CHP Overview

Combined Heat & Power Measure

September 9, 2009

CHP Systems & Applications

- Generate electricity & useful thermal energy in an integrated system
- Use variety of fuels and technologies
- Topping & bottoming cycle configurations
- Used for host of commercial, institutional & industrial applications
- Wide system size range (<500 kW to >100 MW)

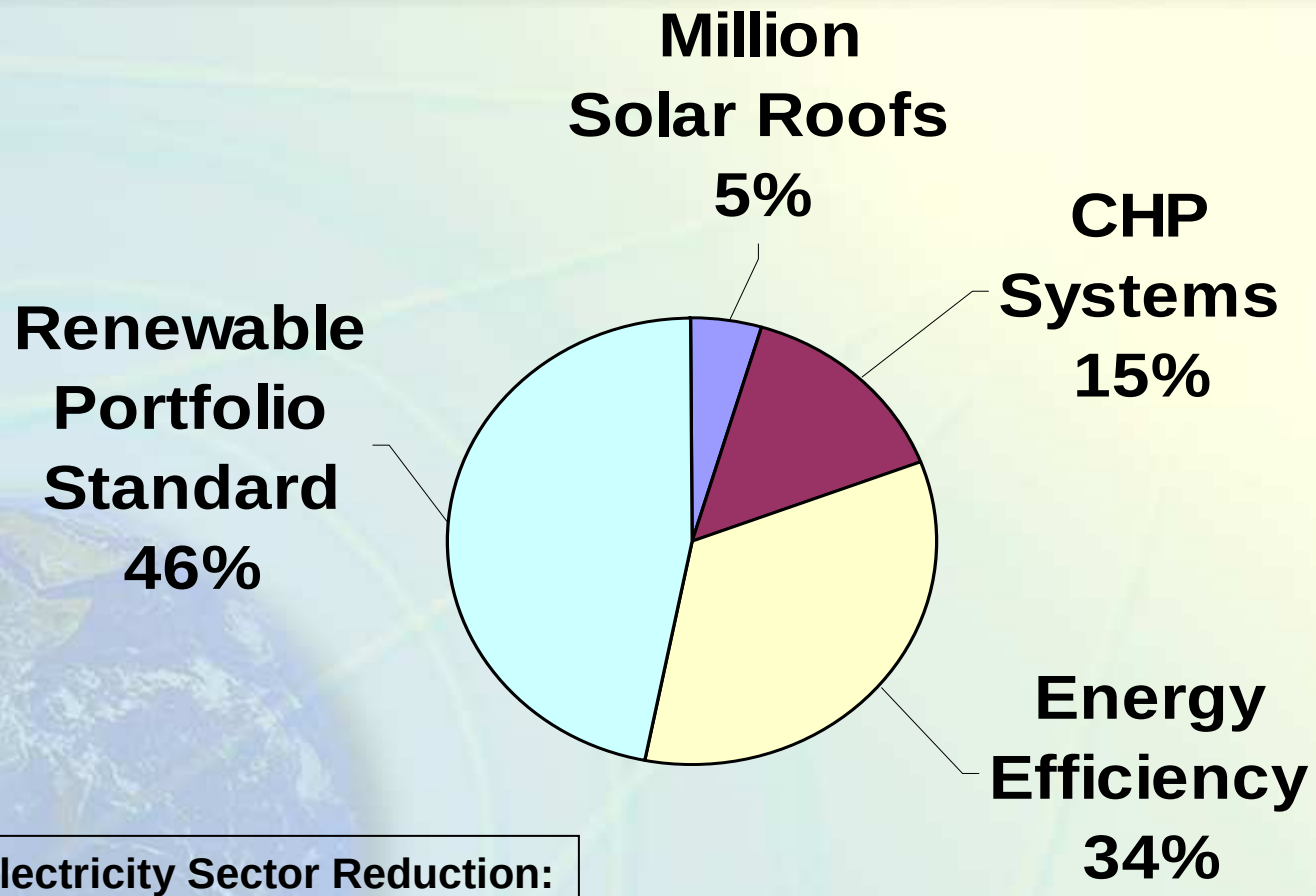
Potential CHP Benefits

- Fuel used efficiently reduces energy costs and GHG emissions
- Reduce need for new or expanded central station power plants and transmission systems
- Improve electricity system efficiency, reliability & security
- Provide protection against outages & brownouts
- Reduce transmission and distribution congestion

CHP Scoping Plan Measure

- Scoping Plan measure sets a target of an additional 4,000 MW of CHP capacity by 2020
- Estimated reduction in GHG emissions of 6.7 MMT in 2020
- Goal based on assumptions from a CHP market penetration study

Electricity Sector Reduction Measures



Total Electricity Sector Reduction:

~ 45.3 MMTCO$_2$E

Coordination with other Entities

- California Public Utilities Commission
- California Energy Commission
- California Independent System Operator
- Western Climate Initiative Partners
- ARB working group participants (utilities, industry reps, environmentalists, academia, manufacturers, et al)

Recommended CHP Actions

- CPUC/CEC to implement 2007 IEPR recommendations:
  - Remove market and regulatory barriers to export power
  - Provide incentives/requirements to encourage CHP development (e.g. feed-in-tariffs, utility portfolio standard)
- ARB to provide necessary support to CPUC/CEC to achieve GHG reductions

Other Issues to Consider

- Participation & role of publicly owned utilities
- Preserve existing CHP capacity
- Additional standards and incentives for GHG reductions

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