



July 22, 2005

**CLIMATE CHANGE ADVISORY COMMITTEE TO THE ENERGY COMMISSION
RECOMMENDATIONS FROM THE INDUSTRY AND AGRICULTURE SUBCOMMITTEE**

These preliminary recommendations represent the views of the Industry and Agriculture subcommittee of the Energy Commission's Climate Change Advisory Committee. Unless ratified by the Advisory Committee, this advisory statement does not necessarily represent the view of the full Advisory Committee or the Energy Commission.

Considering the limited number of industries represented by the subcommittee and the diversity of industries in California, the subcommittee developed several general principles that all participating sectors support. Additional industry specific recommendations will be proposed by the Center for Clean Air Policy for each of the represented industry sectors. Examples in this document are not intended to be exhaustive of all the options available. The subcommittee recommends the Energy Commission undertake studies to identify the existing policy, regulatory and economic barriers that encourage voluntary green house gas reductions in all sectors. This information should be used to develop economy wide policies to expand energy efficiency programs, reduce barriers and provide incentives to implement new technology.

Encourage energy efficiency

Encourage all sectors to implement opportunities to reduce energy use through utility sponsored programs, energy audits, and cost effective technologies. Set expectations for the largest sectors. Specific examples include:

- Cement:
 - Encourage the use of bench marking tools, such as those being developed under the adoption the Energy Star program. This tool is currently under development and will allow the cement industry to rate the performance of their manufacturing facilities.
- Commercial Real Estate:
 - Install occupancy sensors in all office buildings larger than 100,000 square feet.

Removing barriers to implementing new technology

Many technologies could be adopted, but there are currently regulatory or bureaucratic barriers to their adoption. By removing these barriers, the likelihood for adoption is greatly improved.

- Cement:
 - Adoption by the state of the ASTM C 150-04 standard for Portland cement. Each 1% of limestone mixed with Portland cement reduces emissions by an equivalent percentage.
- Agriculture and Forestry:
 - Utilize the California carbon stock protocol and associated baseline established for Forestry. Establish a carbon stock baseline for agriculture so landowners can voluntarily implement projects that sequester carbon. These baselines should be available for use by any project of the appropriate type and region. Standard baselines would reduce the cost and uncertainty faced by projects. They would estimate how the carbon stock on the lands would likely have changed had the project not been implemented.

- Consider net reductions for fire prevention activities. Currently, emissions from wildfires are considered natural events even if they were started by human activity. However, activities to prevent wildfires are counted as manmade emissions. Since these activities reduce the potential for wildfires, their net reduction should be considered.
- Biomass for uses in forestry. Most facilities currently have co-gen. There are currently barriers for smaller, mobile generators that can attach to the grid and provide additional capacity. These types of generators are currently in use in India.

Incentives to implement new technology

Consider performance-based incentives to implement new, emerging, or promising low greenhouse gas (GHG) technologies that currently are not cost effective.

- Cement
 - Provide incentives for the building of concrete houses which are very energy efficient.
- Agriculture and Forestry:
 - Encourage the purchase of offsets that result from the carbon sequestration of agricultural and forestry projects.
 - Encourage the use of curve sawing. This technology increases the net carbon in timber products.
 - Establish a compensation system to encourage the use of net metering for methane digesters. One of the items that must be considered are the NO_x emissions from the digesters. Prior to widespread adoption, an audit of the net outcome needs to be considered.

Consideration of Cap and Trade

A cap and trade system at the State-level or based on a single-sector may have inherent limitations and unintended consequences. The strategies mentioned above should be developed, implemented and their reductions measured as the first priority. While most industries support the use of market-based incentives to meet mandatory GHG reductions, they believe that they should be implemented in a staged approach and that a regional or national system is the most effective. State based cap and trade programs should be discouraged. In the development of any cap and trade system, several considerations need to be taken into account, including:

- California has the second lowest electricity use per capita¹ and the second highest industrial electricity cost in the nation.²
- California's GHG emissions are growing at less than the national level (4% versus 12% between 1990 and 1999).³
- Programs must consider the economic impact to the state and its industries.
- Start with voluntary systems to gain experience and identify potential problems.
- Caps should take historic and future economic growth into account while reducing GHG emissions.
- Policies should be coordinated with other national and global regimes.

¹ http://www.energy.ca.gov/electricity/us_percapita_electricity.html

² http://www.eia.doe.gov/cneaf/electricity/epa/average_price_state.xls based on 2003 data for full service providers.

³ http://www.energy.ca.gov/global_climate_change/04-CCAC-

[1 advisory committee/documents/2004-07-15_meeting/2004-07-15_THERKELSEN.PDF](http://www.energy.ca.gov/global_climate_change/04-CCAC-1_advisory_committee/documents/2004-07-15_meeting/2004-07-15_THERKELSEN.PDF) slide

- Credits must have maximum fungibility to allow for effective trading.

Comments Specific to the Forestry Sector

The following recommendations were developed by the Forestry sector.

- Include the crediting of forest-based greenhouse gas reductions in any multi-sector greenhouse gas cap and trade system that is established.
- Establish targets to protect and increase the state's overall forest carbon stocks and implement voluntary landowner incentives to achieve such targets.
- Require a CEQA (California Environmental Quality Act) analysis, including an analysis of climate effects, for any proposed conversion of forest land to a non-forest use.
- Implement a public education campaign regarding the role of forests in climate change.
- Provide research funding for:
 - The impacts of climate change on California's forests
 - CO2 emissions caused by forest land conversion
 - Climate mitigation opportunities/potential on managed forest lands based on increased carbon stocks across the landscape

Subcommittee Members

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