

# California's Energy Efficiency & Demand Response Programs

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Dian M. Grueneich, Commissioner  
California Public Utilities Commission

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# Highest Priority Resource

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**Energy Efficiency** is California's highest priority resource to:



- Meet energy needs in a low cost manner
- Aggressively reduce GHG emissions



# Energy Efficiency

## California's Highest-Priority Resource



Lowering Energy Costs,  
Promoting Economic Growth,  
and Protecting the Environment

California Public Utilities Commission  
and California Energy Commission

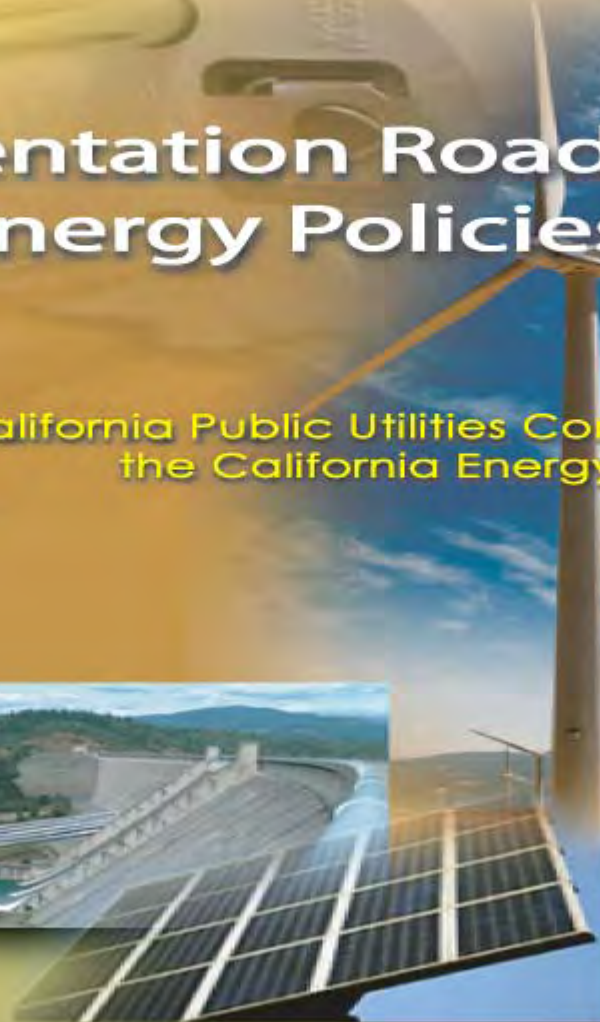


# Energy Action Plan II

## Implementation Roadmap for Energy Policies

Adopted by the California Public Utilities Commission and  
the California Energy Commission

October 2005



# Energy Action Plan II

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- Loading order continued
  - “Pursue all cost-effective energy efficiency, first.”
- Strong demand response and advanced metering infrastructure programs
- Adds RD&D, climate change, and transportation
  - [www.cpuc.ca.gov/Published/Report/51604.htm](http://www.cpuc.ca.gov/Published/Report/51604.htm)



# California's Aggressive EE Program

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- Energy Efficiency goals (2004-2013)
  - 26,506 GWh/year
  - 5,000 MW off-peak
  - 444 Million therms/year
- Eliminates need for 10 new power plants
- Eliminates 9 million tons of CO<sub>2</sub> emissions (equal to 1.8 million cars)
- \$10 billion in net savings to consumers



# New Legislation: AB 32 (Global Warming Solutions Act of 2006)

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- Codifies the state's emission reduction targets
  - 1990 levels by 2020
- Energy efficiency – a major tool



# Strategies for Greenhouse Gas Emission Reductions

CPUC Programs	GHG Savings (Million Tons CO <sub>2</sub> )	
	2010	2020
Energy Efficiency Programs through 2013	4	8.8
Additional Energy Efficiency Programs/Demand Response (2014- 2020)	NA	6.3
California Solar Initiative	0.4	3
33 Percent Renewable Portfolio Standard	5	11
Combined Heat and Power Initiative	1.1	4.4
Electricity Sector Carbon Policy	1.6	2.7
<b>Total:</b>	<b>12.1</b>	<b>36.2</b>

Source: Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.

[www.climatechange.ca.gov](http://www.climatechange.ca.gov)



Commissioner Dian M. Grueneich  
November 2, 2006



# Next Steps in Energy Efficiency

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- Shareholder risk/reward incentive mechanism
- Embedded energy savings associated with water efficiency
- Evaluation, measurement and verification
- Update EE potential studies and 10-year savings goals
- Planning process for 2009-2011 program cycle



# CPUC Accomplishments in Demand Response Programs

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- Rolled-out interval meters for large customers (>200 kW) and placed those customers on time-of-use tariffs (2001)
- CPUC approved the utilities' 2006-08 DR budget proposals (\$262 million)
- Adopted an aggressive long-term dynamic pricing MW goal for the utilities: 5% of system peak demand by 2007 (2003)
- Completed a 2-year pilot program, the Statewide Pricing Pilot, to examine the demand response capability of residential and small commercial customers (2003)



# Accomplishments in Demand Response Programs (cont'd)

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- Authorized a total of \$70 million in AMI pre-deployment activities for the utilities (2005)
- Directed the utilities to propose default Critical Peak Pricing tariffs for large customers in their General Rate Cases (2006)
- Completed Automated Demand Response System (ADRS) pilot that investigated DR capability of residential customers with automated DR technology and their willingness to pay for the technology (2006)
- Directed the utilities to propose DR measures for Summer 2007
  - 619 additional MWs expected
  - Proposed Decision adopts many of the proposals - Final decision in November



# Advanced Metering Update

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- PG&E's AMI project with a budget of \$1.74 billion approved in July 2006
- CPUC decision on SDG&E's AMI application is scheduled for Q1 2007
- SCE's AMI application is expected in July 2007 – 18 months ahead of its original schedule



# Next Steps in Demand Response

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- CPUC decisions on default CPP tariff
- Staff has proposed a new OIR focusing on development of DR measurement protocol, cost-effectiveness methodology, and reassessment of the DR goals





<http://www.cpuc.ca.gov>