

Energy Champion Awards

California
Energy Efficiency
Industry Council



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Oakland, CA
efficiencycouncil.org

The Efficiency Council's Energy Champion Awards focuses on highlighting and recognizing key businesses and leaders in California who have shown excellence in advancing energy efficiency. Congratulations to the 2016 Energy Champion Award Recipients!

Opening Remarks:

Nancy Skinner

State Senate Candidate and former Assembly Member



Nancy Skinner will speak on the importance of energy efficiency and demand response as part of California's move toward clean energy and a low carbon future. A social justice advocate, energy and climate expert, and accomplished legislator, Ms. Skinner served in the State Assembly for three terms representing the East Bay cities along the I-80 corridor from Hercules to Oakland. Assembly Member Skinner chaired Rules Committee, the Budget Committee and Natural Resources Committee. She authored dozens of important new laws including: two groundbreaking gun violence prevention laws; enhanced worker protections and enforcement of workplace violations; the "E-Fairness" bill requiring sales tax collection from Amazon and internet retailers; California's renewables portfolio standard that requires 33% of electricity be generated from renewable sources, increased net metering; improved home and building energy efficiency; and changes to make food stamps more accessible to families. She also notably led the effort to green the Capitol building through a major energy efficiency upgrade, saving the tax payers over half a million dollars per year.

Legislator of the Year:

Assembly Member Das Williams



Assembly Member Williams is recognized because he was key to the passage of SB 350 in 2015 which doubled energy efficiency goals for the state. He also authored AB 802 which was landmark legislation establishing the use of existing conditions baseline and normalized metered energy consumption for energy efficiency and also invigorated a languishing benchmarking policy at the Energy Commission. This year he championed demand response in his authorship of AB 2454 which mandates that the PUC consider all technically and economically achievable demand reduction in its procurement policies.

Outstanding Project of the Year:
**Enhanced Retro-commissioning (ERCx)/Boeing –
Multi Campus System Optimization**
The Boeing Company
Partner: Nexant

As a participant of Southern California Edison's (SCE) Enhanced Retro-commissioning (RCx) Program, a third party program administered by Nexant, The Boeing Company has implemented measures resulting in over 4.5 million kWh of verified annual energy savings. Furthermore, an additional 4 million kWh of potential savings have been identified and is currently being implemented.

To date, Boeing and Nexant have collaborated at four of Boeing's Southern California campuses: El Segundo, Huntington Beach, Seal Beach, and Long Beach. Beginning with Huntington Beach and El Segundo, Boeing and Nexant devised a long-term strategic plan to optimize the energy consumption of more than 70 buildings through a methodical analysis of the end-use of each building and its energy consumption profile. Types of measures identified related to scheduling optimization, Variable Frequency Drives on fans and pumps, optimization of supply-air and chilled water supply temperature, static pressure resets, and reducing simultaneous heating/cooling.

In addition to implementing RCx and controls upgrade measures, Boeing is also integrating data analytics and installing cutting edge Fault, Detection, and Diagnostics (FD&D) on all of their major Energy Management Systems. Incorporation of these technologies is one of the key requirements of the Enhanced RCx program, adding persistence to RCx measures as well as providing strong tools at the facilities for on-going optimization and improvement.



Outstanding Project of the Year:
2016 Palo Alto Energy Efficiency Reach Code
The City of Palo Alto
Partner: TRC

The City of Palo Alto unanimously approved a new local amendment to the California Energy Code, to take effect January 1, 2017. This new Zero Net Energy ready ordinance will improve the energy efficiency of all new buildings in Palo Alto and is expected to become the most aggressive energy code in the United States. Palo Alto has long been a leader in energy stewardship. The City Council approved a Carbon Neutral Electric Resource Plan (March 2013) committing Palo Alto to using carbon neutral electric resources. This makes Palo Alto one of only a handful of places on Earth that is using 100% carbon-neutral electricity. The City engaged the community through the Green Building Advisory Group and visioning exercises that helped create the long-term policy plan. The new Energy Reach Code will act as an incremental step in meeting the state's Zero Net Energy goals set for 2020 for new residential projects and 2030 for non-residential projects, and aligns with Palo Alto's commitment to sustainability, zero net energy, and carbon reduction. The ordinance contains compliance pathways that support projects that either include or don't include a solar photovoltaic system. This flexible framework provides project teams with options for compliance rather than a rigid set of rules for achieving the desired outcome. TRC supported the City of Palo Alto by completing a cost-effectiveness analysis requiring 10% above Title 24 code for all building types, and developed alternate policy paths that allow permit applicants to exchange PV credit for energy efficiency savings.



Outstanding Project of the Year:
Irvine Company HVAC Optimization
The Irvine Company
Partner: CLEAResult

The Irvine Company is California's largest owner of leased property and manages a 98 million square foot portfolio of residential and commercial space. As a statewide leader in commercial real estate, Irvine Company has made a commitment to sustainable building practices through a number of initiatives including the implementation of a scalable, cost-effective energy management strategy across their commercial building portfolio. Historically, the small commercial space has been a challenging market for energy efficiency due to the high cost of implementation. However, with a long-term corporate vision and an investment in an in-house team of experts, Irvine Company has implemented an energy management platform that has overcome traditional barriers to commercial energy efficiency.

Irvine Company's energy management strategy is a comprehensive four-prong approach including the Southern California Edison (SCE) HVAC Optimization program, building audits, Performance Monitoring and Demand Response. SCE HVAC Optimization is part of a statewide IOU effort providing technical training and financial support to implement quality commercial HVAC maintenance programs in alignment with the "Big, Bold Strategies" outlined in the California Energy Efficiency Strategic Plan. With program support, The Irvine Company trained and certified 18 of their in-house HVAC technicians on the ASHRAE principles of quality maintenance and NATE standards of HVAC performance. These certified technicians then evaluated and optimized the performance of over 450 medium and large HVAC units according to the operational requirements of each building, impacting over 8,000 daily occupants. During these evaluations, nearly 110 older medium-tonnage package units were also upgraded to meet current Title 24 ventilation requirements utilizing SCE incentives for VFD and NEMA premium supply fan motor upgrades and CO2 sensors for demand-control ventilation. Overall, these improved maintenance practices and ventilation upgrades are saving an estimated 2,252,102 kWh annually and 998 kW in demand reduction in the critical SONGS region.

Since late 2011, HVAC service calls have decreased in spite of increasing occupancy. In addition, in-depth building audits and trend analysis revealed 7 discrete treatments that were implemented on over 100 buildings resulting in annualized savings of \$1,395,350. Going forward, complementary Performance Monitoring efforts will provide the Irvine Company with actionable data to detect equipment faults proactively thereby reducing energy waste and tenant complaints. This investment in an energy management infrastructure has also allowed the deployment demand response capabilities throughout much of the portfolio, resulting in cost savings and reductions in service disruption. As a result of this comprehensive energy management approach, Irvine Company has increased their number of Energy Star builds from zero to nine.



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