 2022, the Company entered into a definitive agreement with LanzaTech NZ, Inc., a Delaware corporation ("<u>LanzaTech</u>"), and the other parties thereto, providing for a business combination between the Company and LanzaTech (the "<u>Merger Agreement</u>" and the transactions contemplated by the Merger Agreement, the "<u>Transaction</u>");

WHEREAS, the Company desires to amend the Merger Agreement in the form attached hereto as <u>Annex A</u> (the "<u>Merger Agreement Amendment</u>") and, pursuant to Section 2(e) of the Subscription Agreement, the consent of Subscriber in writing is required in order to amend certain provisions of the Merger Agreement; and

WHEREAS, the Company and Subscriber desire to amend the Subscription Agreement in order to align its terms with the proposed amendment to the Merger Agreement.

NOW, THEREFORE, in consideration of the foregoing and the mutual representations, warranties and covenants, and subject to the conditions, herein contained, and intending to be legally bound hereby, the Company and Subscriber hereto hereby agree as follows:

- 1. Capitalized terms used in this Amendment and Consent but not otherwise defined herein have the meanings ascribed thereto in the Subscription Agreement.
- 2. Subscriber hereby consents, for all purposes under the Subscription Agreement, to the Merger Agreement Amendment, in the form attached hereto as <u>Annex A</u>.
- 3. Effective as of the effective date of the Merger Agreement Amendment, the first recital of the Subscription Agreement shall be amended to include the words "as amended, amended and restated or supplemented from time to time" immediately before the words "the 'Merger Agreement".
- 4. Effective as of the effective date of the Merger Agreement Amendment, Section 6 of the Subscription Agreement shall be amended to replace "December 7, 2022" with "February 28, 2023".
- 5. Except as expressly amended hereby, the Subscription Agreement shall not be amended, modified or affected by this Amendment and Consent, and the Subscription Agreement, and the rights and obligations of the Company and Subscriber thereunder, shall remain in full force and effect in all respects.

6.	In the event of any conflict between the terms of this Amendment and Consent and the terms of the Subscription Agreement, the
terms of this Amendm	ent and Consent shall prevail. Upon the effectiveness of this Amendment and Consent, each reference in the Subscription Agreement
to "this Agreement," "	hereunder," "hereof," "herein," or words of like import shall mean and be a reference to the Subscription Agreement as amended
hereby, and each refer	ence to the Subscription Agreement in any other document, instrument or agreement executed or delivered in connection with the
Subscription Agreeme	nt shall mean and be a reference to the Subscription Agreement as amended hereby.

- 7. This Amendment and Consent shall be governed by, and construed in accordance with, the laws of the State of Delaware, without regard to the principles of conflicts of laws that would otherwise require the application of the laws of any other state.
- 8. Any Action based upon, arising out of or related to this Amendment and Consent shall be finally resolved pursuant to Sections 8(p)-(q) of the Subscription Agreement, which are hereby incorporated by reference and shall apply to this Amendment and Consent as if set forth herein in their entirety, *mutatis mutandis*.
- 9. This Amendment and Consent may be executed and delivered in one or more counterparts (including by electronic mail, in .pdf or other electronic submission) and by different parties in separate counterparts, with the same effect as if all parties hereto had signed the same document. All counterparts so executed and delivered shall be construed together and shall constitute one and the same agreement.

[Signature Page Follows]

above.	IN WITNESS WHEREOF, the Company	Subscriber have caused this Amendment and Consent to be duly executed as of the date first wri	tten
		AMCI ACQUISITION CORP. II	
		By: Name: Title:	
SUBS(CRIBER		
Name (of Subscriber:		
Ву:	Name: Title:		
		[Signature Page to Amendment and Consent]	