

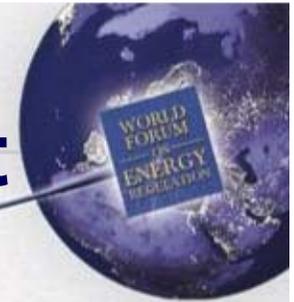


# Ensuring the Promise of Energy Efficiency in California

Commissioner Dian M. Grueneich  
California Public Utilities Commission

World Forum on Energy Regulation IV  
Athens, Greece  
October 18 - 21, 2009

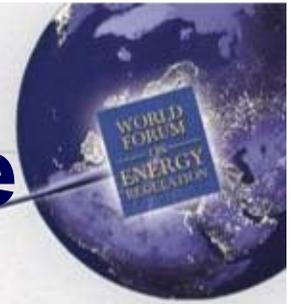
# Energy Efficiency and Procurement



## “Loading Order” for Electric Resource Procurement:

1. Energy efficiency
2. Demand response
3. Distributed generation
4. Renewable generation
5. Cleanest available fossil resources

Utilities must demonstrate consistency with loading order when filing their Procurement Plans



# Unlocking The Efficiency Resource

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- **Clear Policy**
  - Efficiency linked to resource planning through specific annual and cumulative savings goals
- **Firm Standards**
  - Building and Appliance Standards in step with utility programs
- **Adequate Financial Mechanisms and Funding**
  - Decoupling sales from revenues; Performance incentives
- **Evaluation Measurement and Verification**
  - Independent analysis of achievements

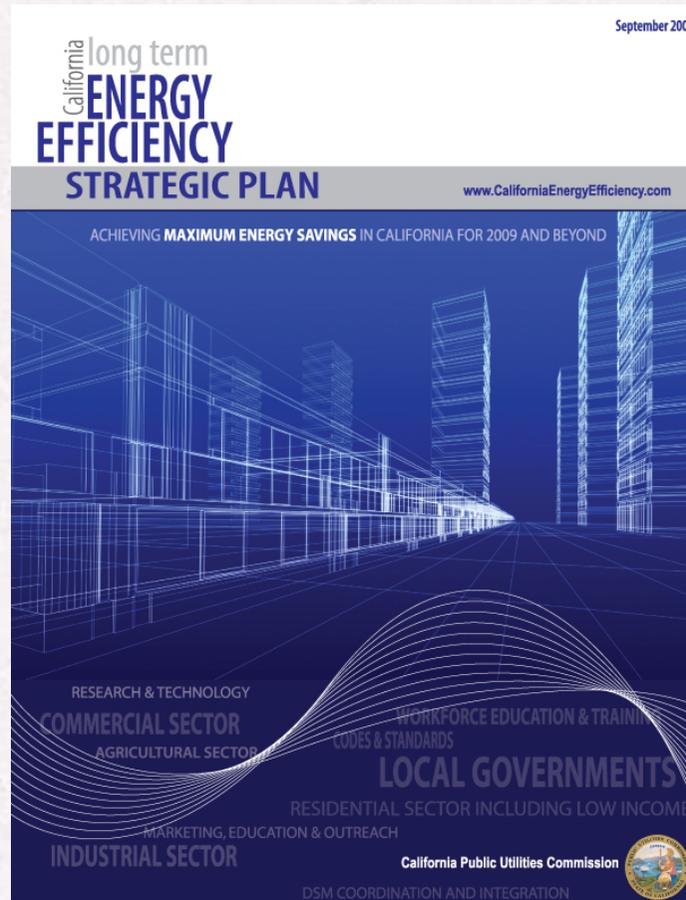
# California Efficiency Goals

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- **30,000 GWh by 2020**
  - Scoping Plan to AB 32, California's Global Warming Solutions Act of 2006.
- **Zero Net Energy**
  - All new residential homes by 2020, Commercial by 2030
- **Energy Efficiency Retrofits**
  - Energy consumption in existing homes will be reduced by 20% by 2015 and 40% by 2020
- **Low Income Energy Efficiency**
  - All eligible low income households will benefit from LIEE program offerings by 2020.

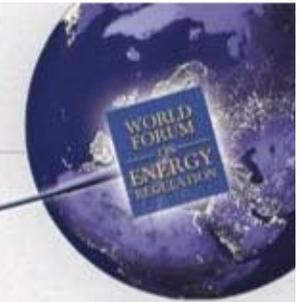
# The California Long Term Energy Efficiency Strategic Plan



[www.CaliforniaEnergyEfficiency.com](http://www.CaliforniaEnergyEfficiency.com)

Dian M. Grueneich - World Forum on Energy Regulation IV - Athens, Greece - October 18-21, 2009

# Goals Example: COMMERCIAL



<p>1. New construction will increasingly embrace zero net energy performance including clean, on-site distributed generation, reaching 100 percent penetration of new starts in 2030.</p>	<p>➔ An increasing percentage of the 50-120 million sq. ft./ year of new commercial construction will be progressively more efficient; all new construction ZNE by 2030.</p>
<p>2. 50% existing buildings equivalent to ZNE buildings by 2030 through deep efficiency &amp; clean DG.</p>	<p>➔ 250 million square feet (1/20th of existing space) per year through 2030 reach deep levels of energy efficiency improvements through whole building approaches.</p>
<p>3. Commercial lighting will transform to high-efficiency, high-performance technologies, pushed by state &amp; national codes and standards.</p>	<p>➔ Utilities will phase out mass market CFL bulb promotions, shifting focus to new technologies &amp; innovations to long-life solutions &amp; higher consumer uptake.</p>

# Following Through with the Plan

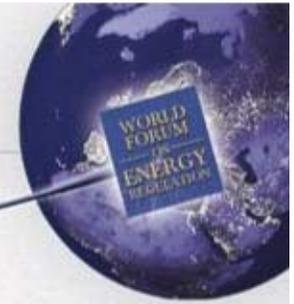
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- **2010-2012 Utility Programs**
  - Decision issued September, 2009
  - Available at: [www.CaliforniaEnergyEfficiency.com](http://www.CaliforniaEnergyEfficiency.com)
  - Approves \$2.9 billion of ratepayer-support over 3 years
  - Establishes 12 statewide programs
  - Launches broad-scale residential retrofit initiative (20% savings in 130,00 homes by 2012)
  - Refreshes California's approach to capturing savings in lighting
- **EE Web Portal**
- **Statewide Branding Effort**

# Key Elements of Successful EM&V

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- **Timing**
  - Evaluation must inform decision-making on a relevant timescale
- **Simplicity**
  - Evaluation must be understood by non-expert audiences
- **Transparency**
  - Transparency supports credibility and dispute resolution.
- **Objectivity**
  - Independence is essential, particularly when money is at stake.