

## ‘Women of Carbon’ Screening: Wednesday, April 16, 5-7 pm PDT

Join us for a mixer and networking before our film screening, followed by a panel discussion with leaders featured in the film and local to the California Bay Area, at 120 Wurster Hall, UC Berkeley. Learn more at [Women of Carbon](#). Screening starts at 6:00 pm.

*Open to Industry Partners and the General Public. Drinks and appetizers will be served.*

## Plenary Session: Thursday, April 17, 8:15 am-5 pm PDT

Pauley Ballroom East, UC Berkeley at 2495 Bancroft Way [Hybrid sessions also via Zoom]

*Open to Industry Partners, Invited Research Affiliates and Guests*

**8:15 am** Registration and Breakfast

### 9:00 am Session One: Indoor Environments and Innovations [begin Zoom webinar]

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**9:00 am** Welcome and Participant Introductions



**9:20 am** Make Yourself Comfortable: Nudging Heat and Noise Mitigation Using Smartwatch Interventions

*Clayton Miller, Associate Professor, National University of Singapore*

Development of just-in-time adaptive interventions using micro-surveys and messages triggered by environmental, contextual and personal conditions.



**9:45 am** Experimental Evaluation of Targeted Cooling Devices to Alleviate Surgeons’ Heat Stress in Operating Rooms

*Guangyu Cao, Visiting Prof. from Norwegian University of Science & Technology*

Preliminary results from several ‘localized’ cooling solutions specifically designed to mitigate the unique conditions faced by surgeons.



**10:05 am** Indoor Environmental Quality and Ventilation in Commercial Kitchens

*Jiayu Li, Postdoctoral Researcher*

We assessed physical measurements of thermal conditions, air quality and ventilation assessments, and also subjective feedback from kitchen staff.

**10:30 am** Break (30 min.)

### 11:00 am Session Two: HVAC Innovations [Hybrid]

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**11:05 am** Resource-Efficient Decarbonization for Existing Hospitals

*Paul Raftery, Professional Researcher*

We explore potential emissions reductions from various electrification options based on analysis of heating and cooling load data from an existing hospital.



**11:25 am Comparison of Air and Radiant Cooling Systems in a ZNE Building**  
*Kian Wee Chen, Senior Researcher, Global Environmental Technologies Inc.*  
 We compared environmental, energy and thermal comfort performance of air and radiant cooling systems in a zero-energy building in Singapore.



**11:45 pm Field Demonstrations of the Brick Metadata Schema to Scale up Deployment of Advanced Controls and Analytics**  
*Carlos Duarte, Assistant Professional Researcher*  
 Preliminary results from two new and ongoing intervention studies using randomized control strategies to assess water-side energy efficiency.

**12:00 pm Lunch**

**1:00 pm Keynote and Partner Presentations [Hybrid]**

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**1:00 pm Humanizing Our Resistance to Make Buildings Great Again**  
 Keynote presentation; Ben Stapleton, Executive Director, USGBC California

**1:50 pm Partner Presentations:** HOK, EHDD and REHAU

**2:00 pm Break** (20 minutes)

**2:20 pm Session Three: New Directions [Hybrid]**

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**2:25 pm Generative Models for Building Stock Analysis: Estimating Embodied Carbon and Reuse Potential**  
*Ramon Weber, Assistant Professor of Architecture, UC Berkeley*  
 Work-in-progress on a Rhino/Grasshopper tool that will be available to partners for beta testing, and to be presented at the Venice Architecture Biennale.



**2:45 pm Assessing Thermal Comfort for Winter Demand Response Program Design**  
*Chitra Nambiar, PhD Student in Building Science, Technology and Sustainability*  
 Findings from a winter demand response field study in Alaska reveal the impacts of thermal comfort on demand response participation.



**3:05 pm Advancing Low-Carbon Building Materials: New Strategies, Barriers, and Policy Pathways**  
*Matt Roberts, Assistant Professional Researcher*  
 CBE will be developing marginal abatement cost curves and functionally-equivalent substitution hierarchies for key building materials in California.

## 3:25 pm Lightning Presentations [Hybrid]

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### Impact Reductions to Drive Decarbonization in Early-Phase Building Design

*Shao-Tsu (Cecilia) Tu, Visiting PhD student from Tsinghua University*

Preliminary findings from a literature review to correlate impact reduction strategies with early-phase design decisions, with an upcoming practice survey.



### Effect of a 'CleanCooler' Prototype on Heat Stress Reduction and Indoor Particle Concentrations

*Yao Lu, Visiting Assoc. Professor, South China University of Technology;*

*Chang Liu, Visiting PhD Student from Shenzhen University.*

Preliminary lab results for an evaporative cooler/air filter prototype developed to provide low-energy cooling and resilience during heatwaves and poor air quality events.



### Applying Causal Thinking for Effective Building Data Analysis

*Ruiji Sun, PhD Student in Building Science, Technology and Sustainability*

This presentation will introduce novel methods and applications for using causal inference in the context of exploring building industry data.

**3:45 pm Closing Remarks for Zoom Participants [Conclude Zoom webinar]  
Break (15 min)**

## 4:00 pm Breakout Sessions

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### 4:00 pm Breakout Table Topics

CBE staff and partners will lead roundtable discussions with in-person participants, focusing on current topics of concern to research and industry. (Topics will be made available soon.)

### 4:50 pm Conclude Plenary Session

### 5:00 pm Cocktail Hour and Dinner, Cal Alumni House, UC Berkeley Campus

## Executive Session: Friday, April 18, 8:30 am-12:00 pm PDT

The Magnes Collection, 2121 Allston Way, Berkeley, CA [\[Hybrid sessions also via Zoom\]](#)

*Open to Industry Partner Representatives (two per supporting firm or membership team)*

**8:30 am Continental Breakfast**

**9:00 am Introductions and Director's Message [\[begin Zoom webinar\]](#)**

**9:30 am Advisory Board Meeting**

Moderated by CBE Partner Chair Shruti Kasarekar and Vice Chair Patrick Thibaudeau. CBE faculty and research staff will seek feedback on CBE's FY 2025-2026 research portfolio.

**10:30 am Break [\[conclude Zoom webinar\]](#)**

**10:45 am Breakout Discussion**

To advance interaction we will break into smaller groups centered around multiple themes.

**12:00 pm Conclude Executive Session**

**Optional Lunch in Downtown Berkeley**