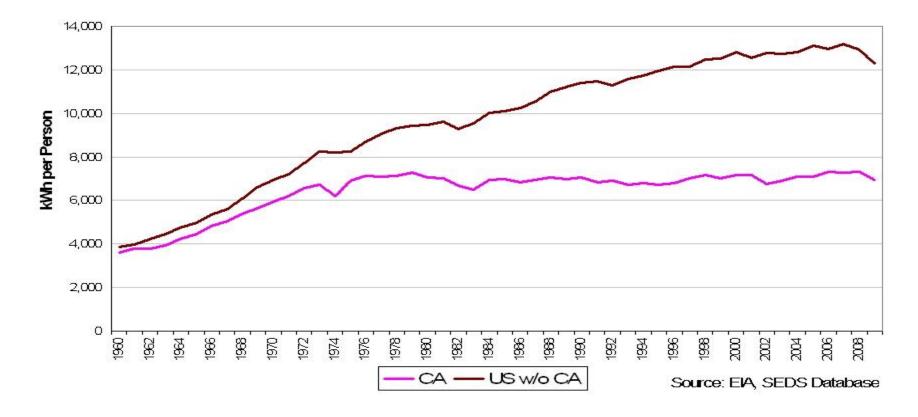


# California's Successful Energy Efficiency Strategies

#### Natural Resources Defense Council June 7, 2011



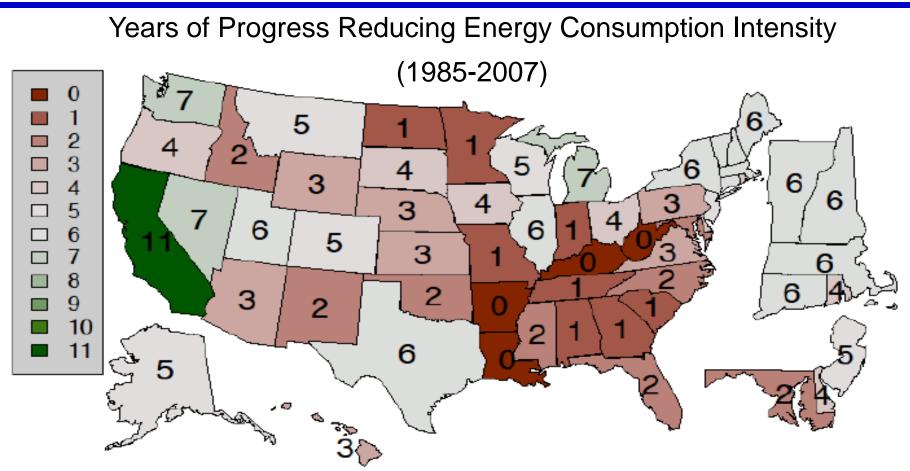
#### Lower Electricity Consumption Per Capita



- CA per capita electricity consumption remained nearly flat over the past 35 years, while the U.S. increased by 50 percent
- Efficiency policies contribute at least 1/3 to this effect



### **Residential Consumption Trends**



- Study measures change in per capita residential consumption
- CA shows greater progress over 20 years compared to the U.S.

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#### Efficiency Saves Money & Reduces Pollution



- CA bills are 14% less than the U.S. and CA households spend \$750 less than Texan counterparts
- Program net benefits to customers from 1998-2008 reached \$5 billion
- Energy savings avoided the equivalent of CO<sub>2</sub> emissions from nearly 3 million cars and the need to build nearly 30 power plants (since mid-1970s)
- Long lasting savings reduce costs for customers and improve comfort, health, & safety

### Efficiency Costs Less Than Dirty Power

- Efficiency continues to be cheaper (and significantly cleaner) than conventional energy resources
- Market transformation efforts and comprehensive program design inherently cost more than "cream skimming" activities
- As markets are transformed, new and innovative programs become more cost-effective and lead to codes and standards and/or common practice
- Current cost-effectiveness methodology needs to be updated to account for strategic goals



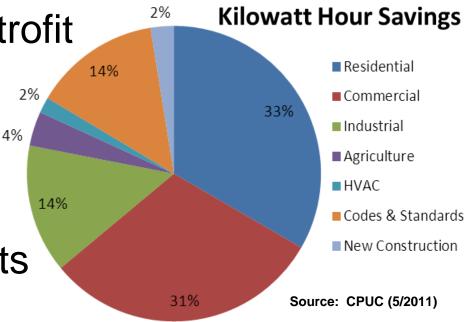
### Efficiency Policies Support Job Creation

- 50 new jobs across the economy are created for each new job foregone in the fossil fuel sector
- **1.5 million full-time equivalent jobs** were created from 1972 to 2006 due to efficiency policies
- CA efficiency workforce grew 20% in 2009 and another 17% in the first quarter of 2010
- 200,000 new jobs in 2020 will be created due to efficiency policies and investments



## Efficiency Programs Continue to Expand

- Increased offerings
- Address major end uses/ market segments
- Designed to support strategic goals
- Program highlights include:
  - Custom commercial retrofit
  - Whole home retrofit
  - Consumer electronics
  - Advanced lighting
    - Code enforcement pilots



#### **Opportunities for Continued and Expanded Success**

- Focus on improvements to a strong foundation
- Provide stability and continuity for the industry
- Ensure EE is on par with conventional resources
- Align the CPUC rules with strategic goals
- Maximize savings from codes and standards
- Expand publicly owned utility programs
- Enable collaborative effort to resolve barriers



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#### Citations

- Slide 2 –Sudarshan, Anant, Deconstructing the 'Rosenfeld Curve': The Problem with Energy Intensities (November 27, 2010). USAEE-IAEE Working Paper No. 10-057.
- Slide 3 Harper, M. et al, Ground-truth analysis of California's Residential Sector aECI Trend. Schatz Energy Research Center, Humboldt State University, and NRDC. May 2011. p.2
- Slide 4 NRDC. California Restores Energy Efficiency Leadership, March 2009; Next 10. California Green Innovation Index, 2009 and 2010.
- Slide 6 Roland-Holst, University of California, Berkeley, Energy Efficiency, Innovation, & Job Creation in California, October, 2008, p. 4/5; Donald Vial Center, University of California, Berkeley, California Workforce Education & Training Needs Assessment, 2011, p. ix.; California Energy Efficiency Council, Industry Survey Shows that Energy Efficiency in California is Creating "Real People, Real Jobs" at a Record Rate, September, 2010.

