

AGENDA**ASSEMBLY BUDGET SUBCOMMITTEE No. 3
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION****Climate Change Initiative****Assemblymember Fran Pavley, Chair****WEDNESDAY, APRIL 5, 2006
STATE CAPITOL, ROOM 447
8:30 A.M.**

Hearing Items

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Governor's Climate Change Emission Reduction Initiative

On June 1, 2005, the Governor signed Executive Order S-3-05 that followed recommendations of the Climate Action Team (CAT) and directed the Secretary for Environmental Protection (CalEPA) to coordinate a multi-agency effort to reduce statewide greenhouse gas (GHG) emissions and meet the following GHG emission targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80 percent of 1990 levels

In order to reach these targets, the Governor formed the Climate Action Team to develop strategies to support the order. The draft Climate Action Team Report was released in December 2005 and recommends the following action to meet the Governor's GHG Emissions reduction targets.

- Require mandatory reporting of GHG Emissions
- Levy a public goods charge on gasoline and diesel to fund the promotion of alternative, cleaner transportation fuels
- Coordinate the state's investment funds to reward industry development of emission reduction technology
- Create Provisions to credit companies that take early actions to reduce GHG emissions.

The final draft of the Climate Action Team report has not been released, but was due in January. The Executive Order also specified that this report would be updated biannually thereafter.

Governor's Budget. According to the CalEPA agency, to arrive at the GHG emissions reduction proposals presented in the Governor's budget, CalEPA and related departments reviewed the universe of ongoing state activities that could help the State reach GHG emissions goals and then worked individually with departments to identify potential new programs that would dovetail into existing efforts and provide maximum GHG emissions reductions as possible.

In support of the Climate Change Initiative, the Administration is proposing \$7.2 million in budget proposals and 23.4 positions across a number of agencies. As shown in Figure 1, these proposals provide a wide variety of programs intended to begin implementation of the CAT recommendation.

Figure 1

Governor’s Climate Change Initiative
<p>Regulatory Control Measures. Develop regulatory control measures to encourage use of biofuels and refrigeration technologies; and to reduce or eliminate emissions from the semiconductor industry, stockyards, diesel engines used at ports, and light- and heavy-duty vehicles.</p> <p>Economic Analysis. Evaluate the economic effects of greenhouse gas (GHG) emission reduction strategies.</p> <p>Climate Change Research. Identify links between air quality and climate change.</p> <p>Incentives. Expand the Innovative Clean Air Technologies grant program to include technologies to reduce GHG emissions.</p>
<p>Coordinate Efforts; Foster Crosscutting Research. Coordinate statewide efforts to meet the Governor’s GHG reduction targets; contract for crosscutting research and public outreach.</p>
<p>Evaluate Potential GHG Reductions. Evaluate and verify potential GHG reductions for electricity generation and from other key industries.</p> <p>GHG Emission Inventory. Update and improve methods and data of the existing statewide GHG inventory.</p> <p>Economic Research. Design and develop research projects relating to the economics of climate change.</p>
<p>Renewables Portfolio Standard. Plan for an acceleration of the Renewables Portfolio Standard from the current goal of 20 percent renewable energy by 2017 to: 20 percent by 2010, and 33 percent by 2020.</p> <p>California Solar Initiative. Add 3,000 megawatts of solar energy by 2017.</p> <p>Energy Efficiency. Expand utility energy efficiency programs and increase energy efficiency in state buildings; develop and implement a program to support combined generation of heat and electricity in industrial settings.</p> <p>Policy Development. Analyze carbon policy options for the electricity generation industry.</p>
<p>Methane Conversion. Increase capture of methane emitted from landfills for use as an alternative fuel.</p> <p>a Redirected positions within the commission.</p> <p>Source – LAO Analysis of the 2006-07 Budget</p>

Existing GHG Emissions Programs. Currently numerous statewide activities initiated through legislation, as shown in Figure 2, are being implemented statewide to reduce GHG Emissions.

Figure 2 Selected Existing Greenhouse Gas Emission Reduction Strategies	
Agency	Enabling Legislation
Secretary for Resources	
California Climate Action Registry. Register voluntary reporting of greenhouse gas (GHG) emissions to establish baselines against which future GHG emission reduction requirements may be applied.	Chapter 1018, Statutes of 2000 (SB 1771, Sher); Amended by Chapter 769, Statutes of 2001 (SB 527, Sher)
Air Resources Board	
GHG Vehicle Emission Standards. Require board to regulate GHG emitted by passenger vehicles and light-duty trucks to achieve maximum feasible reductions.	Chapter 200, Statutes of 2002 (AB 1493, Pavley)
Anti-Idling. Require board to develop regulations to prevent diesel truck engine idling at ports.	Chapter 1129, Statutes of 2002 (AB 2650, Lowenthal)
Public Utilities Commission	
Renewables Portfolio Standard. Require the state's retail sellers of electricity to achieve at least 20 percent of energy sales from renewable sources.	Chapter 516, Statutes of 2002 (SB 1078, Sher)
California Solar Initiative. Provide financial incentives to encourage residential and commercial installation of solar energy technology.	
Investor-Owned Utility Energy Efficiency Programs. Establishes energy-savings targets for investor-owned utility energy efficiency programs.	
Energy Commission	
Energy Efficiency Standards. Issue standards that reduce the energy demands in buildings and household appliances.	Chapter 329, Statutes of 2000 (AB 970, Ducheny)
Tire Replacement and Inflation. Ensure that replacement tires sold in the state are at least as energy efficient as the originals, and encourage energy-efficient inflation.	Chapter 654, Statutes of 2003 (AB 844, Nation)
Alternative Fuels. Develop and adopt by June 30, 2007, a state plan to increase the use of alternative transportation fuels that, among other things, reduce the emission of GHGs.	Chapter 371, Statutes of 2005 (AB 1007, Pavley)
State Consumer Services/Cal-EPA	
Green Buildings Initiative. Site, design, construct, renovate, operate, and maintain state buildings that are models of energy efficiency.	
Source – LAO Analysis of the 2006-07 Budget	

Overall Policy Direction Needed. As the LAO commented in their Analysis, the Governor's Climate Change budget proposal is generally consistent with prior legislative policy direction in examples such as: Promotion of cleaner, alternative fuels; motor vehicles emission regulation; offering clean air technology developer incentives; GHG emissions inventorying; renewable energy portfolio standard attainment; and energy efficiency standards establishment. In many cases, however it expands statewide GHG reduction activities beyond current parameters set in place by the Legislature.

The Governor's budget proposes to implement programs to achieve GHG reduction targets established in Executive Order S-3-05. Neither through this proposal nor through prior actions by the legislature has a clear, comprehensive framework for GHG emission reduction activities been established. Prior to taking action on the proposals presented in the Governor's budget, the Legislature needs to address various broad policy issues related to Climate Change. In their analysis, the LAO highlighted the absence of an overall policy direction for Climate Change Reduction Activities and recommended that the legislature consider the following issues outlined in Figure 3.

Figure 3

Establishing Climate Change Policy: Key Issues and Decision Steps for the Legislature
<p>Goals Establish performance targets in terms of greenhouse gas (GHG) emissions reductions.</p> <p>Implementation Actions Determine what actions should take priority, considering the costs and the impact of the actions on GHG emissions reductions. Set time frame for achieving goals.</p> <p>Tools Determine appropriate mix of regulatory and voluntary strategies. Compare cost-effectiveness, and efficiency of the strategies. Consider who should pay to implement strategies—including the role of public versus private funding.</p> <p>Oversight and Operation Decide which agency will oversee the state's GHG reduction programs. Determine the appropriate role of, and relationship between, state and local agencies. Consider how the state's GHG reduction efforts will be coordinated and how they will interact with the state's other programs and activities.</p> <p>Source – LAO 2006-07 Budget Analysis</p>

0555 - SECRETARY FOR ENVIRONMENTAL PROTECTION

ISSUE 1: CLIMATE CHANGE EMISSION REDUCTION INITIATIVE

Governor's Budget. The Governor's budget includes \$900,000 (\$135,000 General Fund) in additional funds to fund two positions and \$595,000 in additional contracts to lead a statewide effort to meet the GHG emission reduction targets set by the Governor. Contract funding will fund technical support to continue the development and analysis of the various GHG emission reduction scenarios and the implementation of a cap and trade program.

Unclear Comprehensive Plan. Throughout the development of this proposal, the Administration has commented that once a full assessment of ongoing and new GHG reduction activities were completed, an analysis of cost and achievable results was conducted for each department to prioritize proposals. It remains unclear, however, how these proposals all fit together into an overall plan, and whether the Administration ever compared these proposals on a cross-departmental basis looking at such issues as feasibility, cost achievable results, and interfunctionality.

Coordinating Role. As the primary coordinating entity for the Governor's Climate Change Initiative, the CalEPA will be responsible for collecting data from all statewide GHG reduction activities and evaluating it to determine future programmatic priorities. Given that this myriad of different programs spread across multiple agencies will generate distinct and specialized data, the CalEPA is faced with the challenge to compile this information and provide an accurate, fair, and balanced comparison of program elements within the Climate Change Initiative. For the hearing, CalEPA should be prepared to explain to the committee how it plans to collect and analyze statewide GHG emissions data and how it will be used to determine future Climate Change policy decisions.

ITEM 3360 CALIFORNIA ENERGY COMMISSION

ISSUE 1: CLIMATE CHANGE EMISSION REDUCTION INITIATIVE

Climate Change Initiative (4 positions). The Governor's budget proposes an augmentation of \$612,000 to fund 4 positions and \$200,000 of ongoing contract funds to help implement the Governor's June 2005 Executive Order setting out his greenhouse gas emission reduction goals for California. The Energy Commission's tasks would be to reduce emissions from electricity generation and from industrial activity, accelerate the Renewable Portfolio Standard (RPS), update the greenhouse gas emissions inventory, and analysis of the economic impact of climate change on California.

Budget Requests for Related Existing Programs. The budget also includes the following requests to implement existing programs and efforts that contribute to the reduction of greenhouse gas emissions:

Alternative Transportation Fuels. AB 1007 (Pavley) requires the Energy Commission to develop a plan to increase the state's use of alternative transportation fuels. The budget includes \$500,000 of one-time contract funds to complete the alternative fuels plan. The plan will evaluate fuels on a full fuel-cycle basis, set goals for the use of alternatives by 2012, 2017, and 2022, and recommend policies to ensure that alternative fuel goals are attained.

Public Purpose Natural Gas Research. The Governor's budget proposes \$504,000 from the Gas Consumption Surcharge Fund to add 5 additional positions to oversee this research program and to expand it to include transportation-related research that will benefit natural gas ratepayers. The budget indicates that the CEC will spend \$16.8 million on natural gas research in 2006-07. The request would double existing staff in this program, which was first funded in the 2005-06 Budget.

Verifying Energy Efficiency Savings. The Governor's budget proposes \$209,000 for two permanent positions to assist in the Public Utilities Commission's efforts to verify the performance of utility energy conservation and efficiency programs.

Renewable Resources 5-Year Investment Plan

Existing law requires the CEC to prepare investment plans to guide the expenditure of Renewable Resources Trust Fund (RRTF) funds. The second 5-year investment plan was presented to the Legislature in February 2006. That plan proposes the allocation of \$750 million of ratepayer funds deposited in the between January 2007 and January 2012. Although existing law continuously appropriates RRTF funds for the purpose of renewable energy subsidies, expenditure of post-2006 funds is contingent on further action by the Legislature to "reauthorize" the program after review of the new 5-Year Investment Plan.

One of the primary purposes of the RRTF is to provide financial incentives to increase renewable energy electricity generation to meet the state's Renewable Portfolio Standard (RPS) goal of 20 percent of electricity from renewable resources by 2017.

Should The RRTF Be More Focused On Reduction Of Greenhouse Gas Emissions? The new investment plan does not directly address whether the RRTF funding amount or the specific allocations proposed by the commission will achieve the RPS goal. Indeed, the allocation of funds among different renewable energy technologies and approaches (partly reflecting existing statutory direction and partly reflecting the Administration's choices) is primarily directed at funding a variety of technologies and approaches than at achieving any single goal (such as the reduction of greenhouse gas emissions) in the most expeditious and effective manner.

PIER Plan

In accordance with existing law, the Energy Commission also provided a March 2006 report to the Legislature on the Public Interest Energy Research (PIER) Program. The report sets out long-term research priorities. The commission now has hundreds of active PIER research and development projects. The PIER Program receives about \$70 million annually for research from ratepayer funds (and interest) and currently spends about \$5 million annually on climate change research—although many other research projects address energy conservation, renewable energy and efficient pricing systems that may result in reduced greenhouse gas emissions.

Would More Focused Research Get a Bigger Bang for the Buck? The PIER Program funds a myriad of research projects and programs, some through subcontractors. It is not clear how the commission decides to divide up the available funds among research areas. The current "shotgun" approach might increase chances of hitting a few big winners. On the other hand, it risks ineffectiveness and difficulty in evaluation.

3900 – AIR RESOURCES BOARD

ISSUE 1: CLIMATE CHANGE EMISSION REDUCTION INITIATIVE

Governor's Budget. The budget includes \$5.2 million to support the Governor's greenhouse gas emission reduction targets. These funds will generally be used to support new GHG emission research an assessment that will help shape future control strategies to deal with Global Warming. The budget includes \$1.9 million from the Motor Vehicle Account (MVA) and \$3.3 million from the Air Pollution Control Fund (APCF). The MVA funds will be used to support 15.5 positions and the APCF will be used to fund one-time contracts for various research efforts. The additional positions will support the following activities:

- **Bio-fuel Blends.** Supports two positions to develop and propose regulations related to bio-fuel blends.
- **Perfluorocarbon Emission Reductions.** Supports one position to develop control measures and technology options for reducing emissions from the semi-conductor industry.
- **Manure Management.** Supports one position to develop and propose regulations for manure management options.
- **Refrigerated Transport.** Supports one position to develop and propose regulations to require new refrigerated trucks to be equipped with electric stand-by systems.
- **Port Electrification.** Supports two positions to develop and propose measures to phase in vessels and infrastructure to plug in for shore-side power.
- **Hydrofluorocarbon Emission Reductions.** Supports three positions to develop and adopt measures to maximize the use of low global warming potential refrigerants in mobile, commercial and residential air conditionings.
- **Light-Duty Vehicles.** Supports one position to develop and propose policies for the implementation of lightweight materials and cool paints to reduce emissions from light-duty vehicles.
- **Heavy-Duty Vehicles.** Supports two new positions to implement AB 1493 and the Teach the Trainer Program for increasing fuel efficiency.
- **Economic Analysis.** Supports 1.5 positions to allow ARB to conduct economic analysis of proposed climate change strategies statewide.
- **Climate Change and Air Quality Interaction.** Supports one position to integrate air quality and climate science goals.

3910 – INTEGRATED WASTE MANAGEMENT BOARD

ISSUE 1: CLIMATE CHANGE EMISSION REDUCTION INITIATIVE

Governor's Budget. The Governor's Budget includes \$466,000 in special funds to fund three new positions to expand existing efforts to research, reduce, capture and recycle methane produced in landfills. This funding will fund the following activities:

- Update landfill gas to energy systems inventory
- Refine models on landfill GHG emissions generation and reduction
- Assess gas monitoring system viability
- Participate in Task Force and coordinate with other Board programs and state agencies regarding landfill gas recovery programs
- Update outdated control and recovery technology
- Development Action Plan
- Provide regulatory oversight and policy evaluation related to landfill closures

8660 PUBLIC UTILITIES COMMISSION

Note: Subcommittee 4 is scheduled to hear the Public Utilities Commission (PUC) budget on April 25th. The PUC's climate change proposals are included here for information and discussion in order to provide a comprehensive picture of the Governor's Climate Change Proposals.

ISSUE 1: CLIMATE CHANGE EMISSION REDUCTION INITIATIVE

Climate Change Proposal. The PUC budget proposes redirection of 12 existing positions specifically to assist in the implementation of the Governor's Climate Action Strategies. These positions would address the initial workload needed to augment or accelerate existing programs to achieve the Governor's more aggressive climate action targets. The PUC's request would fund the following activities and workloads:

- **RPS Acceleration (3 positions).** These staff would begin accelerating the Renewable Portfolio Standard (RPS) from the current goal of 20-percent of electricity generated from renewable resources to the Governor's goal of 33 percent by 2020. Tasks would include additional program analysis, development of legislative proposals, ensuring that implementation of the current RPS goal is consistent with future expansion, and that various commission proceedings take the RPS expansion into consideration.
- **Electric Sector Carbon Policy (2 positions).** Generally, these staff would help evaluate and develop carbon policies, such as cap-and-trade models, and to evaluate the ability to measure and verify emissions savings through electric sector carbon policy *and* other climate programs.
- **California Solar Initiative (1 position).** The additional position appears to be related to verification of greenhouse gas emissions reductions.
- **Energy Efficiency (3 positions).** These positions would generally work on expanding the PUC's existing energy conservation programs to achieve additional reductions in greenhouse gas emissions.
- **Green Buildings (1 position).** This staff person would help the PUC put state buildings on an "energy diet," in the governor's words by encouraging the state to participate in various PUC energy conservation or distributed generation programs.
- **Combined Heat and Power (2 positions).** The staff would explore and develop a program to expand existing incentives to projects with capacities over 5 MW.

Budget Requests for Related Existing Programs. The PUC's budget also includes the following requests for staffing redirections to implement existing programs and efforts that contribute to the reduction of greenhouse gas emissions:

- **RPS (3 positions).** These staff would assist with implementing the RPS, distributed generation policies, and the Governor's Million Solar Roofs initiative.
- **Utility Energy Efficiency Programs (4 positions).** These staff would verify and evaluate utility energy efficiency programs and to implement advanced metering and demand response programs.
- **Utility Procurement (2 positions).** These staff would monitor utility procurement of energy resources.

Redirections Rather than Augmentations. The 21 positions requested for the purposes listed above all would be provided through redirection of existing resources. Six of these positions would be redirected from existing efforts related to electricity procurement, energy efficiency, and similar functions. To some extent, the PUC proposal appears to be a repackaging of staff rather than a truly new effort.

More Exploration than Implementation. Most of the work identified for the 12 positions specifically related to the Governor's Climate Change Proposals consists of policy analysis, or explorations of technical feasibility. Essentially, these positions would be involved in developing the specific approaches to implement the Governor's goals.