CHARTER OF THE NOMINATING AND GOVERNANCE COMMITTEE OF THE BOARD OF DIRECTORS OF LANZATECH GLOBAL, INC.

As adopted on February 8,2023

I. PURPOSE

The purpose of the Nominating and Governance Committee (the "Committee") of the Board of Directors (the "Board") of LanzaTech Global, Inc. (the "Company") is to assist the Board in (1) reviewing, evaluating and recommending changes to the Company's corporate governance framework; (2) identifying qualified candidates to join the Board and each of its committees; and (3) evaluating the composition of the Board and each of its committees. This charter (the "Charter") sets forth the authority and responsibility of the Committee in fulfilling its purpose.

II. MEMBERSHIP

The Committee will consist of two or more members of the Board, with the exact number determined from time to time by the Board. All members of the Committee will be appointed by, and will serve at the discretion of, the Board. The Board may appoint a member of the Committee to serve as the chairperson thereof (the "Chair"); if the Board does not appoint a Chair, the Committee members may designate a Chair by their majority vote. Resignation or removal of a director from the Board, for whatever reason, shall automatically constitute resignation or removal, as applicable, from the Committee.

Each member of the Committee will be "independent" in accordance with applicable laws, rules and regulations, including the applicable rules and regulations of the Securities and Exchange Commission and the rules of the stock exchange on which the Company's common stock is listed, and any other guidelines for independence established by the Company (the "*Independence Standards*").

III. RESPONSIBILITIES AND DUTIES

The principal responsibilities and duties of the Committee in serving the purposes outlined in Section I of this Charter are set forth below. These responsibilities and duties are set forth as a guide, with the understanding that the Committee will carry them out in a manner that is appropriate given the Company's needs and circumstances. To the extent permitted under applicable law, stock exchange listing standards and the Company's certificate of incorporation and bylaws, the Committee may supplement or (except as otherwise required by applicable laws or rules) deviate from these responsibilities and duties as appropriate and may establish policies and procedures from time to time that it deems necessary or advisable in fulfilling its responsibilities. Unless otherwise indicated below, these responsibilities and duties will take effect upon the appointment of the Committee and the adoption of this Charter by the Board.

A. Corporate Governance Framework

Consider matters of corporate governance and related legal requirements and periodically review
the Company's corporate governance framework, including its certificate of incorporation, bylaws
and other arrangements affecting corporate governance and submit recommended changes to
the Board for approval.

- 2. Review and make recommendations to the Board regarding requests for waivers of the Company's corporate governance policies, practices and procedures, including the Company's Code of Conduct and Ethics.
- Oversee the Company's efforts regarding environmental, social and governance matters, including periodically receiving and reviewing reports from management regarding (i) environmental sustainability and (ii) corporate political activities and contributions and lobbying activities.
- 4. Fulfill the Committee's responsibilities or other functions as assigned by law, the Company's certificate of incorporation or bylaws, the Board or the Company's other policies.

B. Board Composition and Related Matters

- Develop and recommend to the Board the selection criteria for directors (the "Selection Criteria") and annually review the Selection Criteria and submit recommended changes for the Selection Criteria to the Board for approval.
- 2. Identify, recruit and interview individuals qualified to serve as directors, consistent with the Selection Criteria.
- 3. Maintain a pool of qualified director candidates for consideration in the event of a vacancy or newly created directorship and make recommendations of director candidates to fill any such vacancies or newly created directorships.
- 4. Evaluate and present to the Board at least annually the Committee's determination as to the independence of each director and director candidate under the Independence Standards.
- 5. Recommend to the Board director nominees to be presented for stockholder approval at annual or special stockholder meetings, as appropriate.
- 6. Periodically review and make recommendations to the Board concerning the size of the Board.
- 7. Consider and make recommendations to the Board regarding stockholder nominees for election to the Board, to the extent the nomination is submitted in accordance with the Company's bylaws.

C. Committee Composition and Related Matters

- 1. Review the qualifications of directors to serve on the Board's committees (including this Committee) at least annually and submit recommendations for committee composition to the Board, as appropriate, including with respect to chairs for each committee.
- 2. Recommend additional committee members to the Board to fill vacancies as needed.
- 3. Annually review recommendations of each Board committee regarding changes to its charter,

including this Charter, and submit recommended changes to the Board for approval.

- 4. Periodically review the structure and size of the Board's committees (including this Committee) and submit recommended changes to the Board for approval.
- 5. Review operations of the Board's committees and periodically submit recommended changes to the Board for approval.
- 6. Evaluate and present to the Board at least annually the Committee's determination as to (a) whether each director and director candidate satisfies the applicable Independence Standards (or any other classification under applicable laws, rules or regulations for purposes of committee assignments) and applicable exchange, legal and regulatory requirements applicable to the Board, and (b) whether the Audit Committee has an "audit committee financial expert" and satisfies the other applicable exchange, legal and regulatory requirements for Audit Committee members.

D. Evaluations, Orientation and Training

- Develop and recommend to the Board for its approval an annual self-evaluation process of the Board and each of its committees and annually oversee and report to the Board regarding the performance and effectiveness of the Board and each of its committees in fulfilling its responsibilities, including considering performance of incumbent members of the Board in determining whether to recommend that they be nominated for reelection.
- 2. Develop and recommend to the Board for its approval an annual evaluation process of the Chief Executive Officer of the Company, annually oversee the process and report to the Board regarding the effectiveness of the Chief Executive Officer in fulfilling his or her responsibilities.
- 3. Oversee an orientation program for new directors and a continuing education program for current directors, periodically reviewing these programs and updating them asappropriate.

E. Stockholder Engagement and Related Matters

- 1. Review and provide guidance to the Board and management about the framework for the Board's oversight of, and involvement in, stockholder engagement.
- Consider any stockholder proposal submitted for inclusion in the Company's proxy materials and make a recommendation to the Board regarding whether the proposal should be included or excluded from the Company's proxy materials and, if included, whether it should be supported or opposed by the Board.

F. Other Responsibilities

- 1. Consider, and if appropriate, approve a request by the Company's directors or officers to serve on the board of directors of any other company, consistent with any other applicable policies and procedures of the Company.
- 2. Carry out any other duties and responsibilities assigned to it by the Board, to the extent permitted by law and the Company's certificate of incorporation and bylaws.

IV. STUDIES AND ADVISORS

The Committee, in discharging its responsibilities and duties, may conduct, direct, supervise or authorize studies of, or investigations into, any matter that the Committee deems appropriate, with full and unrestricted access to all books, records, documents, facilities and personnel of the Company. The Committee has the sole authority and right, at the expense of the Company, to retain or terminate any search firm to identify director candidates, and legal and other consultants, experts and advisors of its choice to assist the Committee in connection with its functions. The Committee will have the sole authority to approve the fees and other retention terms of any such third parties.

V. MEETINGS, ACTIONS WITHOUT A MEETING AND STAFF

Meetings of the Committee shall be held as frequently as determined appropriate by the Committee, which shall be no less often than quarterly. The Chair, in consultation with the other member(s) of the Committee, will set the dates, times and places of such meetings. The Chair will set the agenda for Committee meetings and will circulate reasonably in advance of each meeting an agenda of matters to be addressed at the meeting. The Chair or any other member of the Committee may call meetings of the Committee in accordance with the Company's bylaws.

The Chair will preside over Committee meetings. If the Chair is absent from a meeting, the members of the Committee may appoint any other member to preside.

The Committee shall be governed by the same rules regarding meetings (including meetings in person or by telephone or other similar communications equipment), action by written consent, notice, waiver of notice and quorum (except that a quorum of the Committee will consist of no fewer than two members) and voting requirements as are applicable to the Board.

Subject to the requirements of this Charter and applicable laws, rules and regulations, the Committee and the Chair may hold private meetings with their advisors and may invite any director, executive or employee of the Company, or such other person, as it deems appropriate in order to carry out its responsibilities, to attend and participate (in a non-voting capacity) in all or a portion of any Committee meeting. The Committee may exclude from all or a portion of its meetings any person it deems appropriate in order to carry out its responsibilities. The Chair will designate a secretary for each meeting, who need not be a member of the Committee. The Company shall provide the Committee such staff support as it may require.

VI. MINUTES AND REPORTS

The Committee will maintain written minutes of its meetings and copies of its actions by written consent, and will make such minutes and copies of written consents available to the other members of the Board and cause them to be filed with the minutes of the meetings of the Board. The Chair will periodically report to the Board with respect to the activities of the Committee, including on significant matters related to the Committee's responsibilities and the Committee's deliberations and actions.

VII. COMPENSATION

Members of the Committee will receive compensation, if any, for their service as Committee

members as may be determined by the Board, which may include additional compensation for the Chair.

VIII. DELEGATION OF AUTHORITY

The Committee may from time to time, as it deems appropriate and to the extent permitted under applicable law, stock exchange listing standards, and the Company's certificate of incorporation and bylaws, form and delegate authority to subcommittees. In the event of a conflict between this Charter and the Company's certificate of incorporation and bylaws, the Company's certificate of incorporation and bylaws shall control.

IX. REVIEW OF COMMITTEE COMPOSITION, PERFORMANCE AND CHARTER

The Committee will evaluate the Committee's composition and performance at least annually, and report to the Board on such evaluation. The Committee will also annually review and reassess the adequacy of this Charter, and recommend to the Board any changes the Committee determines are appropriate.