

California Energy Alliance 2020 ANNUAL REPORT

Table of Contents

Opening Address	3
Highlights and Accomplishments	4
Administrative	4
Education & Outreach	5
Targeted Research Activities	6
Financial Summary	8
Sustaining Members	9
Members	11
Leadership Team	13
CEA Corporate Officers	13
Board of Directors	13
Technical Advisory Council	14
Staff	14



Opening Address

As the California Energy Alliance (CEA) enters its fifth year as a leading energy advocacy organization operating on behalf of California stakeholders, Doug and I can't help but look back on 2020 with a bit of wide-eyed amazement at all that CEA accomplished during a time of such incredible change and challenge. During the past year, while we have been unable to come together in-person, CEA members and staff continued to create and support a collection of critical energy initiatives that are sure to improve our workspaces, neighborhoods and businesses for years to come. Here are some of the highlights:

- CEA authored its second code change proposal that included improved, simplified requirements
 for automated demand response technologies, including demand-responsive controlled
 receptacles. CEA's recommendations will become part of California's 2022 Building Energy
 Efficiency Standards.
- CEA was selected to lead a \$1M initiative focused on development of building and appliance energy standards for plug load devices such as residential networking hardware and laboratory equipment.

The CEA also welcomed its first Executive Director in 2020, Mr. Josh Dean, who came to us in September from the San Diego Green Building Council. Josh's passion and positive leadership had immediate impacts on our organization. Josh, along with the wonderful support of CEA staff, the Executive Board, and Technical Advisory Council, are working on multiple programs, including decarbonization of California's building stock; creation of improved cost-effectiveness metrics for use with building codes and standards; and analysis to qualify and quantify the impacts of improved indoor environmental quality. The CEA will continue to prosper and create positive change under Josh's leadership.

During the coming year, take a moment to consider that energy touches each and every person in California and across the world. The challenges of energy access, reliability and affordability can often seem too big to fully comprehend, let alone overcome. However, the CEA believes that simple conversations and compromise have the power to improve, if not solve, so many of our energy problems. Each of us can reach out to our neighbors, and begin a conversation about energy and environmental challenges we face. A simple conversation can lead to important collaboration, and collaboration is really the only way we can expect to improve our energy landscape. So please join CEA in a conversation around the table, and consider inviting your neighbors to take a seat as well. Doug and I look forward to hearing from you in 2021.



Doug Avery
Co-Chair



Cori Jackson Co-Chair



Highlights and Accomplishments

Administrative

Restructuring and Strategic Planning

In November 2020, CEA retained consulting firm Stratiscope to assist with an assessment of the Board and the organization and to help develop a new strategic plan, mission and vision. CEA also reaffirmed its three main areas of focus: evolution of codes, standards and policy; research; and education and outreach.

The first step was a restructuring of the former Executive Committee to align with CEA's bylaws. The new organizational structure includes a nine-member Board of Directors, a three-member Technical Advisory Council and three corporate officers: President and Board Chair; Vice President; and Treasurer.

Stratiscope then held executive retreats in early 2021, resulting in new mission and vision statements, and began the process of a six year strategic plan, which will be released in Summer 2021.

Staffing

In 2020, CEA implemented its first team of paid staff in Development, Operations and the first Executive Director. Further staff positions are in development, pending funding.

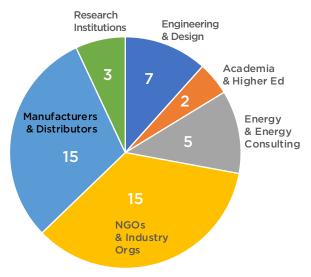
New Funding and Opportunities

Sponsorships — CEA received a \$3,000 sponsorship from member Sheet Metal Workers Local 104 to produce the *A Tale of Two Buildings* video, as part of the *At The Table* educational video series.

CEC EPIC Funding — CEA, in collaboration with CalPlug at UC Irvine and California Lighting Technology Center at UC Davis, was awarded \$996,974 in plug load research funding. This project will evaluate plug load devices to determine savings potential and inclusion in future Energy Codes and standards.

Membership

In 2020, CEA grew in membership by 68 percent and in revenue growth by 19 percent. An additional 22 new members joined the organization's 25 renewing members, representing many hours of in-kind services, important insights and beneficial relationships.



Membership Sectors

In November, CEA submitted a concept paper for Outcome-based Code research in response to a Department of Energy (DOE) funding opportunity for \$3.3 million funding from DOE's BENEFIT (Building Energy Efficiency Frontiers & Innovation Technologies) Program. As part of the funding process, DOE advised CEA and its partners — California Lighting Technology Center, New Buildings Institute, stok, and PAE Consulting Engineers — to proceed with a full grant proposal for the funding, which is underway.





Education & Outreach

Member Events

In 2020, 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.

- · 1 in-person member meeting
- 8 member-wide virtual events
- 5 member webinars
- 3 quarterly member meetings (extended format)
- 8 guest speaker presentations with interactive discussions on featured topics

Video Series

CEA developed the first four of the At The Table educational video series: Acceptance Testing Part I and Part II; Demand Responsive Controlled Receptacles; and A Tale of Two Buildings, which was produced by Emmy Award-winning director Jim Jackson and explains why revising Cost-Effectiveness Metrics is so important for reaching California's climate goals.

Alliance Voice

CEA launched its monthly newsletter for members and non-members, called *The Alliance Voice*. Currently, the online publication is distributed to nearly 1,000 readers and contains information on energy events, important issues and CEA activities. Members are encouraged to submit articles, ideas and industry news for inclusion each month.

Presentations in 2020

- Feb. 5 The LED Lighting Revolution

 Morgan Pattison, Solid State

 Lighting Services, Inc.
- Apr. 15 California's Race to Decarbonize:
 Steps to Get Carbon Out of Buildings
 Scott Shell, EHDD Architecture
- May 13 Case Studies in Occupancy Based
 Unified Controls & Battery Storage
 at CSU Dominguez Hills
 Kenny Seeton, CSU Dominguez Hills
- June 10 COVID-19: Building Readiness
 Chris Ruch, National Energy
 Management Institute
- Sept. 16 Load Management & Real-time Pricing
 Karen Herter, Energy Commission
 Specialist III, California Energy
 Commission

City of San Diego: Municipal Energy Strategy

Lindsey Hawes, Municipal Energy Program Manager Sustainability Department, City of San Diego

- Oct. 14 Could Smart Microgrid Improve
 California's Energy Future?

 Austin Brown, Executive Director for
 UC Davis Policy Institute for Energy,
 the Environment, and the Economy
- Nov. 17 Brutal Honesty About

 Commissioning in California

 Lyn Gomez, DPR Construction



Targeted Research Activities

Emerging Initiatives

Many events in 2020 highlighted the need to address the broader, interconnected initiatives of climate action, energy resilience and equity. CEA took the opportunity to explore these needs in line with our revised mission and vision, starting with Healthy Buildings and Decarbonization.

Working Groups and Task Teams

In 2020, CEA restructured its committees into Working Groups and Task Teams that address its current initiatives. Group goals and activities are developed and executed by members along with invited participants from the public who may have additional expertise in a specific area of need.

Building Energy Efficiency Standards — CEA worked jointly with the IOU CASE Team on a measure proposal refining code on Demand Responsive Controlled Receptacles that was adopted for incorporation into the 2022 update to Title 24. The adoption of Demand Response technologies is integral to an improved Cost-Effectiveness Metrics framework for California.

CEA also developed a proposed modification to Title 24 regarding Exceptional Designs to encourage measured building performance as the primary method for verifying Energy Code compliance. While the Energy Commission cited legal barriers to adoption of the proposal, the effort advanced an important discussion with implications for a transition to outcome-based code and improvement in code compliance in California.

Code Compliance Improvement — CEA engaged the Energy Commission and key Alliance members within the Acceptance Testing community to advance a State Central Non-Residential Data Registry/Repository (CNDR) to document, understand and better enforce code compliance. CEA played a major role as the moderator across stakeholder groups on this critical issue, with prospective improvements pending in the 2022 Energy Code update.

Cost-Effectiveness Metrics — In 2020, this Working Group developed a position paper for briefing state legislators. The Working Group appointed a new leader and reorganized with task teams dedicated to policy and research, and began the process of defining a scope for future research on the requirements for cost-effectiveness metrics.

Outcome-Based Code — In 2020, the Outcome-based Code Working Group reorganized with three task teams focused on code, policy and research. This Working Group also focused on the outcome-based research project, teaming with member New Buildings Institute.





Policy Advocacy

In early 2020, CEA became more engaged in policy advocacy, beginning with the position paper on cost-effectiveness metrics. The paper called for a new operational definition of cost-effectiveness metrics to bring them into alignment with other state policy priorities, including GHG reduction and decarbonization; grid resilience, management and reliability; energy equity; and the security and safety of electrical systems.

In 2020, CEA partnered with UC Davis as part of its Cost-Effectiveness Metrics initiative. CEA, through a restricted gift to the University, supported several students to identify, document and summarize ongoing policy initiatives and bills in the California legislature that address climate action, energy, workforce development, grid modernization, decarbonization/electrification, environmental justice and equity. Students gained valuable work experience while CEA gained important insights into public policy impacting its work in California.

Research

Three important research projects were started in 2020. The *Outcome-Based Code* Working Group developed a proposal for a major two-phase study to quantify the gap between measured and modeled energy performance across hundreds of existing California buildings. Such a study has never been done before and will provide validation and data for outcome-based code and policy efforts.

The Cost-Effectiveness Metrics Working Group began scoping research that would enhance cost-effectiveness calculations; address the lack of publicly available, peer-reviewed studies on non-energy benefits and value analyses of grid services; and analyze site-level levelized costs and energy-related benefits from installing DR-enabled systems. Part of this work was supported by students from the UC Davis Public Policy Institute.





Financial Summary

CEA's 2020 financial summary, including its Balance Sheet and Statement of Activities, is provided as of December 31, 2020. CEA operates under a cash basis accounting system.

Statement of Activities

\$-30,537

Balance Sheet

Total Liabilities & Net Assets

Current Assets

Bank Accounts \$37,209 Memberships \$103,417 Other Gifts \$3,000 Liabilities \$5,000 Grants Current \$6,898 **Total Revenue** \$111,417 Long Term \$0 **Expenses Net Assets** \$65,159 Programs and Initiatives Net Assets Beginning of Year \$60,848 Administration \$44,968 Change in Net Assets \$-30,537 \$31,827 Fundraising \$141,954 **Total Expenses**

\$37,209

Revenue

Net Revenue



Sustaining Members



Carrier is a world leader in HVAC, Refrigeration, Fire & Security solutions. For over a century, we have been developing innovative products and services that have changed the way people live and work. That drive for innovation continues today with a renewed focus on creating solutions that will change the world for the better. At Carrier, we see possibilities in everything. As the leading global provider of healthy, safe and sustainable building and cold chain solutions, Carrier is committed to making the world safer, sustainable and more comfortable for generations to come.

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. This will be supported by planned investments of more than \$2 billion over the next 10 years toward the development of healthier, safer and more sustainable solutions. 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.

Watt Stopper®

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.



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.



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.





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.

Throughout its 20-year history, NBI has become a trusted and independent resource helping to drive buildings that are better for people and the environment.

We envision a transformed built environment that is carbon-free, sustainable, and energy-efficient and supports thriving economies that benefit all people and the planet. With this vision, we then set out to create the research that informs our tool and policy development aimed at creating market change.

We will continue to fuel innovation that accelerates adoption of "next" practice in energy performance by the energy efficiency and building industries. We are helping to create a future where the built environment represents an effective use of resources, a positive force against climate change, and a driver for local economies that creates jobs and saves money for homeowners and business on energy costs. 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.



Members

(*) denotes Sustaining Member





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

Clifton Lemon Associates

Clifton Lemon Associates



Sheet Metal and Air Conditioners National Association



California Street Light Association



Carrier (*)









Center for Sustainable Energy



Design Lights Consortium





a Daintree company





ETC Connect



 ${\sf CodeCycle}$

Gregg D. Ander LLC

Illuminating Engineering Society (IES)



Institute of Heating and Air Conditioning Industries



John Martin (Legacy Member)



Joint Committee on Energy and Environmental Policy



Leviton (*)





Lutron (*)



National Energy Management Institute Committee



National Lighting Contractors Association of America



New Buildings Institute (*)



PAE Consulting Engineers



Peter Schwartz



Phil Hall Images & Light



Prasino Energy



RMS Energy Consulting



Salinas Lighting Consulting



San Diego Green Building Council



Sierra Club



Signify (*)



Uplight Electrical Engineering



Visibility Innovations

Watt Stopper®

Wattstopper/Legrand (*)



Western Riverside Council of Governments

Leadership Team

CEA Corporate Officers



Cori Jackson President and Board Chair Program Director, California Lighting Technology Center



Bernie Kotlier Vice President Executive Director, Labor Management Cooperation Committee



John Martin Treasurer

Board of Directors



Doug Avery Board Member President, Avery Energy Enterprises



Bernadette Boudreaux Board Member Associate Director of Operations, Design Lights Consortium



John Busch **Board Member** Energy Code Specialist and Regional Sales Manager West, Leviton



Pekka Hakkarainen **Board Member** Vice President, Government and Industry Relations, Lutron Electronics



Kelly Seeger Board Member Technical Policy Manager, Standards and Regulations, Signify



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



Technical Advisory Council



Dick LordTechnical Advisory Council Member
Senior Fellow, Carrier



Staff

Josh DeanExecutive Director



Craig OchoaTechnical Advisory Council Member
Preconstruction Project Manager,
Dynalectric



Clifton Stanley LemonBusiness Development Director



Daniel SalinasTechnical Advisory Council Member
CEO, Salinas Lighting Consult



Gail Russo-Larsson Operations Manager



California's Energy Stakeholder Advocates 836 57th Street, Suite #420 Sacramento, CA 95819

caenergyalliance.org

TAKE YOUR SEAT AT THE TABLE.

