

2015 CSE Impact Statement

From the Executive Director



As 2015 ended, efforts to address the mounting urgency to wean our world and nation off fossil fuels were marked by a breakthrough agreement at the United Nations climate conference and restored support for renewable energy tax incentives by Congress. In California, the Public Utilities Commission maintained net metering for solar customers through 2019 and the San Diego City Council adopted the most aggressive climate action plan of any large city in the nation.

Unquestionably, we are in one of the most exciting periods for clean energy technology. Consider the following:

- Today, renewable energy sources account for about 10 percent of total U.S. energy consumption and about 13 percent of electricity generation.¹
- Electric vehicles are gaining greater traction in the marketplace and influencing demand for grid integration.
- Clean-tech employment continues to grow, with the number of solar installers now outpacing jobs extracting oil and gas.²
- For the first time in our nation's history, solar beat out natural gas, with solar supplying more than 29 percent of all new electric generating capacity in 2015.³
- Emerging self-generation and storage technologies are transforming pathways to our energy future.

Entering our 20th year of operation, the Center for Sustainable Energy (CSE) continues to provide technical solutions, policy guidance and a variety of energy advisory services to governments, utilities, businesses, property owners and consumers looking to achieve clean energy goals.

With offices in San Diego, Los Angeles, Boston and the San Francisco Bay Area, CSE is expanding its services and working to further increase consumer choice, while reducing energy costs and greenhouse gas emissions.

Some of our most significant mission-driven efforts in 2015 are listed for your review.



Len Hering, RADM, USN (ret.)

¹ eia.gov

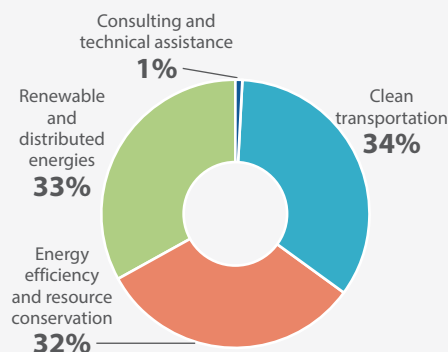
² Fortune.com

³ GreenTech Media

2015 CSE Financial Summary

Operating revenues in fiscal year 2015 totaled \$171.9 million, including \$138.1 million in funding distributed as rebate and incentive payments. The 2015 service revenues of \$33.8 million were earned in performance of contracts that include administration of rebate and incentive payments, marketing, education and outreach, research and analysis, and technical assistance. The 2015 operating revenues increased by 18 percent over the prior year.

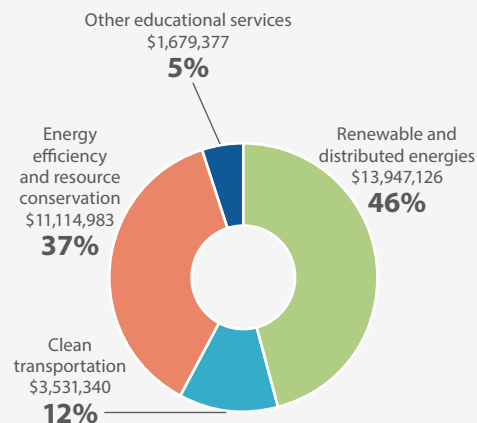
Energy Sector



Expenses, excluding rebates delivered

General management: \$3,356,501
Fundraising: \$5,683
Program areas: \$33,635,009

Breakdown of program area expenses



CSE's work directly benefits the states, communities and people we serve.



Supporting Green Job Growth

- Awarded \$4.5 million by the **California Energy Commission** to develop workforce training in disadvantaged communities, in conjunction with state electrical union organizations, to train an estimated 500 apprentices to install automated demand response (Auto-DR) technologies, resulting in 200 future installations of Auto-DR systems in disadvantaged communities.



Eliminating Barriers to Clean Energy

- Partnered with the **Department of Energy SunShot Initiative** to work on a \$712,000 project with solar industry organizations to eliminate barriers that constrain greater adoption of solar electric power in multitenant residential and commercial properties.



Making Clean Vehicles More Accessible

- Selected to administer the **Connecticut Hydrogen and Electric Automobile Purchase Rebate** (CHEAPR) program to support Connecticut's clean air goals by increasing adoption of clean vehicles through incentives, totaling over \$900,000 in consumer savings in just eight months in 2015.
- Initiated a research project to develop the world's first standards-based smart electric vehicle charging system for grid-integrated charging with a \$1.5 million grant from the **California Energy Commission**.
- Incentivized the adoption of 1,785 electric vehicles since June 2014 through the **Massachusetts Offers Rebates for Electric Vehicles** (MOR-EV) program, cutting the state's greenhouse gas emissions output by an estimated 5,051 tons.
- Established a **Public Fleets in Disadvantaged Communities Pilot Project** with a \$2.8 million grant from the Air Resources Board to reduce vehicle emissions in California's most vulnerable and pollution-burdened areas as part of the Clean Vehicle Rebate Project administered by CSE.



Commercial rooftop solar installation funded by California Solar Initiative.



Clean Vehicle Rebate Project on display at an Oakland, Calif., community event.



Energy Integration for Rail Transportation

- Contracted with **Arup and San Francisco Bay Area Rapid Transit** (BART) to explore deployment and operation of solar, advanced energy storage, electric vehicle charging and other technologies in a unique and holistic manner.



Expanding CSE's Services

- Established a **Northeast regional office in Boston** to help state and local governments establish programs and strategies to achieve higher levels of efficiency and accomplish clean energy goals.
- CSE joined with the **Northeast States for Coordinated Air Use Management** to formulate strategies to increase the adoption of plug-in electric vehicles in New York State.



Improving Building Performance

- Awarded a contract from the **County of Los Angeles** to develop and administer energy code compliance and enforcement programs and protocols for energy data reporting for local governments in the Southern California Regional Energy Network.



Championing Solar

- Launched a solar electric incentive program for the **Bear Valley Electric Service** that established 623 kilowatts of solar in 2015 and will continue administering rebates in the Southern California service area through 2022.
- Formed a partnership with the **City of Santa Monica** to improve understanding and use of virtual net energy metering of solar for multifamily and multitenant properties in California.



CSE's building performance intern training supports local community development.



Improving Regional Quality of Life Research

- Completed merger with the nonprofit **Equinox Center** adding to CSE's portfolio of programs. Now named Equinox Project, this initiative plans to expand regional quality of life research to other communities in California and other states.

In 2015, CSE facilitated

47^{MW}

of distributed generation capacity through incentives, technical reviews and/or direct technical assistance



72,955^{MWh}

of energy savings through incentives, technical reviews and direct technical assistance



229,094

Therms saved through incentives and direct technical assistance



\$104⁺ million

in rebates processed for electric and alternative fuel vehicles



111,501

metric tons of lifetime avoided greenhouse gas emissions resulting from incentivized alternative fuel vehicles and distributed generation



112

local governments received direct technical assistance



328

community, regional and state workshops



17,698

direct engagements with consumers



900,000⁺

reached digitally through website and social media



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