California's Climate Change Policies

Dian M. Grueneich, Commissioner
California Public Utilities Commission
www.cpuc.ca.gov
February 14, 2006

Governor Schwarzenegger's Executive Order S-3-05 CO_2 Emissions Reduction Targets

Date	CO_2 Emission Goals
2010	2000 levels (reduction of 59 million tons)
2020	1990 levels (reduction of 145 million tons)
2050	80% of 1990 levels

Climate Action Team Draft Report

- Report to the Governor and the Legislature on strategies to achieve Governor's GHG reduction goals

	GHG Saving (Million Tons CO_2) 2010	2020
10 Strategies Underway	22	67
33 Strategies to be Pursued	35 – 40	115 - 120
Total Potential Reductions	**57 - 62**	**182 - 187**

- Impact of climate change on California
- Preliminary economic impact analysis of strategies shows net benefit

Source: Climate Action Team Draft Report. Savings numbers are estimates only. For full text of the report to www.climatechange.ca.gov

Climate Action Team's Major Policy Recommendations

- Mandatory climate change emissions reporting
- Public goods charge for transportation
- Coordinated investment strategy for state funds (e.g. the state pension system, public interest energy research)
- Development of a policy to provide early action credit

GHG Emissions Reduction Strategies Already Underway

Strategies	GHG Savings (Million Tons CO_2) 2010	2020
Vehicle Climate Change Standards	1	30
Diesel Anti-idling	1	1.2
Accelerated Renewable Portfolio Std (33% by 2020)	5	11
California Solar Initiative	0.4	3
Investor Owned Utility Energy Efficiency Programs	4	8.8
Statewide 50% Recycling Goal	3	3
Building Energy Efficiency Standards	1	2
Appliance Energy Efficiency Standards	3	5
Fuel-efficient Replacement Tires & Inflation Programs	1.5	1.5
Green Buildings Initiative	0.5	1.8
Hydrogen Highway	Not yet estimated	
Total Potential Emission Reductions	**22**	**67**

Energy Efficiency Programs

Cumulative state-wide targets (2004-2013)

- 26,506 GWh/yr
- 5,000 MW off peak
- 444 MMth/yr

- Eliminates need for 10 new power plants and 8.8 million tons of CO_2 emissions (equal to 1.8 million cars)
- Over 55 percent of incremental energy needs
- $2 billion in funding for Program Years 2006-2008
  - Funding from utility procurement dollars and Public Goods Charge
  - Levelized cost of 3 cents/kWh and 21 cents/therm
  - $2.7 billion in net savings to consumers

Renewable Energy Programs

- Renewable Portfolio Standard
  - Currently require load serving entities to provide 20% renewables by 2010
  - State's Energy Action Plan II sets goal of 33% by 2020
- California Solar Initiative
  - $2.9 billion over 10 years/Goal of 3000 MW
  - $2.80 per watt effective Jan. 1, 2006, declining by approximately 10 percent annually
  - Average rate impact of $12/year for residential electricity customers

California's Energy Action Plan II

- "Loading Order" of Resource Additions
  - Energy efficiency and demand response are preferred resources
  - Renewable generation
  - Distributed and self generation
  - Clean, conventional generation and transmission
- Climate Change - ensure that energy supplies are consistent with the Governor's climate change goals

CPUC GHG Standards

- GHG Adder of $8 per ton – December 2004
  - Utilities use adder only in ranking bids
  - Reflects potential cost of future regulation

- Policy Statement on GHG Performance Standard for Utility Procurement – October 2005
  - All Utility owned generation and purchase contracts exceeding three years
  - GHG Emissions profile that is no greater than the emissions from a combined-cycle natural gas plant

Procurement Incentives Framework January 2006 Draft Decision

- Establishes framework to guide future IOU procurement efforts with a focus on reducing GHG emissions
  - Load based cap on GHG emissions
  - Offsets for direct utility related activities only
  - Flexible compliance mechanism with performance penalties
  - Power purchase contracts permitted only with suppliers that register with, and report emissions to, the California Climate Action Registry