



Senate Energy, Utilities and Communications Committee

Presentation of the California Investor-Owned Utilities' 2006 -2009 Energy Efficiency Programs

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California's Investor-Owned Utilities Lead the Nation in Energy Efficiency

California's Investor-Owned Utilities Partnered in 2006-2009 with Customers to Install More Efficient Equipment in Homes & Businesses than Any other State^[1]

- \$1.4 billion in total rebates paid to California customers for energy efficiency installations
- 543,348 inefficient refrigerators and freezers removed from the electric systems and recycled; an estimated 2-3 times more than all other utility programs in the U.S. combined
- 144,487 small businesses assisted with energy efficiency solutions
- 784,720 low-income households treated with free energy efficiency upgrades
- 255,884 ENERGY STAR® room air conditioners purchased with rebates
- 655,363 air conditioner tune-ups provided
- 636,251 tons of efficient HVAC installed, the equivalent of cooling 182,000 California homes^[2]
- 815,939 efficient appliances purchased with rebates (refrigerators, ovens, dishwashers, washers/dryers)
- 130 million Compact Fluorescent Lamps price-reduced for California consumers
 - But only 25% of all light sockets that could hold a CFL in CA IOU service territories, do hold one^[3]
- 26,830 efficient pool pumps installed
- 249,167 home energy efficiency surveys taken by customers
- 8,783 energy efficient new homes built

[1] Data from the past four years of California investor-owned utility energy efficiency programs

[2] Cooling average DEER 2008 Weighted Average Prototypes

[3] 2009 Kema/Cadmus Residential Lighting Metering Study – Preliminary Results

California's Investor-Owned Utilities Lead the Nation in Energy Efficiency (cntd.)

These Energy Efficiency Installations Create More Benefits for Californians Than Are Created by Programs in Any Other State^[1]

- CPUC calculates that these energy efficiency measure installations will save nearly 6.2 Billion kWh = Enough energy to power 877,000 California homes for a year
- CPUC calculates that these installations will permanently reduce demand by 1,225 MW = Equivalent to the peak electrical demand of 3 large power plants and associated transmission lines
- CPUC calculates that these installations will provide \$2.3 billion in avoided electricity supply-side costs (generation, transmission, distribution, and emission reductions), after accounting for program costs

Since 1992, California's IOU EE Programs Have Saved More Electricity than the Combined Savings from 44 Other U.S. States^[2]

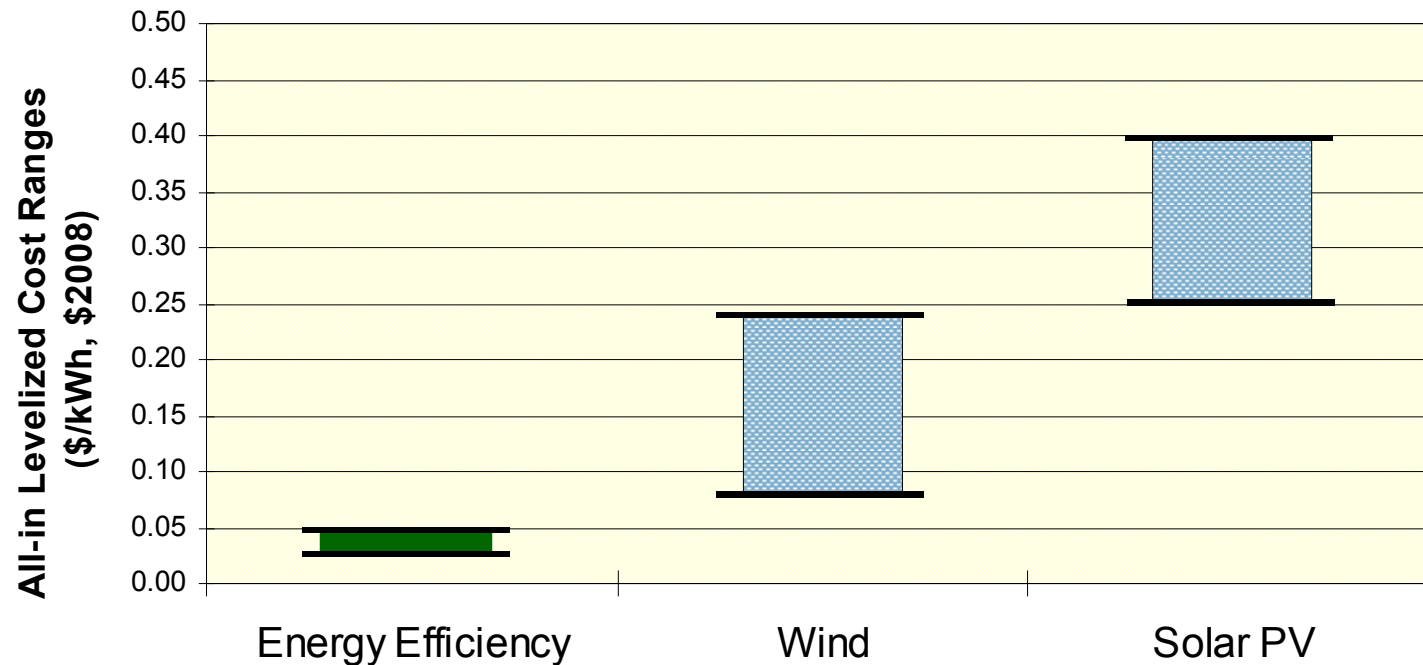
[1] Data from the most recent CPUC report on benefits and costs, covering 2006-08 programs. Does not include 2009 results.

[2] Data from U.S. Energy Information Administration. 1992 represents first year of reporting.

California's Investor-Owned Utility EE Programs Provide Least-Cost Energy, Economic & Environmental Benefits

Energy Efficiency Saves Energy at a Lower Cost than Other Green Resources^[1]

- Energy Efficiency: 3-5 cents/kWh
- Wind: 8-24 cents/kWh
- Solar Photovoltaic: 25-40 cents/kWh



[1] Source: National Action Plan for Energy Efficiency; Energy and Environmental Economics Inc. 2008, average levelized costs for wind, solar.

California's Investor-Owned Utility EE Programs Provide Least-Cost Energy, Economic & Environmental Benefits (cntd.)

EE Supports Communities and Creates Green Energy Jobs^[1]

- More than \$745 million in funding put out to bid for delivery of utility programs by third parties
- Contract with 247 Women, Minority, Disabled-Veteran Business Enterprises that in turn employ thousands of Californians
- 65 Partnerships, with \$265 million to assist 285 cities, counties and state agencies (including Department of Corrections, UC/CSU System, Community Colleges, etc.)
- \$122 million to education, outreach, and training programs at all levels of California's education system
 - Preschool, K-12, Colleges and Universities, Workforce Training by utilities and non-utility groups
- 15,000 to 20,000 new blue and white (and "green") collar jobs will be created in the next three years by the IOU energy efficiency programs^[2]
 - Customer outreach, equipment (lighting, HVAC, etc.) installer, project manager, electrician, construction foreman, driver, engineer, administrative assistant, government and community relations, customer service, classroom instructor

EE is the Cornerstone of California's Greenhouse Gas Reduction Plans

- Over the past 4 years, California's IOUs' EE programs created emission reductions of 3.2 million metric tons of CO₂, the equivalent of removing 615,000 cars from California roads^[3]
- CARB stated that building upon "California's thirty-year track record of pioneering energy efficiency programs" is a key element to meeting AB 32 goals
 - Energy Efficiency is the 2nd largest element of the CARB Scoping Plan (behind Pavley GHG vehicle standards)

[1] Authorized for 2010 – 2012 program cycle

[2] Jobs as estimated by the CPUC as impacted by the authorized investor-owned utility 2010-12 energy efficiency programs. Job types are examples and do not reflect a comprehensive list of potential jobs created by energy efficiency programs.

[3] Data from the past four years of California investor-owned utility energy efficiency programs

CPUC Is Working to Further Improve California's Energy Efficiency Processes

The Framework Tested in 2006-08 Created Controversy Instead of Supporting Program Improvements for the Future

- The 2006-08 process did not use the "same yardstick" to authorize programs and measure success
 - CPUC reviewed and adopted one set of energy savings assumptions to authorize IOU programs plans and budgets
 - Utilities provided the programs to California consumers under this CPUC authorization
 - CPUC verified that the programs were delivered pursuant to CPUC authorization and rules
 - CPUC verified that the program costs were appropriate and accurate
 - CPUC onsite inspections verified that over 99% of installations were in place and operating as reported
 - After programs were delivered and customers received benefits, the previously-adopted savings assumptions were then adjusted
- California IOUs Receive Less Savings Credit for the Same Measure Than Other States with Major Programs
 - Current California measurement rules do not credit utilities with the impacts of transforming markets
 - Example: ENERGY STAR® Compact Fluorescent Lamp -- credit of savings to programs, by State
 - California: 50%-60% of savings credited to utilities
 - Massachusetts: 200%
 - New York: 500%
 - Vermont: 120%

The CPUC is Developing a New Framework to Build Upon California's Success

- CPUC has now adopted use of the "same yardstick" to authorize programs and measure success for 2010-12
- Consistent with California's Energy Action Plan, the CPUC has put a performance incentive mechanism in place for IOU EE program success
- CPUC has taken steps to develop a "more transparent, more streamlined and less controversial" approach to a performance incentive mechanism

California Investor-Owned Utility Energy Efficiency Programs Help All Homes and Businesses^[1]

RESIDENTIAL AND INCOME-QUALIFIED CUSTOMERS

- Home Appliance Rebates
- No-Cost Measures for Income-Qualified customers
- Lighting Rebates – CFLs and Advanced Consumer Lighting
- Multifamily Home Rebates
- Appliance Recycling
- Home Energy-Use Surveys
- Consumer Electronics / Plug Load Rebates
- Whole House Retrofits
- Mobile-Home Energy Efficiency
- In-language Community Outreach
- Advanced Home New Construction
- New Construction - Manufactured Housing Efficiency
- Home Energy Rater Training
- Multifamily Home Tune-Ups
- Multifamily Solar Pool Heating
- Multifamily Gas Savings
- High Efficiency Gas Water Heaters

BUSINESS CUSTOMERS

- Industrial Customer Rebates
- Commercial Customer Rebates
- Agricultural Customer Rebates
- Energy Use Audits for Industrial / Commercial / Agricultural
- No-Cost Measures for Small Business
- Healthcare Energy Efficiency
- Data Center Energy Efficiency
- High Performance Hospitals
- Cool Schools
- Public Schools
- Retail Energy Action Program
- K-12 Private Schools
- California Preschools
- Solid Waste Energy Efficiency
- Food & Kindred Products
- Primary and Fabricated Metals
- Industrial Gasses
- Chemical Products Efficiency
- Petroleum Refining Efficiency
- New Construction Rebates and Assistance
- Boiler Energy Efficiency Program
- Retail Energy Management
- EnergySmart Grocer
- Lodging Energy Efficiency
- Medical Building Tune-Up
- Campus Housing Efficiency
- Energy-Efficient Parking Garage
- Furniture Store Energy Efficiency
- High Performance Office Lighting
- LED Accelerator
- Energy-Efficient Kitchens
- Casino Green
- Ozone Laundry Energy Efficiency
- Small Commercial Boiler Repair and Tune-Up
- Cement Production and Distribution Energy Efficiency
- Wine Industry Efficiency
- Dairy Industry Resource Advantage Pgm
- Wastewater Treatment for Ag Food Processing

PARTNERSHIPS

- California Community Colleges
- UC/CSU
- California Dept of Corrections
- State of California
- 285 cities, counties and state agencies

MULTIPLE MARKETS

- HVAC Quality Installation – Residential and Nonresidential
- HVAC Commercial Equipment
- HVAC Diagnostics
- HVAC Workforce Education & Training
- Other Workforce Education & Training
- Marketing, Education & Outreach
- Building Standards Advocacy
- Appliance Standards Advocacy
- Standards Compliance Training
- Emerging Technologies Programs (Testing, Demonstrations, Studies)
- Strategic Planning & Implementation
- Financing Programs – On-Bill and Other

[1] Not a comprehensive list of all 2010-12 Programs