



California  
Energy  
Alliance

# Member Business Meeting

November 9, 2021, 11:00 a.m. - 12:00 p.m.

# Welcome & Meeting Overview

*Josh Dean, CEA Executive Director*



# CEA Antitrust Statement

The purpose of the CEA is to explore avenues of mutual interest and cooperation in building energy policy. It is important to recognize that these activities are subject to certain legal limits imposed by state and federal antitrust laws. One central concern of these laws is with combinations or agreements in restraint of trade whereby competition is reduced by design. In the course of all CEA activities, discussions among members involving pricing, sale terms, territories, production or other aspects of competition, must be avoided. In the event any member ever feels that the course of Alliance activities or statements or actions in Alliance meetings is headed into such an area, members should raise the issue immediately so that further discussion of such matters can be suspended pending receipt of advice satisfactory to the members that the topics addressed do not give rise to antitrust problems.



# Agenda

- 11:00 a.m. Welcome & Meeting Overview
- *Josh Dean, CEA, Executive Director*
- 11:05 a.m. CEA Updates & 2025 Code Cycle Workshops
- *Josh Dean*
- 11:15 a.m. Healthy Existing Buildings: Working Group Update
- *Kelly Seeger, Signify*
- 11:20 a.m. Cost-Effectiveness Metrics: Working Group Update
- *Dan Salinas, Salinas Lighting Consult*
- 11:25 a.m. Outcome-Based Code: Working Group Update
- *Dema Tzamaras, Center for Sustainable Energy*
- 11:30 a.m. Member Spotlight - DesignLights Consortium®
- *Axel Pearson, DLC*
- 11:55 a.m. Upcoming Events & Meeting Wrap-up
- *Josh Dean*



# CEA Updates & 2025 Code Cycle Workshops

*Josh Dean*



# CEA General Updates

- Fall Member Meeting - held October 6th
  - Working Group Breakouts
    - Developing a Steering Committee
  - Afternoon Breakouts
    - Expand beyond Building Energy Efficiency Standards
    - CEA - 2025 Code Cycle Workshops
- Government Affairs & Policy Tracking Questionnaire
  - Complete survey [HERE](#)
- December Member Meeting?
  - Zoom poll
- In-person Member Meeting - February or March 2022
  - Zoom poll
- 2022 Membership renewals - sending out mid-November

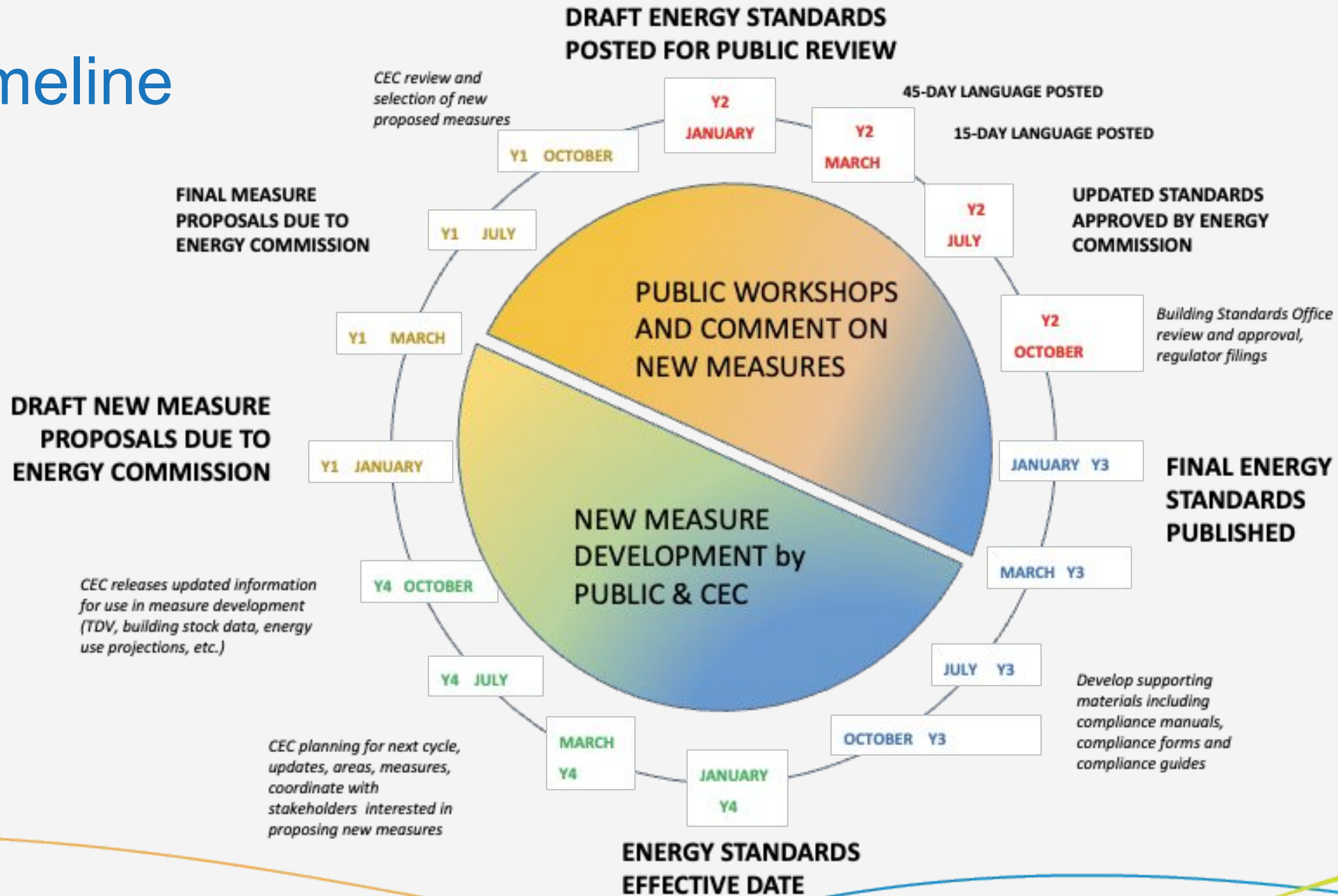


# 2025 Code Cycle Workshops

- 2025 Code Cycle Approach & Timeline
  - Topics
    - 2025 Building Energy Efficiency Standards/Energy Code, Load Management Standards, CALGreen, Appliance Standards, Flexible Appliance Standards, CPUC, Legislative Bills
    - Past - Energy Monitoring, Automated window shading, Cx, daylighting, etc.
    - New - GEBs, SoO for ADR, existing buildings, HVAC permit compliance, electrification, etc.
  - Timeline
    - Identify new measure topics - Oct. 2021 - March 2022
      - CEA Workshops
        - Nov - week of 11/29
        - Dec - week of 12/13
        - Jan - week of 1/10
        - Feb/March - In-person Member Meeting
      - Coordinate with CASE Team topics
        - Statewide CASE Team 2025 Code change proposal
          - Due January 15th - <https://title24stakeholders.com/2025-code-cycle/>
    - New measures development - April 2022 - Dec. 2022



# Timeline





# Healthy Existing Buildings: Working Group Updates

*Kelly Seeger, Signify*



# HEBs WG October Breakout Session

- Initiative summary for the CEA strategic plan: intent, priorities, how the initiative supports the CEA vision
- Research and funding needs
- Collaboration with OBC and CEM WGs
- Deliverables
- How to get members and others involved

## HEBs WG Breakout: 2026 Vision

CEA is the '**institutional bridge**' between policy-makers, regulators, and market actors supporting the transformation of the existing building stock in California into Healthy Existing Buildings.



# HEB Working Group (Define/Priorities/2022 Plans/Funding Needs/Ways to Engage)

## Research?

Is there an opportunity to influence federal/state legislation to go toward HEBs, e.g., infrastructure plan

Look at LEED, WELL, 189.1, CALGreen for insights

Healthy buildings landscape / current situation, state of research, in bldg. performance standards, state of EB stock in relation to healthy buildings

CA building retrofit market, EB stock, muni. bldg. performance standards for EBs

CA ABB41 (grants to schools for HVAC assessment, and repairs -- indoor IAQ monitoring and CO2), Prop 39 for school improvements

HEB workforce assessment - verify that workforce is skilled and trained on processes and equipment they are installing, maintaining, services. Look at studies. What opps are available? Workforce in

issues of not having skilled trained workforce. identify pathways. move that over to engagement. Making the connection - being the bridge. develop the understanding of whats out there and make the connection.

Developing energy best practices for HEBs

Deliverables need to address audience, e.g., TI contractor

## Collaboration?

Identify collaboration topics with CEM and OBC WGs

Non-energy benefits (align with CEM WG)

Policy and code changes that push toward CA goals (align with OBC WG)

Launch pages on CEA website - gather insights and house them there, then see what people use etc.

Are there current adopted standards that are not being followed that would help with HEBs? Also look at upcoming legislation

Look at IHACI research for insights

Run research and implementation concurrently.

Define institutional bridge

## Funding needs?

Hiring an intern

Build website, maintain +analytics

Pay walls -highest level summary materials - free, user manual levels - modest charge?

Look into DOE funding opportunities?

Identify a gap and push CA into doing studies, e.g. PIER Studies

Utilities and regional energy networks might have funding available

help agencies on both sides find solutions

## Ways to engage?

Look at whats been done - recommendations to code cycle and legislation - short term

energy and health/wellbeing is not an either-or

non-energy benefits recommendations, e.g., productivity in classrooms

IAQ should be a selling point to all building owners - this wont be last pandemic

Update CEA pages with research topics

Regional energy networks in CA - possible ally?

marketing + social media

# Research Priorities

- **Building performance standards:** work with several municipalities to understand their standards. Develop [recommendations](#) for municipalities on the incorporation of HEB principles into their performance standards.
- **Federal / state legislation:** Is there an opportunity to influence to go toward HEBs, e.g., through the infrastructure plan?
- **Building certification programs (WELL, LEED, Fitwel, etc.), high performance building standards (189.1, CALGreen):** review for insights.
- **Healthy building landscape / current situation:** state of research, aspects in building performance standards, state of EB stock in relation to healthy buildings etc. Develop into [short paper](#).
- **CA building retrofit market:** EB stock, municipal building performance standards for EBs, transparency laws/retro-commissioning reqs., other avenues, etc.
- **CA Laws:** CA AB841 (grants to schools for HVAC assessment and repairs – indoor IAQ monitoring and CO2), Prop 39 for school improvements.
- **Workforce for HEBs:** determine if workforce is skilled and trained on processes and equipment they would be installing, maintaining, servicing. Look at studies. What opportunities are available? What are the needs? Where are the gaps etc. Identify pathways, move that over to engagement. Making the connection, being the bridge. Develop the understanding of what's out there and make the connection.



# Research Priorities cont.

- **Energy best practices to make EBs into HEBs:** explore energy implications of health and wellbeing strategies and develop energy best practices, quantify non-energy benefits in collaborations with the OBC WG and CEM WG. Develop [white paper](#).
- **IHACI research:** review for insights.
- **T24 2022/CALgreen:** Look at currently adopted standards – are there aspects that are not being followed that would help with HEBs? Do we need new codes/standards provisions for HEBs?
- **CEA website HEB Initiative pages** – build [new launch page](#), gather insights and house them there, then see what people use etc. determine needs. Plan for new website.
- **Define ‘institutional bridge’** Core ideals/principles of the HEB approach (healthy for people, healthy for economy/grid, healthy for environment): write [position paper](#) and create [infographic](#).
- **Core HEB system attributes:** develop [fact sheet](#).
- **Holistic strategies:** build a [series of end-to-end HEB strategies](#) to promote within California to building owners and municipalities. Illuminate the critical nature of building operation and maintenance and highlight pressing issues and if possible, offer potential solutions. Evaluate typical as well as reach design strategies, connectivity strategies, Cx strategies, operations and maintenance protocols, and fault detection and diagnostics. Consider energy and cost justification at various steps of these strategies.



# Next Steps

- Smartsheet created for Research topics for collaboration ✓
- Send link to WG members so they can select the items they want to work on for the WG
- Set up CEA Folders for WG to add materials/share etc.
- Look into the funding ideas suggested
- Update the CEA HEBs WG webpage with current info and contacts, areas of research etc.
- Draft 2022 workplan with timeline, look at our short-term vs. long-term goals



# Cost-Effectiveness Metrics: Working Group Updates

*Dan Salinas, Salinas Lighting Consult*



# CEM WG October Breakout Session

Martin Vu presented his results of doing a review for CPUC Cost Effective Metrics in a PowerPoint titled: “CPUC EE Potential Goals and Portfolio Approval and Oversight with Timeline”

A few notes from the discussion:

- Need to understand the TOTAL SYSTEM Benefits ahead of CEM under CPUC
  - What value does education have in the process – how can it be measured?
  - How do we tie CEA Education to programs for the purpose of “Influence that can be measured”?
  - Education is connected to market support with long term evaluation
- Some CPUC Commissioners are trying to lead in new directions, but staff may be the bottleneck
  - Helpful to sit in on some of the meetings commissioners have to see the process and how we can help as a resource
  - The challenge is knowing when to intervene
- CEA needs a calendar of events for CPUC, CEC, etc., so we can have CEA members selected to sit in for us and be a resource.
- Regarding additional Non-Energy Benefits, etc., that can be presented for the benefit of users, how can this be measured?
- CPUC limits energy efficiency programs to TRC “Total Resource Cost”
- CPUC is having difficulty merging their view with CEC





# Different Approaches to Calculating Cost Effectiveness with Real World Examples

1. CEC calculates using a Time Dependent Valuation (TDV) approach
2. CPUC calculates using a Total Resource Cost (TRC) approach (EE only)
3. CARB has another approach
4. CAISO's system operator perspective/approach & infrastructure consideration
5. Customer perspective
6. CEA's recommended approach to unify cost effectiveness

- Examples

- **Field Study:** For a whole building systems approach, can we show the differences of each approach and show the possibility of unification of cost effectiveness
- **Lab Study:** Study done in a controlled lab environment at Flex Lab (Peter Schwartz)?
  - How does outcome based code (OBC) differ from the CPUC's NMEC approach?
  - How does non-energy benefits get captured in each approach?



# Outcome-Based Code: Working Group Updates

*Dema Tzamaras, Center for Sustainable Energy*



# Member Spotlight

*DesignLights Consortium*





*Axel Pearson, LC, CPM  
Senior Technical Product Manager*



# Member Meetings & Events

*Josh Dean*



# November - Member Webinar

- **Grid-Interactive Efficient Buildings**
  - **Mary Ann Piette**, Senior Scientist and the Director of the Building Technology and Urban Systems (BTUS) Division in the Energy Technologies Area at Lawrence Berkeley National Laboratory
    - National Roadmap for Grid-Interactive Efficient Buildings
    - Demand Response Potential Study
    - California Load Flexibility Research and Development Hub (CalFlexHub)
  - Tuesday, November 30th from 10:00 a.m. - 11:30 a.m. PT
  - Virtual - via Zoom
    - Register [HERE](#) in advance for this meeting.
    - Share registration link within your organization.

**Calendar invites have been sent out.**



# 2025 Code Cycle Workshops

- Will host meetings until 2022 Q1 In-Person Member Meeting
  - Nov - week of 11/29
  - Dec - week of 12/13
  - Jan - week of 1/10
  - Feb/March - In-person Member Meeting
- Will send a Doodle Poll for days/times



# Wrap-Up

*Josh Dean*







# **Thank You For Attending CEA Member Business Meeting**

Meeting Materials are available to  
CEA Members via the member portal at

[caenergyalliance.org](https://caenergyalliance.org)