

California Energy Alliance

2021 ANNUAL REPORT

TAKE YOUR SEAT AT THE TABLE.

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Opening Address

Despite the challenges that the pandemic continued to present in 2021, the California Energy Alliance (CEA) was able to continue bringing our members and stakeholders together virtually to collaborate and advance our initiatives throughout the year. In early 2021, the CEA Leadership Team began developing a Strategic Plan with the goal of reshaping and growing the organization into one that is a valued resource providing insightful, fact-based research and advocacy to the energy industry.

Highlights of the Strategic Plan include:

- Vision Healthy and equitable built environment that is powered by carbon-free, reliable energy sources.
- Mission Bring beneficial, equitable change to energy standards, policies, and programs by developing consensus among diverse and engaged stakeholders.
- Value Proposition "Be the conduit between the market and policy & code makers"

Additionally, CEA identified pathways to increase engagement in the codes & standards making process and focus research efforts on larger policy-related issues, e.g., updating cost-effectiveness measures in energy regulations, how to apply outcome-based approaches, and ensuring the focus on healthy buildings includes energy efficient strategies while maintaining adequate Indoor Air Quality (IAQ). These efforts led CEA to developing a Public and Government Affairs Working Group in order to broaden our member's voices on energy policy issues.

As CEA continues to grow and expand in the coming year, the Alliance will assess activities and initiatives to ensure all stakeholders' needs are met and the organization is advancing towards its Vision. We look forward to your continued support and engagement as we enter this critical phase of the next cycle of building code development. We invite you to take your seat at the table to have your voice heard, and we hope that you consider inviting your colleagues to be a part of the conversation as well.

We look forward to your participation and support in continuing our important work in 2022 as California's energy stakeholder advocate.



Chris RuchPresident & Board Chair



Josh Dean

Executive Director



Highlights & Accomplishments

Administrative

Strategic Planning

In 2021, the CEA continued with development of our Strategic Plan and, in particular, the solidification of our four Mission Pillars. These pillars are key drivers which inform our projects, committees, and education throughout the year.

Mission Pillars

Building Energy & Environmental Policy

Focus on working with federal, state, and local representatives to identify and take the necessary steps to develop legislation, regulations, and ordinances that help achieve our Vision. This Pillar is critical to opening the door for new strategies and technologies to be incorporated in codes and standards development.

Building Codes & Standards - Improvement & Evolution

This Pillar allows for CEA stakeholders to collaborate and develop a collective voice on evolving building codes and standards as well as improving the compliance and enforcement mechanisms in place to achieve the state's climate change goals.

Government & Industry Engagement

This Pillar focuses on creating a feedback loop between what's happening in the field with what was expected from policy. CEA is in a unique position to provide a space for government and industry to collaborate, learn, and share opportunities for achieving each other's energy and environmental goals.

Education, Training & Outreach

CEA will work to assist and provide recommendations for the continued development and use of a skilled, trained, and certified workforce.



Education & Outreach

In 2021, CEA produced many events that provided unique educational opportunities on a range of topics and a chance for members to engage and collaborate with key energy stakeholders, policy makers, regulators, fellow members, and other influencers.

- 20 Member Events
- 7 Guest Speaker Webinars
- 3 Roundtables

- 3 Convenings
- 8 Member Spotlights
- 1 Quarterly Member Meeting

Decarbonization Convening

Decarbonization is core to CEA initiatives because it has significant momentum in California state government and is widely recognized by energy stakeholders and the public at large as a climate action that presents feasible opportunities and tangible results.

In order to advance this strategy, in January, March, and April 2021, CEA sponsored a series of three virtual convenings focused on the building, transportation, and power sectors. The purpose of the convenings was to assess current efforts on decarbonization in California and to define CEA's role in mobilizing its diverse stakeholder membership and other partners in these efforts. The three convenings brought together a diverse group of 66 experts that shared insights, ideas, and opportunities to advance decarbonization efforts in California. The convening outcomes and action items were shared with CEA Members and incorporated into the Strategic Plan.



Roundtables

In 2021, CEA convened multiple roundtables in order to discuss growing initiatives and highlight goals for future code proposals and programming.

Decarbonization

This roundtable allowed CEA to report back on the topics discussed at the decarbonization convening, highlight the big ideas, and hear from Members about their involvement decarbonization in efforts. The small group discussions highlighted how CEA's current Initiatives and Working Groups are already working towards decarbonization efforts. This puts CEA in a position to continue researching, providing education & outreach, and improving codes & standards with an eye towards decarbonization of the built environment.

2022 Energy Code

This roundtable was an opportunity for CEA Members to discuss the 2022 Energy Code 45-day language, ensure that CEA code proposals were incorporated, and discuss areas for CEA to provide comments to the California Energy Commission (Energy Commission).

Healthy Buildings

This roundtable identified CEA's role in this space as the institutional bridge to recommend policy and code changes that would better align with the market - incentivizing both manufacturers and building owners to invest in healthy building technology and practices.

Working Groups & Task Teams

The Working Groups and Task Teams develop goals and activities to address CEA's current initiatives including code compliance & improvement, healthy buildings, and decarbonization.

Healthy Existing Buildings

After a number of Member meetings and a Roundtable focused on the importance of health in our built environment, CEA launched its Healthy Existing Buildings Working Group. This Working Group will conduct its own research and leverage the knowledge and expertise of CEA Members in building design, construction, energy, and operations & maintenance to develop a comprehensive approach to healthy building strategies. The goal is for CEA to become the institutional bridge between policymakers and the market, pulling together the story, the best practices, and the recommendations to transform the existing building stock into healthy buildings that use energy responsibly and support California's decarbonization goals.

Public & Government Affairs

In 2021, CEA took steps to broaden its approach to policy advocacy by forming a Public & Government Affairs Working Group. The Public and Government Affairs Working Group supports CEA's efforts with advocacy, tracking new legislation and regulations, and creating a feedback loop between the market and policy makers. This Working Group will be the bridge between policy makers and the market to synthesize and explain what's required to advance energy and environmental goals.

Cost-Effectiveness Metrics

The Cost-Effectiveness Metrics (CEM) Working Group spent time this past year researching and meeting with the Energy Commission to discuss metrics, relevant definitions, and new approaches. This included historical review of the cost effectiveness calculations as originally defined by the Warren-Alquist Act in the 1970s, each revision or modification since then, and further development of a white paper to present to legislators. This will paper will highlight reasons for evaluating the weaknesses and need for redefining the metrics to meet:

- Current technology requirements,
- Design needs that place humans first, and,
- Environmental concerns including Decarbonization.





Working Groups & Task Teams cont.

Outcome-Based Approach

The Outcome-Based Code Working Group moved to change its name to Outcome-Based Approach (OBA) to focus on making a data-driven case for both outcome-based code compliance and outcome-based building performance standards. An Outcome-Based Approach in building performance standards can ensure buildings continue to perform as designed through their useful life and provide a better understanding of the true energy performance of the building stock. Both applications of an OBA require that participating buildings are monitored, post-occupancy, for a predetermined time period or periodically over many years. Deep and necessary gains in building energy efficiency cannot continue without considering actual building performance in new and existing buildings.

Additionally in 2021, the OBA Working Group had the opportunity to present to the International Association of Lighting Designers (IALD) and share the efforts of the Working Group and how it's pursuing opportunities to make a case for an outcome-based approach and incorporate it into California codes and policies. After a brief presentation on CEA's efforts in this space, the group gained insight from the IALD community about opportunities, hurdles, and direction of this initiative.



Working Groups & Task Teams cont.

Codes & Standards Working Group

2022 Building Energy Efficiency Standards

CEA played an extensive role in presenting new code measure proposals and providing public comments to the Energy Commission throughout the development of the 2022 Building Energy Efficiency Standards. The proposals developed to support the 2022 Energy Standards update address:

- Demand Responsive Controlled Receptacles
- Improve upon and expand the demand response (DR) requirements to ensure new buildings are DR-ready
- Development of a new data registry and repository for energy compliance forms and information

CEA is the only energy advocacy organization to have its code change proposals adopted as part of recent California Energy Standards updates. CEA's proposals are self-funded and developed by members in collaboration with interested public participants, industry experts, and the people working every day in California buildings.

2025 Code Cycle Kick-Off

In the Fall of 2021, CEA began its code development work with the first of many workshops to discuss topics and proposals for the 2025 code cycle. CEA looks to build on its success in the previous code cycle and play a unique role of developing code change proposals with consensus from diverse and engaged industry stakeholders.

Targeted Research Activities

CEA took a major step forward in 2021 to carry out research efforts related to energy efficiency, developing new codes & standards, and assessing decarbonization strategies. The two research projects below are funded through the Energy Commission's Electric Program Investment Charge (EPIC) program.

Plug Load Energy Testing to Inform Codes & Standards - PLETICS

In March 2021, CEA kicked off the PLETICS research project. The project team includes UC Davis - California Lighting Technology Center (CLTC), UC Irvine - California Plug Load Research Center (CalPlug), and CSU Northridge. The objectives of the research are to reduce electricity use of active and standby modes for residential networking equipment, commercial imaging equipment, and laboratory equipment as well as provide information to inform future codes & standards. By the end of 2021, the project team completed device selection, a full market assessment report, and started assessing which common features impact energy use for each device. The next phase of the project will involve the development of new or to improve existing test procedures for measuring total energy consumption for future consideration by codes and standards.

Renewable Energy & Advanced Lighting Systems - REAL

CEA was selected to be part of the CLTC project team focused on the development, testing and demonstration of renewable energy and advanced lighting (REAL) systems that can reduce nighttime grid-supplied energy consumption. CEA will provide expertise in industry outreach and energy code development to ensure project outcomes are beneficial to a large stakeholder group and are appropriate for potential use in codes & standards development activities. CEA will support the following activities: market assessment, building codes & standards development, and associated technology transfer activities. The project is expected to last from July 2021 to March 2025.









Policy Advocacy

With support and guidance from the Public & Government Affairs Working Group, CEA was able to take a seat at the table to track, inform, and comment on upcoming energy policy. Activities in 2021 led to CEA taking part in and commenting on proceedings and rulemakings at both the Energy Commission and the California Public Utilities Commission. In addition, CEA began preparations for outreach to representatives at the California State Legislature. This included the development of a framework to coordinate and host an Advocacy Day planned for Spring 2022.

Highlights include:

• California Energy Commission

- 2021 Integrated Energy Policy Report (IEPR)
 - CEA Members, Cori Jackson from CLTC and Randy Young from SMW 104, presented at the July 13th IEPR workshop on workforce development opportunities and readiness for building decarbonization.
 - CEA Executive Director, Josh Dean, and Members, Randy Young from SMW 104 and Bob Wiseman from IHACI, presented at the September 10th IEPR workshop to provide insight on actions to improve the quality of installation of HVAC equipment.
 - Comments and recommendations from the two workshops and CEA comment letter on the Draft 2021 IEPR were incorporated into the Final 2021 IEPR.

• California Public Utilities Commission

 CEA provided comments and recommendations on the Heat Pump Water Heater Contractor Training and Workforce Issues and Methods To Increase Self-Generation Incentive Program Technologies' Contribution To Summer Reliability rulemaking.



Financial Summary

CEA's 2021 financial summary, including its Balance Sheet and Statement of Activities, is provided as of December 31, 2021. CEA operates under a cash basis accounting system.

Balance Sheet

Statement of Activities

Current Assets		Revenue	
Bank Accounts	\$2,622	Membership	\$107,500
		Grants	\$106,722
Liabilities			
Current	\$454	Total Revenue \$2	\$214,272
Long Term	\$O		
Net Assets		Expenses	
Net Assets Beginning of Year	\$30,312	Programs & Initiatives	\$138,202
Change in Net Assets	\$-28,144	Administration	\$88,947
		Fundraising	\$15,267
Total Liabilities & Net Assets	\$2,622		
		Total Expenses	\$242,416
		Net Revenue	\$-28,144

Sustaining Members



Carrier is a world leader in HVAC, Refrigeration, Fire & Security solutions. Building on our vision to create solutions that matter for people and our planet, Carrier is targeting carbon neutrality across its operations by 2030 and aiming to reduce our customers' carbon footprint by more than one gigaton. Carrier participation in the CEA initiatives aligns with this strategy and helps advance Carrier strategic goals and to help improve overall Environmental goals and responsibilities. We are proud to be a sustaining member of CEA.



From electrical to lighting to networking, Leviton engineers thoughtful solutions that help make life easier, safer, more efficient and more productive. We are proud to be a sustaining member of CEA.



From dimmers for the home, to lighting management systems for entire buildings, Lutron offers more than 15,000 energy-saving products, sold in more than 100 countries. We are proud to be a sustaining member of CEA.



New Buildings Institute (NBI) works collaboratively with industry market players—governments, utilities, energy efficiency advocates and building professionals—to promote advanced design practices, innovative technologies, public policies and programs that improve energy efficiency. We also develop and offer guidance and tools to support the design and construction of zero energy / carbon neutral buildings. We are proud to be a sustaining member of CEA.



Simply put, CEA achieves results. We're pleased to support and contribute to the growth of such a dynamic, impactful stakeholder group committed to the growth and evolution of California energy policies and standards for the benefit of people and the environment. We are proud to be a sustaining member of CEA.



Wattstopper, a product line of Legrand, offers the most comprehensive line of simple, scalable, and flexible energy-efficient lighting controls and solutions for commercial and residential applications. We are proud to be a sustaining member of CEA.

Members









Acuity Brands

ADC Energy

Autani Building Controls

BIOS Lighting



California Advanced Lighting Controls Training Program (CALCTP)



California Community Colleges



California Labor Management Cooperation Committee (CA LMCC)



California Lighting Technology Center (CLTC)



Sheet Metal & Air Conditioners National Association



California Street Light Association



Center for Sustainable Energy



LIGHTING DESIGN AND ENGINEERING

Clanton & Associates

Clifton Lemon Associates







Clifton Lemon Associates

CodeCycle

Daikin

Design Lights Consortium









Dynalectric

ETC

Current

Gregg D. Ander, LLC



Members









Illuminating Engineering Society (IES)

Institute of Heating & Air Conditioning Industries

Institute of Heating & Air Conditioning Industries

National Lighting Contractors Association of America



PAE Consulting Engineers



Peter Schwartz



Phillip Hall



Prasino Energy



RMS Energy Consulting



Salinas Lighting Consult



Sheet Metal Workers Local Union No. 104 - SMART



The Title 24 Expert



Uplight Electrical Engineering



Western Riverside Council of Governments

Leadership Team

CEA Corporate Officers



Cori Jackson

President & Board Chair

Program Director, California

Lighting Technology Center



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John Busch
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Energy Code Specialist & Regional
Sales Manager West, Leviton



John Martin Treasurer



Pekka Hakkarainen
Board Member
VP Government & Industry
Relations, Lutron Electronics



Christopher Ruch
Board Member
Director of Training, National
Energy Management Institute



Kelly Seeger

Board Member

Technical Policy Manager,

Standards & Regulations, Signify



Randy Young
Board Member
Business Representative, District 2,
Sheet Metal Workers Local 104



Technical Advisory Council Staff





Josh DeanExecutive Director



Craig Ochoa
Technical Advisory Council Member
Preconstruction Project Manager,
Dynalectric



Clifton Lemon
Business Development Director



Daniel Salinas
Technical Advisory Council Member
CEO, Salinas Lighting Consult



Gail Russo-LarsonOperations Manager

TAKE YOUR SEAT AT THE TABLE



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