Memorandum of Understanding

among

Tsinghua University

and

The University of California, Berkeley

and

The Regents of the University of California, Management and Operations Contractor for the Lawrence Berkeley National Laboratory

Concerning the Establishment of a Joint Research Center on Energy and Climate Change

This Memorandum of Understanding (MOU) is among Tsinghua University (Tsinghua), The University of California, Berkeley (UCB), and The Regents of the University of California (The Regents), in its capacity as the manager and operator of the Lawrence Berkeley National Laboratory (LBNL).

Tsinghua is a research university located in Beijing, China. UCB is a research university located in Berkeley, California. LBNL is a U.S. Department of Energy (DOE) National Laboratory managed and operated by The Regents pursuant to DOE Contract No. DE-AC02-05CH11231.

Tsinghua, UCB, and The Regents are collectively herein referred to as the "Participants" or individually as a "Participant."

1. Objective

The objective of this MOU is to explore potential future collaboration in the fields of energy and climate change.

2. Areas of Planned Cooperation

Planned cooperation may include, but is not limited to, the following areas:

- A. Exploration of the establishment of a joint research center on energy and climate change.
- B. Information exchange, planning for joint research, training, and dissemination activities that may include:
 - Planning future joint research to enhance the capacity of China and the United States to reduce greenhouse gas emissions through technology and policy innovation.
 - Supporting policy dialogue and practical cooperation between China and the United States on energy and climate change.
 - Nurturing the next generations of academic researchers, industry leaders, and policy

- makers through participation in workshops and visiting researcher programs in the areas of energy and climate change.
- Analyzing the contributions of China and the United States to global climate agreements.
- Identifying strategic areas for technology and policy cooperation between China and the United States.
- Exploring the potential for establishing an annual Tsinghua-Berkeley Energy and Climate Forum.

The scope of the planned activities and cooperation described above may be changed by mutual written consent of the Participants, with any future collaborative research to be undertaken pursuant to an appropriate written agreement therefor.

3. Mechanisms of Cooperation

A Steering Committee is to be established to help coordinate communications relevant to activities under this MOU. The Steering Committee is to meet periodically to discuss, review, and approve plans for proposed joint research activities, and is to exchange general information which may be of interest to the Participants. Each Participant is to appoint one representative to the Steering Committee.

The initial members of the Steering Committee are the Director of the Low Carbon Energy Laboratory at Tsinghua; the Director of the Berkeley Energy and Climate Institute (BECI) at UCB; and the Group Leader of the China Energy Group at LBNL.

4. Commencement, Modification and Discontinuation

- A. Cooperative activities under this MOU may commence upon signature by the Participants and continue for a five (5) year period, unless discontinued in accordance with Paragraph B of this Section.
- B. The Participants may discontinue this MOU at any time by mutual written consent. Alternatively, a Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least ninety (90) days written notice to the other Participants.
- C. This MOU may be modified or extended for additional periods by mutual written consent of the Participants.

5. General Terms

- A. Each Participant should conduct the cooperation contemplated by this MOU in accordance with all applicable laws, regulations and other requirements to which it is subject, including, without limitation, export control laws and environmental and health and safety laws and regulations, and international agreements to which its Government is party.
- B. This MOU does not create any legally binding obligations among the Participants.
- C. The conduct of cooperative activities contemplated by this MOU is subject to the availability of funding, personnel, and other resources.
- D. Each Participant is to be responsible for the costs it incurs in participating in cooperative activities under this MOU.

MOU between LBNL UCB, and Tsinghua

E. Except in promoting activities among participating faculty and students, a Participant should not use the name of the other Participants in any form of advertising or publicity without express written permission of the Participant(s) concerned.

Signed in triplicate.

FOR TSINGHUA UNIVERSITY:

Din fort Qiu Yong President

FOR THE UNIVERSITY OF CALIFORNIA, BERKELEY:

Chancellor

FOR THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, Manager and Operator of Lawrence Berkeley National Laboratory:

A. Paul Alivisatos

Director

November 10, 2015

Date

Berkeley, GA USA