Greenhouse Gas Emission Reduction Goals in the Electricity Sector

Assembly Utilities and Commerce Committee
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Energy Strategies for Reducing GHG Emissions

  - Places GHG reductions prominently in the Energy Commission’s Energy Agenda
  - Identifies specific strategies to meet state’s energy needs and reduce GHG emissions
  - Concludes that California electricity sector can meet its share of AB 32’s targets
Energy Strategies for Reducing GHG Emissions

- Increase energy efficiency through standards and utility incentives
- 33 percent of power from renewable resources by 2020
- New and improved distribution infrastructure is needed for reliability and also to support technologies such as distributed renewables and demand response
Energy efficiency and renewable energy are essential for meeting AB 32 goals:

– It is feasible to achieve 100% cost – effective energy efficiency through a combination of building and appliance standards, traditional utility programs, and new strategies and technologies delivered through local governments, community organizations, and the private sector

– The 33% renewables by 2020 target is achievable with focused and coordinated support. Changes are needed to:
  • Streamline planning and permitting processes
  • Expand and upgrade the transmission grid and distribution system
  • Redesign the market price referent system – move to expanded use of feed-in tariffs (fixed price)
California's CO₂ Emission Reduction Strategies

Source: California Energy Commission, Climate Action Team data
Energy Strategies for Reducing GHG Emissions

- Joint proceeding with CPUC to develop GHG reduction guidelines for the electricity sector
  - In 2007, CARB adopted mandatory reporting guidelines and 1990 emissions baseline based on recommendations from the CEC & CPUC
  - In 2008, CEC & CPUC recommending to CARB electricity and natural gas program design

- Joint proceeding with CPUC on interim GHG policy decision recommendations to CARB
  - Quantify emissions reductions at what cost and impact on electricity provider (2nd phase)
  - Decisions in March and August
    - March decision recommends mix of program measures and markets, point of regulation and allocation principles. Approach will achieve real GHG reductions at least cost to California consumers
    - August decision will address allocation of costs and benefits, ratepayer costs, and cost effectiveness of measures
  - CARB adoption of Scoping Plan – November 2008
Energy Strategies for Reducing GHG Emissions

- Working on Western Climate Initiative working groups to design regional cap-and-trade program by August 2008

- Staffing and participating in 11 CalEPA Climate Action Team subgroups
  - Chair for Land Use and Local Government Subgroup
California Energy Commission

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Standards:

- Building Energy Efficiency Standards
  - 2005 standards went into effect in late 2005
  - Adoption of 2008 standards expected in April 2008
  - AB 1560 clarifies authority for water energy savings in building standards

- Appliance Energy Efficiency Standards
  - 2005 standards in effect in 2006-2008
  - New standards in progress:
    - New lighting standards in response to AB 1109
    - Will cover consumer electronics (televisions) and battery chargers
  - Federal preemption limits state authority
  - AB 662 directs the Energy Commission to include water efficiency and conservation standards in future appliance standards
Energy Strategies for Reducing GHG Emissions

- Municipal Utility Programs (Portfolio of energy efficiency, renewables, combined heat and power and carbon reduction)
  - Statewide energy efficiency goals have been adopted (AB 2021)
  - Established GHG emission performance standard for baseload generation (SB 1368) for municipal utilities and load serving entities
California Energy Commission

Energy Strategies for Reducing GHG Emissions

– Developing Climate Research, Development, Demonstration and Deployment Roadmap
  • Draft interagency report to be released summer of 2008

– Bioenergy Action Plan Implementation
  • Biomass for electricity generation - the State shall meet a 20% target for use and production of biopower within established State goals for renewable generation for 2010 and 2020

– Participating in CARB Scoping Plan Process and Development
Questions