

Goldman

Saells

May 24, 2022

U.S. Securities and Exchange Commission
Office of the Secretary
100 F Street, N .E.
Washington, D.C. 20549

RE: AMCI Acquisition Corp. II

Ladies and Gentlemen:

Goldman Sachs & Co. LLC ("Goldman Sachs") hereby submits the enclosed resignation letter (the "Resignation Letter"). The Resignation Letter was previously delivered to AMCI Acquisition Corp. II (the "Company") to inform it that Goldman Sachs has resigned and ceased to act as placement agent and capital markets advisor to the Company and any related capacity, relationship or role in connection with the proposed business combination of the Company and LanzaTech NZ Inc., and that Goldman Sachs will not be responsible for any part of the Company's Registration Statement on Form S-4 (File No. 333-264811), including any amendments thereto or documents incorporated therein (the "Registration Statement").

This letter is being furnished to the U.S. Securities and Exchange Commission (the "Commission") in accordance with Section 1 l(b)(1) of the Securities Act of 1933, as amended, to notify the Commission that Goldman Sachs will not be responsible for the contents of the Registration Statement.

If you should have any questions regarding these matters, please contact the undersigned by phone at (212) 902-4012 or by email at daniel.young@gs.com.

Securities and Investment Services Provided by Goldman Sachs
& Co. LLC
U.S. Securities and Exchange Commission
May 24, 2022
Page 2

Sincerely,

Name: Daniel M. Young
Title: Managing Director

cc: AMCI Acquisition Corp. II

Encl.
PERSONAL AND CONFIDENTIAL

May 20, 2022

Nimesh Patel
Chief Executive Officer
AMCI Acquisition Corp. II
600 Steamboat Road
Greenwich, CT 06830

Re: Placement Agent and Capital Markets Advisor Resignation

Dear Nimesh:

Goldman Sachs & Co. LLC ("Goldman Sachs") writes to inform you that Goldman Sachs hereby resigns and ceases to act as placement agent and capital markets advisor to AMCI Acquisition Corp. II (the "Company") and any related capacity, relationship or role, and will not act in any other capacity, relationship or role, with or for the Company, LanzaTech NZ Inc. (the "Target"), any affiliate of the Company or the Target (each, an "Affiliate"), or any entity formed or caused to be formed by the Company, the Target or an Affiliate, in each case in connection with the proposed business combination of AMCI Acquisition Corp. II and the Target, effective immediately, and that Goldman Sachs will not be responsible for any part of the Company's Registration Statement on Form S-4 (File No. 333-264811), including any amendments thereto or documents incorporated therein (the "Registration Statement").

This letter is being furnished to you in accordance with Section 11 (b)(1) of the Securities Act of 1933, as amended, to notify you that Goldman Sachs will not be responsible for the contents of the Registration Statement. This letter should not be construed as an admission that Goldman Sachs is or was an underwriter, as that term is defined in Section 2(a)(11) of the Securities Act of 1933.

(GOLDMAN SACHS & CO. LLC)

Name: Eduardo Manzur
Title: Managing Director