



California
Energy
Alliance

Member Business Meeting

September 21, 2022, 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 General Business Updates
- *Josh Dean*
- 11:10 a.m. CEA Website Updates
- *Josh Dean*
- 11:15 a.m. CASE Team Code Measures Review
- *Lighting Review Team*
 - *HVAC Review Team*
- 11:35 a.m. 2025 Code Cycle Development
- *All*
 - *Updates & final vote on CEA Measures*
- 11:55 a.m. Meeting Wrap-up
- *Josh Dean*
- 12:00 p.m. Adjourn



CEA General Business Updates

Josh Dean



CEA General Updates

- 2023 In-person Meetings
 - March 14 and 15, 2023 in San Diego - Zoom Poll
 - Opportunity to support the Codes & Standards Development work
 - Only 2x in 2023
- Fellows from Sacramento Valley College Corps
 - CEA will be host site for (2) Fellows
 - Majors - Environmental Design and Ecological Mgmt & Conservation
 - Skills:
 - Community and campaign organization/outreach
 - Spoken and written Spanish
 - Graphic design
 - Term - September 2022 - May 2023 (375 hours/Fellow)
 - Feedback and areas of where WGs need support?



CEA General Updates

- 2024 IECC draft
 - CEA to provide comments in support?
 - [Link to IECC Draft](#)
 - Due Oct 21st
 - NBI webinar on Sept 29th at 10 - 11 a.m. PT
 - [Link to register](#)
- Governor's Office of Planning and Research (OPR) - CA's 5th Climate Change Assessment
 - New climate data and scenarios that portray impacts of climate change on California
 - Sept. 26th - Infrastructure & Built Systems – [Link to register](#)
 - Sept. 30th - Human Health, Culture, & Wellbeing – [Link to register](#)



**California's Fifth Climate Change Assessment
Virtual Research Roundtables**

Identifying research topics or information gaps that are critical to California's climate adaptation work

- Infrastructure & Built Systems: Sept. 26 | 8:30 - 10:30 a.m
- Human Health, Culture, & Wellbeing: Sept. 30 | 8:30 - 10:30 a.m
- Water Management: Sept. 30 | 1:30 - 3:30 p.m
- Natural Lands & Biodiversity: Oct. 3 | 8:30 - 10:30 a.m
- Natural Waters & Biodiversity: Oct. 3 | 2:00 - 4:00 p.m
- Working Lands, Waters, & Biodiversity: Oct. 6 | 12:30 - 2:30 p.m

Logos for: OFFICE OF PLANNING AND RESEARCH, CALIFORNIA NATURAL RESOURCES AGENCY, CALIFORNIA ENERGY COMMISSION, CALIFORNIA STRATEGIC GROWTH COUNCIL, and CCST CALIFORNIA COUNCIL ON SCIENCE & TECHNOLOGY.



CEA General Updates

CEA Policy Corner

- 2022 legislative bills tracked
 - . *AB 1279* - The California Climate Crisis Act: codifies California's goal to become carbon neutral by 2045.
 - . Passed
 - . *SB 1020* - Clean Energy, Jobs, and Affordability Act of 2022: revises state policy to generate 90% of electricity from renewables by 2035 and 100% by 2045.
 - . Passed
 - . *AB 2232* - School facilities: heating, ventilation, and air conditioning systems.
 - . Passed
 - . *SB 1164* - Energy: building energy efficiency: document repository and registry.
 - . Held in committee and under submission. Will not move forward this session.
 - . *SB 1063* - Energy: appliance standards and cost-effective measures.
 - . Passed
 - . *SB 260* - Climate Corporate Accountability Act: requires reporting entities to disclose GHG emissions for scope 1, 2, & 3 emissions.
 - . Failed in Assembly
- Met w/ Senator Becker's office and IMT to discuss Building Performance Standards (BPS) and OBA Working Group research
- Want to get involved? Email - josh.dean@caenergyalliance.org



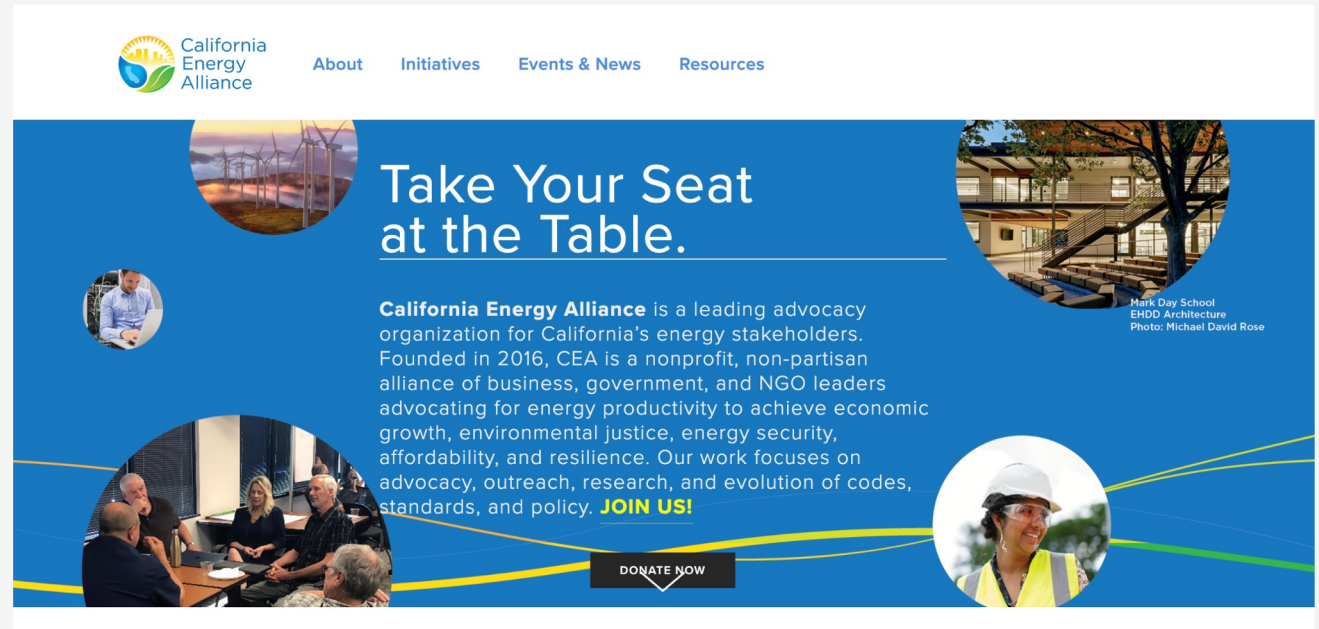
CEA Website Updates

Josh Dean



Website Changes

- About
 - Pillars
 - People
 - Working Groups
- Initiatives
 - Aligns with Strategic Plan
 - Research Projects page
 - Linked to existing initiatives to create archive
- Action Items:
 - Review Working Group pages
 - Review Initiatives pages
 - Share resources and events
 - WG At the Table videos



CASE Team Code Measures Review

All



HVAC Review Team Feedback

High Priority – Measures that CEA would like to take an active role in. We have Subject Matter Experts (SME) that can be assigned to work with and assist the CASE team.

Measure Name
Acceptance Testing for Commercial Refrigeration Measures
Buried duct credit for alterations
Buried ducts as alternative to HPA or DCS
Buried ducts with HPA as prescriptive alternative to DCS
Clarify occupied standby and VAV DOAS requirement
Classroom Ventilation and IAQ **
Comprehensive Healthcare Proposal
Demand Control Kitchen Ventilation
DOAS and HRV acceptance testing
Expand VAV DOAS
Kitchen Exhaust Hoods
Laboratory HVAC right-sizing, EAHR, night set-back (or DCV)
Multifamily restructuring
Multifamily restructuring additions and alterations
Prescriptive hydronic heat pump requirements

** = CEA Healthy Existing Buildings (HEB) working group would like to be involved.



Lighting Review Team Feedback

Measure Name	Measure Description	Building Type	CEA Notes	CEA Support (Y/N) (ex. Letter/comments)	CEA suggests priority	Active Involvement (Y/N)	Lighting Review Needed (from 8/22)	Lighting Notes
Acceptance Testing for Commercial Refrigeration Measures	Add new acceptance testing procedures for commercial refrigeration to cover the following systems: <ul style="list-style-type: none"> • Condensers and Condenser Fan Motor Variable Speed Control (air cooled, evaporative cooled, and adiabatic) • Compressor Floating Suction Controls • Liquid Subcooling • Refrigerated Display Case Lighting (motion sensor and automatic time switch controls) • Refrigeration Heat Recovery 	NR	HVAC/lighting team from CEA to review for active involvement	Y	Up to CEA Acceptance Testing Folks	N	Yes	Not likely needing a heavy lift - suggest that CEA folks focused on Acceptance Testing should weigh in if this is needed. Currently no requirement for lighting. Need to be aware of any Title20 looks at completed refrigerated cases to avoid overlap or conflict with field installed systems.
CEH: Greenhouse daylight availability controls	Controls that operate greenhouse horticultural lighting systems based on PPFD and DLI. These products are commercially available, and save energy by reducing light level to meet the required PPE in combination with sunlight entering a greenhouse.	NR	Lighting Team from CEA (Jeremy Yon, Nancy, martin Vu, Kelly, Pekka, Michael J, and Peter)	Y	Yes	Y (Nancy)	Yes	Support for the idea of controls are needed in CEH space. In addition to the stated goals, c\ncern from the group for two tangential issues related to dissuading 24-hour use of light: (a) plant overexposure & (b) dark skies. The connection to this potential research is to support that controls are needed now to enable future provisions as the research continues.
CEH: Indoor and Greenhouse Lighting PPE	2.1 uMol/J) or higher. Significant savings potential and can use existing case report calculation. There was notable stakeholder pushback on the LED only PPE level in the 2022 code cycle but high end products are capable of 2.7-3.4 PPE. Measure is technologically feasible.	NR	Lighting Team from CEA (Jeremy Yon, Nancy, martin Vu, Kelly, Pekka, and Peter)	Y	Yes	Y (Jeremy)	Yes	Need to bring together the voices that are concerned about increased efficacy options and those with technology/research understanding. Better understand controls needs for different spaces.
Classroom Ventilation and IAQ	Controls that operate horticultural lighting systems based on PPFD and DLI. 120.1(d)6. Classroom IAQ monitoring. Each classroom shall have means to monitor current ventilation health and provide visual indication when inadequate ventilation exists in the space. 120.1(f) Design and Control Requirements for Quantities of Outdoor Air 4. All school mechanical ventilation and space conditioning systems shall include airflow measurement devices and shall monitoring and control ventilation rates within 10 percent of the required outside air ventilation rates. Each airflow measurement device shall be equipped with alarm functionality to determine if measured airflow rate is outside of 10% of the required outside air ventilation rates, and shall report the alarm in one of the following ways: A. To a Building Control System monitored by facility personnel B. To the HVAC Equipment controller, when no central Building Control System exist C. If the system serves a single space, then the alarm should be annunciated locally clearly visible at eye level.	NR	HVAC team and HEB WG (and crossover with Lighting Team)	Y			Yes	{Jeremy Follow Up with Kelly as well} Supported encouraging CASE team to include GUV solutions from the perspective of energy tradeoff versus fans and the potential cost to retrofit a solution.
Comprehensive Healthcare Proposal	Develop a comprehensive set of recommendations to improve energy performance requirements for healthcare, including removing exemptions for new construction/additions and establishing requirements for alterations.	NR	HVAC Team Apply to our healthcare energy accounting workshop comments?	Y			Yes	There are a significant number of exemptions for lighting controls - there could be good reason to revisit them, but also should be aware of possible unintended consequences.



2025 Code Cycle Development

All



2025 Code Cycle Development Updates

Measures

- Lighting
 - Institutional tuning (Michael Jouaneh / Dan Salinas / Kelly Cunningham)
 - Allow Lighting for wellbeing (Kelly Seeger / Peter Schwartz)
 - Title 20/Title 24 product requirements (Kelly Seeger / Pekka Hakkarainen)
- Demand Mgmt
 - Eliminate 0.5 w/sf threshold / Requiring DR for alterations (Michael Jouaneh / Kelly Cunningham)
 - DR for Exterior lighting (safety issues) (Charles Knuffke / Dan Salinas)
 - HVAC demand mgmt. – AHRI 1380 standard (Ryohei Hinokuma)
 - Plug load – requiring controlled receptacles for alterations and expanding the space types where they're required (Charles Knuffke)



2025 Code Cycle Development Updates

Measures

- Mandatory “monitoring” (Wayne Stoppelmoor)
- Compliance/Enforcement/AT
 - FD&D – whole HVAC system (Wayne Stoppelmoor)
 - Duct leak testing (Chris Ruch / Randy Young)
 - ATT enforcement – NRCIs and NRCAs (Chris Ruch / Michael Scalzo)

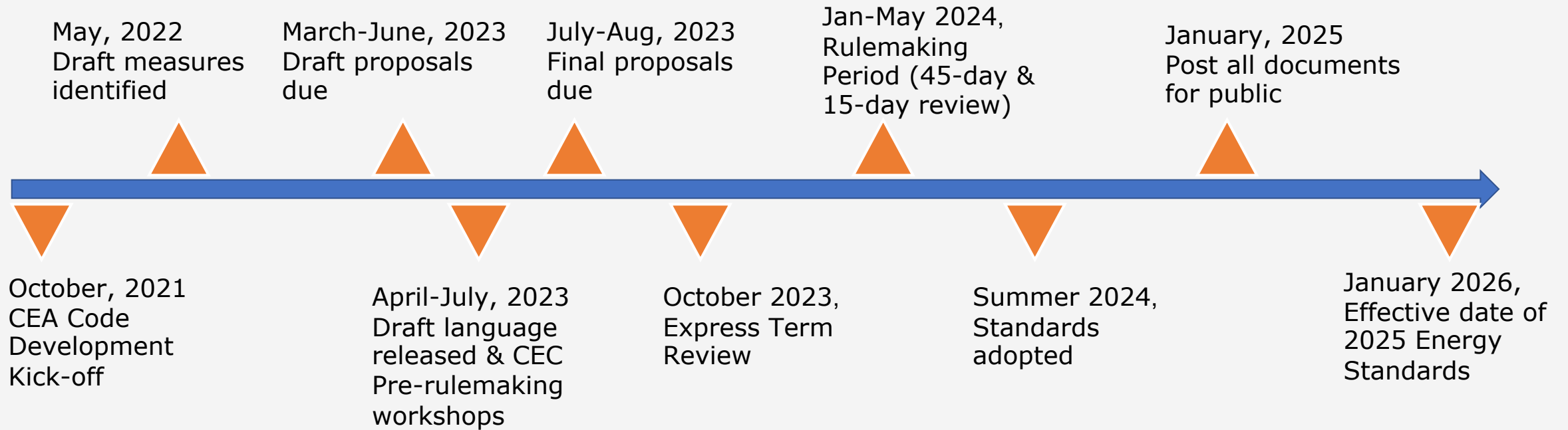
Vote on CEA measures - Zoom Poll

2025 Code Cycle Resources

- [Link to spreadsheet in Google Drive](#)



2025 Standards Development Timeline





Thank You For Attending CEA Member Business Meeting

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