

Memorandum of Understanding
between
Lawrence Berkeley National Laboratory,
managed and operated by the Regents of the University of California
and
Nanyang Technological University

Concerning Cooperation on Future Energy Efficiency Technology Collaborations

This Memorandum of Understanding (MOU) is between Lawrence Berkeley National Laboratory (LBNL), a U.S. Department of Energy National Laboratory managed and operated by The Regents of the University of California under Contract No. DE-AC02-05CH11231, located at One Cyclotron Road, Berkeley, California 94720, and Nanyang Technological University (NTU), a corporation organized and existing under the laws of Singapore located at 50 Nanyang Avenue, Singapore 639798. LBNL and NTU are collectively herein referred to as “Participants” or each as a “Participant.”

1. Objective

The Participants intend to explore potential future collaboration in the fields of future energy efficiency technologies.

2. Areas of Planned Cooperation

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

- A. NTU staff training and support, including staff from The Energy Research Institute @ NTU, concerning the conduct of field tests and research in Building and Construction Authority’s Test Bed Facility.
- B. Information exchange, facilitation of joint research, training, and dissemination activities in the areas of:
 - Efficient building technologies simulation and validation
 - Building systems integration
 - Thermal insulated facades
 - Windows, day-lighting and lighting technology
 - Ventilation, cooling and indoor environment quality
 - Computational building simulation tools
 - Building sensors, controls and communications
 - High-albedo material coatings

- Data acquisition and management
- Building energy data and benchmarking
- Energy efficient laboratories
- Energy efficiency rating systems
- Emerging technology roadmap research, development, testing, demonstration and deployment planning.

3. Mechanisms of Cooperation

- A. Each Participant should designate a Lead Coordinator to serve as that Participant's principal representative for all activities conducted under this Memorandum of Understanding (MOU), including identifying additional areas of cooperation, providing rapid response concerning its organization's interest in specific areas of cooperation, coordinating cooperation between the Participants, and identifying available resources (including funding) for collaborative activities under this MOU.
- B. The Lead Coordinators may hold meetings when necessary to discuss matters related to cooperation under this MOU.

4. Commencement, Modification and Discontinuation

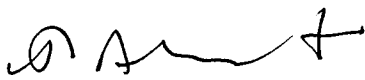
- A. Cooperative activities under this MOU may commence upon signature by the Participants and continue for a five (5) year period, unless discontinued in accordance with Paragraph B of this Section 4.
- B. The Participants may discontinue this MOU at any time in writing. A Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least ninety (90) days written notice to the other Participant.
- C. This MOU may be modified in writing by mutual consent of the Participants, and may be extended for additional periods.

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 environment, health and safety laws and regulations.
- B. This MOU does not create any legally binding obligations between 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 responsible for the costs it incurs in participating in cooperative activities under this MOU.

Signed in duplicate.

THE REGENTS OF THE UNIVERSITY
OF CALIFORNIA, LAWRENCE
BERKELEY NATIONAL
LABORATORY

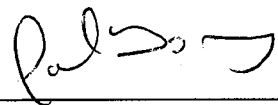
By: 

Name: Dr. A. Paul Alivisatos

Title: Laboratory Director

Date April 3 2015

NANYANG TECHNOLOGICAL
UNIVERSITY

By: 

Name: Professor Lam Khin Yong

Title: Chief of Staff and Vice
President (Research)

Date 3 April 2015