California Environmental Protection Agency

# CLIMATE ACTION TEAM PROPOSED EARLY ACTIONS TO MITIGATE CLIMATE CHANGE IN CALIFORNIA

## Draft for Public Review

CALIFORNIA
Climate
ACTION TEAM

## INTRODUCTION: Climate Action Team Early Actions

The California Air Resources Board, under the California Global Warming Solutions Act of 2006 (Section 38560.5 of the Health and Safety Code) has the primary responsibility for reducing Greenhouse Gas Emissions. However, actions by many other state agencies are essential to meeting the emission reduction requirements of the Act. A substantial portion of the GHG emission reductions proposed in the 2006 Climate Action Team Report to reach 1990 emission levels by 2020 are strategies to be taken by agencies other than CARB.

By July 1, 2007 the statute calls for ARB to submit a list of early action measures that can be adopted and implemented by January 1, 2010. This report supplements the ARB report on early actions and is a status report on early actions being taken by the participating departments and agencies of the Climate Action Team.

The Climate Action Team (CAT) was created and is chaired by the Secretary of the California Environmental Protection Agency. Members include: the California Environmental Protection Agency (Cal/EPA), Business Transportation and Housing Agency (BTH), California Department of Food and Agriculture (CDFA), State and Consumer Services Agency (SCSA), Air Resources Board, California Department of Forestry and Fire Protection (CalFire), California Energy Commission (CEC), Department of General Services (DGS), Department of Water Resources (DWR), Integrated Waste Management Board (IWMB) and the California Public Utilities Commission (CPUC).

All members of the CAT contributed to this report which describes ongoing and expected efforts to reduce and mitigate GHG emissions in the near term. In describing the items listed under Group 1 as “Discrete Early Actions”, the CAT members considered the definition provided by the Global Warming Solutions Act of 2006. It should be noted however that only the ARB has a legal responsibility to enumerate early actions under this statute. The Group 1 items in this report are those where there is a reasonable belief that regulations would be in place by January 1, 2010. It should be noted that the Group 1 strategies of all CAT members except for ARB account for GHG emissions reductions of over 17 million metric tons of $CO_2$ equivalent by 2020 (emissions reductions for several strategies have not yet been determined).

Action items included in Group 2 are those for which a regulatory deadline of January 1, 2010 is not appropriate or achievable but where there are ongoing or expected efforts focused on GHG emissions reductions. Group 2 is titled: “Additional Early Action Measures to Reduce GHGs Already Underway or to be Initiated by CAT Members in 2007-2009”. These items include many of the strategies outlined in the 2006 Climate Action Team report, additional strategies that have been formulated in the intervening months or strategies proposed by stakeholders in the development of the CARB’s early action measures. The Group 2 strategies of all CAT members except for ARB account

for GHG emissions reductions of over 60 million metric tons of $CO_2$ equivalent by 2020 (emissions reductions for several strategies have not yet been determined).

There are several other items which comprise actions which, although not directly focused on GHG emission reductions, have significant co-benefits for climate change mitigation efforts. These Group 3 actions are described as: "Regulations for 2007-2009 Adoption with Potential GHG Reductions or Other Climate Co-Benefits".

## GROUP 1: Discrete Early Action Measures:

In describing the items listed under Group 1 as "Discrete Early Actions", the CAT members have used the definition provided by the Global Warming Solutions Act of 2006. It should be noted however that only the ARB has a legal responsibility to enumerate early actions under this statute. The Group 1 items in this report are those where there is a reasonable belief that regulations would be in place by January 1, 2010 (although there is no requirement in the law that any CAT member other than the ARB adhere to this deadline).

### Business, Transportation, and Housing

- Cement Manufacture: Caltrans has changed its cement specification to allow 2.5 percent interground limestone concrete mix in cement use. This will result in a GHG emissions reduction of <1 million metric tons of $CO_2$ equivalent ($MMTCO_2E$) per year, based on 2004 production levels. Investigations are being conducted to examine the use of concrete blends containing 5 percent interground limestone.

### California Department of Food & Agriculture

- Hydrogen Fuel Standards: The CDFA Division of Measurement Standards, under SB 76 of 2005, is developing hydrogen fuel standards for use in combustion systems and fuel cells. These standards are to be completed by 2008.

### Air Resources Board

- (for details see ARB report: "Early Actions for Climate Change Mitigation in California")

### California Energy Commission

- SB1368 (Regulation of greenhouse gases from load serving entities): In response to SB 1368, the CEC and the CPUC have been collaborating on utility procurement practices to address ways to transition away from carbon-intensive electricity sources. The CPUC adopted its regulations for the investor-owned utilities in January, 2007. The CEC intends to adopt regulations by June, 2007

requiring municipal utilities to transition away from carbon-intensive generation. These strategies implemented by the CEC and CPUC under SB1368 are expected to result in a combined GHG emissions reduction of over 15 $MMTCO_2E$ by 2020.

- Energy Efficient Building Standards: The CEC has been actively engaged in its "Building Energy Efficiency Standards in Progress" effort. The next phase of the project is to conduct public workshops on mark-ups of the “Express Terms” of the Standards, plus the supporting technical rules for software developers and the extensive technical data appendices that are required for showing compliance. The CEC intends to adopt these regulations in 2008. The GHG emissions reductions from this strategy are still to be determined. (The GHG emissions reductions associated with ongoing energy efficient building standards are expected to be 3 $MMTCO_2E$ by 2020.)
- Energy Efficient Appliance Standards: (Specific mention of lighting standards). CEC has the authority to regulate light bulb efficiency. The California Energy Commission is considering options for light bulb standards and anticipates adopting standards by January 1, 2010. The GHG emissions reductions from this strategy are still to be determined. (The GHG emissions reductions associated with other ongoing energy efficient appliance standards are expected to be 7 $MMTCO_2E$ by 2020.)
- Tire Efficiency: Implementation of California’s tire efficiency law, Chapter 8.7 Division 15 of the Public Resources Code. The CEC, in consultation with the California Integrated Waste Management Board, will implement a replacement tire efficiency program of statewide applicability for replacement tires for passenger cars and light-duty trucks, to ensure that replacement tires sold in the state are at least as energy efficient, on average, as the tires sold in the state as original equipment on these vehicles. This strategy is expected to result in GHG emissions reduction of <1 $MMTCO_2E$ by 2020.
- New Solar Homes Partnership: In late 2006, the Energy Commission approved implementation rules for new residential solar installations. Effective in January 2007, approved solar systems will receive incentive funds based on system performance above building standards. This program will result in 400 MW of new, emissions-free generating capacity. The GHG emissions reductions from this strategy are still to be determined.

**Department of Water Resources**

- Water Use Efficiency: DWR will adopt standards for projects and programs funded through water bonds that would require consideration of water use efficiency in construction and operation. This strategy is expected to result in GHG emissions reduction of 1 MMTCO2E by 2020.
- State Water Project: DWR will evaluate the State Water Project (SWP) energy resources and include feasible and cost-effective renewable energy in the SWP’s portfolio. As DWR completes a GHG assessment through membership with the Climate Action Registry, and investigations of cleaner energy sources to replace reliance on the Reid Gardner power plant (see below), the SWP will be able to

significantly reduce its GHG emissions. The GHG emissions reductions from this strategy are still to be determined.

- Cleaner Energy for Water Supply: In renewing energy supply contracts for the State Water Project, it is DWR's goal not to renew contracts supplied by conventional coal power generation. One specific example of this is DWR's ownership interest in the Reid Gardner power plant near Las Vegas, Nevada. Upon expiration of the contract in 2013, DWR will not extend its ownership interest in the Reid Gardner plant. The GHG emissions reductions from this action are still to be determined.

**Integrated Waste Management Board**

- Landfill Gas Recovery: The IWMB is jointly developing a regulatory measure that will be implemented by ARB and will require landfill gas recovery systems on the few dozen small to medium landfills that do not have them and upgrade the requirements at landfills with existing systems to represent best capture and destruction efficiencies. Going forward this will be considered as an ARB measure. The GHG emissions reductions from these strategies are expected to be 2-4 $MMTCO_2E$ by 2020.

**California Public Utilities Commission**

- SB1368 (Regulation of greenhouse gases from load serving entities): Please see this heading under CEC.
- IOU Energy Efficiency Programs: Planning has begun for 2009-2011 energy efficiency portfolios. In 2007, CPUC is evaluating the design of a risk/reward incentive mechanism for utilities to encourage additional investment in energy efficiency. Also in 2007, CPUC will develop new aggressive targets for efficiency between 2007 and 2020. In developing 2009-2011 portfolios, CPUC will evaluate new technologies and new measures that could deliver additional energy savings through these programs; new ideas include new options for encouraging compact fluorescent lighting in residential and commercial buildings. This strategy is expected to result in GHG emissions reduction of 4 $MMTCO_2E$ by 2020.

## GROUP 2: Additional Early Action Measures To Reduce GHGs Already Underway or to be Initiated by CAT members in 2007-2009

Action items included in Group 2 are those for which a regulatory deadline of January 1, 2010 is not appropriate or achievable but where there are ongoing or expected efforts focused on GHG emissions reductions. Group 2 is titled: "Additional Early Action Measures To Reduce GHGs Already Underway or to be Initiated by CAT members in 2007-2009". These items include many of the strategies outline in the 2006 Climate

Action Team report as well as additional strategies that have been formulated in the intervening months.

**Business, Transportation, and Housing (BTH)**

- Transportation Efficiency (2006 CAT Report strategy): The Department of Transportation (Caltrans) will reduce congestion, improve travel time in congested corridors, and promote coordinated, integrated land use-transportation decisions through desired regional growth plans and smart land use measures. Caltrans will implement the Strategic Growth plan and infrastructure investment Plan, Regional Blueprint Planning, and the Caltrans Climate Action Program. This strategy is expected to result in GHG emissions reduction of 9 $MMTCO_2E$ by 2020.
- Smart Land Use and Intelligent Transportation (2006 CAT Report strategy): Caltrans will integrate consideration of GHG reduction measures and energy efficiency factors into planning, project development, etc. Caltrans is developing a Director's Policy on Climate Change and GHG emissions analysis will be integrated into transportation plans and projects. Caltrans will work with the California Transportation Commission (CTC) to include GHG emissions criteria into regional transportation planning guidelines. BTH intends to join the California Climate Action Registry which will complement efforts to determine GHG emissions from transportation. This strategy is expected to result in GHG emissions reduction of approximately 10 $MMTCO_2E$ by 2020.

**California Department of Food & Agriculture**

- Conservation Tillage and Enteric Fermentation (2006 CAT Report strategy): With funding from ARB, CDFA will develop and implement actions to quantify and reduce enteric fermentation emissions from livestock and sequester soil carbon using cover crops and conservation tillage. This strategy is expected to result in GHG emissions reduction of 1 $MMTCO_2E$ by 2020.
- Dairy Digesters (2006 CAT Report strategy): CDFA is participating in the CCAR process to develop a dairy digester protocol to document GHG emission reductions from these facilities. The GHG emissions reductions from this action are still to be determined.

**State and Consumer Service Agency (Department of General Services)**

Green Building Initiative and Other Related Efforts (2006 CAT Report strategy)

- Retro-commissioning: There are 27 retro-commissioning projects underway or completed that will yield an 8 percent to 10 percent reduction in energy usage and corresponding GHG emission reductions for each building. At least 21 more buildings will be retro-commissioned during calendar year 2007. DGS is putting substantial efforts into retro-commissioning state buildings owned and operated by DGS and other departments including: Corrections and Rehabilitation, Motor

Vehicles, Transportation, Developmental Services, Veterans Affairs, Technology Services, Parks and Recreation, Health Services, Food and Agriculture, the California Highway Patrol and the California State Lottery. This work is ongoing and will yield substantial energy savings and GHG emissions reductions in the next 18 months.

- Development of a Tool for Automating Data Collection of Energy Usage and GHG Emissions: The Department of General Services and the California Energy Commission have been working with US EPA Energy Star™ and the California Investor Owned Utilities to determine how to automate the uploading of utility generated energy usage data into the Energy Star™ Portfolio Manager benchmarking database. Most of the 1600 state owned buildings waiting benchmarking will have their energy usage data uploaded in this manner. Additional coordination with the Climate Action Registry will determine how to convert this information to GHG emission reductions
- Solar Generation: Within the last year, the State has implemented over 3 megawatts of clean solar power generation, with another 1 megawatt coming on line this year. The second round of solar generation implementation is anticipated to total 10 additional megawatts and may include UC/CSU campuses and state fairgrounds.
- Energy Efficiency Benchmarking: The DGS has benchmarked its 52 state-owned buildings for energy efficiency and is leading an effort to support other state agencies in benchmarking the remainder of 1,600 state-owned facilities by June 1, 2007.
- Desktop Power Management: The DGS has implemented server-based desktop power management software that will reduce electricity use by desktop computers by up to 40 percent. The California Environmental Protection Agency, Department of Motor Vehicles and Department of Transportation are implementing the software as well.
- LEED Certification: The State now has 9 buildings that are certified by the Leadership in Energy and Environmental Design (LEED) program, totaling more than 2 million square feet. LEED buildings have lower energy usage and lower GHG emissions. LEED certification is being pursued on 85 additional new and renovated buildings totaling over 5.4 million square feet, as well as eight existing buildings totaling over 2.6 million square feet. Additionally, all smaller buildings less than 50,000 square feet in size are being designed and constructed to meet LEED standards.
- Hydrogen Fuel Cells: Initiatives are underway to incorporate clean hydrogen fuel cells in stationary applications at State facilities and as back-up generation for emergency services radios.
- High Performance Schools: The State has adopted new guidelines for energy and resource efficient schools and is currently processing the first applications for up to $100 million in bond money for construction of sustainable, high performance schools.
- Contracting for Environmentally Preferable Products: New State contracts have been or are being created for more energy and resource efficient IT goods, copiers, low mercury florescent lamps, the California Gold Carpet Standard, and

office furniture all of which lower GHG emissions due to environmentally preferable design and manufacturing standards

These combined strategies are expected to result in GHG emissions reduction of 2 $MMTCO_2E$ by 2020.

Transportation Policy Implementation (2006 CAT Report strategy)

- Ultra Low Emission Vehicles: A new long-term commercial rental contract was released in March 2007 requiring a minimum Ultra Low Emission Vehicle (ULEV) standard for gasoline vehicles and require alternative fuel and hybrid-electric vehicles.
- Flex Fuel Vehicles: The DGS fleet purchased 1,134 flex-fuel, E-85 vehicles last year. DGS will replace 800 additional vehicles this year with new, more efficient vehicles, reducing GHG emissions by 370 metric tons of CO2, .85 metric tons of Methane, and 1.14 metric tons of Nitrous Oxide. DGS has committed to purchasing at least 50 percent of new vehicles as flex-fuel vehicles by 2010.
- Climate Registry: The Department of General Services joined the Climate Registry on February 9, 2007. This includes the benchmarking and reduction of GHG emissions for 55 state-owned buildings totaling 15 million square feet, 100 leased buildings totaling 1 million square feet, and over 7,000 light duty vehicles.

The GHG emissions reductions from these combined strategies are still to be determined.

**Air Resources Board**

- (for details see ARB report: "Early Actions for Climate Change Mitigation in California")

**California Department of Forestry & Fire Protection**

- Urban Forestry (2006 CAT Report Strategy): CalFire is working with the U.S. Forest Service's Center for Urban Forestry Research (CUFR), CCAR and others to develop a new forestry protocol for urban forestry. An initial draft protocol outline for measuring Urban Forestry emission reductions has been completed and is being reviewed by the task group assigned. Partnering with local government and private sector entities the objective of this strategy is to expand efforts with the end result of five million additional trees in urban areas by 2020. This strategy is expected to result in GHG emissions reduction of 1 $MMTCO_2E$ by 2020.
- Fuels Management/Biomass (2006 CAT Report Strategy): CalFire is working with the Tahoe Conservancy and the California Conservation Corps on the Lake Tahoe program. Placer County is also participating to provide biomass from forest fuel treatments to existing biomass utilization facilities. This strategy is expected to result in GHG emissions reduction of 3 $MMTCO_2E$ by 2020.
- Forest Conservation and Forest Management (2006 CAT Report Strategy): CalFire is participating with the Wildlife Conservation Board and stakeholders in

discussions that include looking at opportunities for carbon sequestration in the Prop 84 forest land conservation program to conserve and additional 75,000 acres of forest landscape by 2010. CalFire is working with the U.S. Forest Service on the Lake Tahoe program, and has met to discuss other opportunities for contributing to CAT forestry goals, particularly those related to fuels management and reforestation. These combined strategies are expected to result in GHG emissions reduction of 10 $MMTCO_2E$ by 2020.

- Afforestation/Reforestration (2006 CAT Report Strategy): CalFire has met several times with the ARB to discuss carbon protocols for reforestation that have been approved by CCAR. PG&E has an accepted voluntary tariff to subsidize tree planting. Southern California Edison has contacted CalFire to discuss carbon sequestration opportunities through voluntary forest projects. This strategy is expected to result in GHG emissions reduction of 2 $MMTCO_2E$ by 2020.
- WESTCARB Activities: CalFire is working with West Coast Regional Carbon Sequestration Partnership (WESTCARB) to evaluate fuels management and biomass use. CalFire continues to work with WESTCARB to evaluate terrestrial carbon sequestration opportunities by looking at reforestation and forest conservation management at its LaTour State Forest.

**California Energy Commission**

- Municipal Utilities Electricity Sector Carbon Policy (2006 CAT Report Strategy): The CPUC and the CEC have initiated a joint proceeding to provide a set of GHG emissions cap policy guidelines to the ARB for California's electricity sector as a whole (IOUs and POUs). The ARB is actively involved in this proceeding. The GHG emissions reductions from this strategy are included in the numbers associated with the efforts on SB1368, enumerated in Group 1.
- Appliance Energy Efficiency Standards in Place (2006 CAT Report Strategy): The CEC will be updating its appliance regulations to re-institute appliance and equipment efficiency certification and data collection after successfully defending California's right to require such data in federal appellate courts. This strategy is expected to result in GHG emissions reduction of 7 $MMTCO_2E$ by 2020.
- Alternative Fuels: Non-Petroleum Fuels (2006 CAT Report Strategy): The CEC is will complete, by June 30, 2007, a state plan to increase the use of alternative fuels for transportation. The plan will also evaluate alternative fuels on a full fuel-cycle assessment, set goals for 2012, 2017, and 2022 for increased alternative fuel use, and recommend policies to ensure goals are attained. The GHG emissions reductions from this strategy are still to be determined.
- Land Use/Smart Growth. CEC will be leading the Land Use/Smart Growth subgroup of the CAT. This group will investigate potential strategies related to smart growth that will be included in the 2008 CAT report. This will include examining programs such as the California Regional Blueprint Program, the Local Development / Intergovernmental Review process and transportation planning grants. The GHG emissions reductions from this strategy are still to be

determined but some portion of the reduction will fall under the BTH Smart Land use strategy enumerated above.

**Department of Water Resources**

- Water Delivery Planning: DWR has begun a five year analysis and modeling effort to determine the impacts of climate change on California's water systems. The GHG emissions reductions from this strategy are still to be determined.
- Water-Energy Nexus: DWR will consider options that would compel local agencies to incorporate climate change adaptation into regional water planning. Such options would ensure that local agencies consider water-energy nexus in Integrated Regional Water Management Plans and construction and operation fo facilities. DWR expects to include consideration of GHG emissions as a part of the application criteria for future water management plan Proposal Solicitation Processes. The GHG emissions reductions from this strategy are still to be determined.

**Integrated Waste Management Board**

- Zero Waste/High Recycling Strategy (2006 CAT Report strategy): Building off of the successful 50% Statewide Recycling Goal, efforts to move toward zero waste through high level recycling and waste prevention are projected to provide an additional 3 $MMTCO_2e$ by 2020. In January 2007, the IWMB approved a Scope of Work for a Lifecycle Assessment and Economic Analysis to help identify which materials to focus diversion efforts to achieve both maximum diversion and GHG reduction at the lowest possible cost. This strategy is expected to result in GHG emissions reduction of 5 $MMTCO_2E$ by 2020.
- Landfill Methane Capture Strategy (2006 CAT Report strategy): The IWMB is analyzing increasing the efficiency of existing landfill methane systems and examing the implementation of earlier placement of final cover. The IWMB is collaborating with the CEC on a study to obtain field data and improve the estimates for the proposed strategy. The IWMB is conducting an emissions inventory that will be crucial in quantifying the GHG emissions reductions associated with this strategy. The GHG emissions reductions from this strategy are included in the Landfill Gas Recovery item enumerated above in Group 1.
- Organic Materials Management: IWMB will develop a market incentive program to encourage the organic materials management industry to increase organics diversion to the agricultural industry. The GHG emissions reductions from this strategy are still to be determined.
- Landfill Gas Energy: IWMB is providing funding for demonstration grants for Landfill Gas to Energy & LNG/biofuels projects. The GHG emissions reductions from this strategy are still to be determined.
- Target Recycling: IWMB is focusing on industry/public sectors with high GHG components to implement targeted commodity recycling programs. The GHG emissions reductions from this strategy are still to be determined.

**California Public Utilities Commission**

- Accelerated Renewable Portfolio Standard (RPS) (2006 CAT Report Strategy): In 2006, the PUC approved the IOUs' procurement and solicitation proposals, streamlined the market price benchmark calculation used to evaluate renewable projects, and adopted RPS participation criteria for non-utility load-serving entities. In 2007, the PUC will also examine RPS long-term planning as part of utility overall procurement planning, review and act on utility RPS contracts submitted for approval, and address the use of tradable renewable energy credits for RPS compliance. The GHG emissions reductions from this strategy are included in the efforts related to SB 1368 item enumerated above in Group 1.
- California Solar Initiative. (2006 CAT Report Strategy): In late 2006, the PUC finalized implementation rules. The Initiative is designed to deliver approximately 2,000 megawatts of clean, emissions-free energy to the California grid by 2016. Beginning in January 2007, solar systems will receive incentive funds based on system performance. This strategy is expected to result in GHG emissions reduction of 1 $MMTCO_2E$ by 2020.
- Transmission Infrastructure:: The PUC will consider approval of over $3 billion in utility transmission investment in 2007 that will help facilitate renewable goals. The Tehachapi Renewable Transmission Project is currently under review. The GHG emissions reductions from this strategy are still to be determined.
- Water Energy Issues: CPUC required energy utilities to file pilot program proposals in January 2007 to partner with water utilities to deliver energy efficiency programs. The CPUC is evaluating proposals now. New programs should encourage additional energy savings through augmentation of water conservation measures. CPUC is also considering adoption of a methodology to evaluate level of additional energy savings generated through water conservation measures. The GHG emissions reductions from this strategy are still to be determined.
- Water Conservation: CPUC adopted a Water Action Plan in December 2005. The Plan includes a number of initiatives to encourage water conservation, including: rate design reform, conservation program investment by water utilities, and partnering with energy utilities. CPUC is also acting as participating agency in the DWR Water Plan development. The GHG emissions reductions from this strategy are still to be determined.
- Additional RPS: The CPUC is evaluating options for RPS requirements beyond 20% (including 33%). CPUC is evaluating the use of renewable energy certificates (RECs) for RPS compliance. CPUC is evaluating interaction between RPS program requirements and greenhouse gas emissions cap. This is a strategy that may be amenable to a market based approach. This strategy is expected to result in GHG emissions reduction of 11 $MMTCO_2E$ by 2020.

**GROUP 3: Regulations for 2007-2009 Adoption With Potential GHG Reductions or**

## Other Climate Co-Benefits

There are several other action items noted which comprise actions which, although not directly focused on GHG emission reductions, have significant co-benefits for climate change mitigation efforts. These Group 3 actions are described as: “Regulations for 2007-2009 Adoption with Potential GHG Reductions or Other Climate Co-Benefits”.

### California Department of Food & Agriculture

- Salt Recapture: The Proposition 204, Drainage Water Source Reduction, Reuse and Salt Utilization Program, will improve water use efficiency, produce salt tolerant energy crops and recapture salt from drainage as a possible energy source. This program is funded through 2011 and is also pursuing options for growing salt tolerant bio-energy crops.
- Rice Straw: The Rice Straw Tax Credit Program provides $15 per ton of rice straw used off-field, reducing open-field burning of rice straw and methane emissions from rice straw decomposition in the field. This program is slated to sunset at the end of 2008 but CDFA is supporting current legislation to extend and expand this program.
- Dairy Management Practices: CDFA is leading the effort to develop a strategic plan for dairy research and demonstration for on-farm management practices that protect water quality and air quality. These practices go well beyond just digesters and will have ancillary global warming benefits.
- Photovoltaic Installation: The CDFA Division of Fairs and Expositions directly funds about 90% of the operating budget of the Joint Powers Authority (the Ca Construction Authority) that installs photovoltaic systems at county and agricultural fairgrounds. Over 5 MW has been installed in is operating to date, with another 3 MW that are in construction to be completed this summer.

### California Energy Commission

- Report to the Legislature on AB1007 (Increased use of alternative fuels): The CEC will adopt policy recommendations based on the results of all technical analyses performed in response to AB 1007, and submit those adopted recommendations to the ARB for its use in fulfilling the requirements of AB 32. Expected reductions of GHG emissions resulting from these recommendations will be provided in the third quarter report for 2007.

### California Department of Forestry & Fire Protection

- Wildfire Control Program: CalFire has developed a comprehensive program to control wildfires with the objective to control 95 percent of fires at ten acres or less through firefighting and forest management. It is estimated that every acre consumed by wildfire emits between 35 and 75 tons of carbon dioxide. Additional analysis will determine the full GHG emission reduction from this objective.

- Biomass Energy: CalFire promotes the use of wood to diversify energy supplies and is working with the CEC and CPUC on obtaining energy from forest residue (biomass). The Department is working toward the development of two small (1 megawatt) wood-to-electricity plants to demonstrate how renewable forest residue can generate energy.

**Department of Water Resources**

- Urban Best Management Practices: DWR will promote the implementation of Urban Best Management Practices that are locally cost-effective.

**Integrated Waste Management Board**

- Commercial Recycling: Focus local government efforts to require commercial recycling.
- Multi-Family Recycling: Focus local government efforts to require multi-family recycling.

**California Public Utilities Commission**

- Carbon Capture and Sequestration: Several proposals for power plants with integrated gasification combined cycle (IGCC) and/or carbon capture are expected in the next 18 months. If projects proposed to sell to California IOUs, CPUC would need to approve the contracts. This item falls under the auspices of SB1368. The project approval process will be handled on a case by case basis as it relates to reaching the GHG emissions goals of SB 1368.