

CT GHG Recommended Actions and Potential GHG Reduction Strategies

5/3/2010

KEY

	On schedule
	Needs attention
	Behind schedule or stopped

CCAP - This strategy is an action from the 2005 CT Climate Change Action Plan (number identifies the action # in the CCAP)

EPA - This strategy is part of EPA's climate change program

2008 stakeholder - This strategy is from the 2007-2008 GSC stakeholder workshops

GWSA - This strategy is required by the Global Warming Solutions Act, CGS 22a-200

C4 - This strategy proposed or revised by the Climate Change Coordinating Committee

Source of Strategy	Action / Strategy	Implementation Status	Lead Agency	2020 Projected MMTCO2 Reductions from 2005 CCAP
Stationary Source Sector				
Over-arching Stationary Source Sector				
CCAP 55	Emissions Inventory and Registry - Create appropriate tools for effective inventory, reporting system, and registry of State emissions.	EPA mandatory GHG reporting program is now in place. 2010 data should be available in mid-2011. DEP has historically collected data on Title V sources only. Federal rule to have slightly broader impact.	DEP/EPA	0.00
EPA	PSD and Title V Tailoring Rule	Rule proposes to raise the significance level for PSD and Title V sources to 25,000 tpy CO2e (sum of 6 GHG gases). Anticipate final rule in April/May 2010.	Federal (EPA)	
EPA	Greenhouse Gas Permitting Guidance Comment Requested for Reconsideration	BACT Guidance for state permitting authorities to standardize/streamline BACT determinations for GHG pollutants. Anticipate 75,000 TPY threshold.	Federal (EPA)	
EPA	Mandatory Reporting of Greenhouse Gases - Final Rule	Requires reporting of greenhouse gas (GHG) emissions from most sectors of the economy. Provides accurate and timely data to inform future climate change policies and programs. Does not require control of GHG.	Federal (EPA)	
EPA	Waste Energy Recovery Registry	Contains provisions designed to improve energy efficiency by promoting CHP, waste energy recovery, and district energy systems. Under EPCA Sections 371-374, EPA must: Develop an ongoing survey of all major domestic industrial and large commercial combustion sources, locations and review each source for the quantity and quality of waste energy produced; publish a rule that establishes the criteria by which sites that have financial paybacks of 5 years or less, will be listed in a Registry of Potential Recoverable Waste Energy Projects (the Registry).	Federal (EPA)	
EPA	Greenhouse Gas Endangerment - Final Rule	On December 7, 2009, the Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act: Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases: CO2, CH4, N2O, HFCs, PFCs, and SF6 in the atmosphere threaten the public health and welfare of current and future generations. Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare. These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and DOT's NHSTA on September 15, 2009	Federal (EPA)	
EPA	Proposed federal economy-wide cap & trade legislation (Waxman-Markey and Kerry-Boxer bills)	The Clean Energy Jobs and American Power Act (S.1733, "Kerry-Boxer") creates programs to reduce GHG emissions economy-wide. Additional stationary source sectors as well as the transportation and residential sectors. Bill promotes nuclear power and carbon capture and storage technologies. It establishes grant and technical assistance programs for state recycling and renewable energy projects, as well as economic development. It creates a nationwide cap-and-trade program on GHGs, as well as a variety of transition and adaptation programs. The bill does not include a renewable electricity standard, transmission planning, or other energy provisions contained in S.1462, the American Clean Energy Leadership Act, reported by the Senate Energy and Natural Resources Committee in July 2009.	Federal	
Residential Commercial and Industrial (RCI) Sector				
CCAP 10	Appliance Standards - Set efficiency standards for 8 appliances that are commercially available and do not require federal waiver for state regulation.	Regulations have been approved. Regulation currently (2/10) covers four products: bottle type water dispensers, commercial hot food holding cabinets, hot tubs, and swimming pool pumps. Products for which standards were established but were pre-empted by federal standards are: Commercial Refrigerator/Freezers, established 7/1/08 and pre-empted 1/1/10; Large packaged AC > 20 tons established 7/1/09 and pre-empted 1/1/10; Low voltage dry-type transformers established 7/1/06 and pre-empted 1/1/07; unit heaters established 7/1/06 and pre-empted 8/1/08; single voltage external power supplies established 1/1/08 and pre-empted 7/1/08. In all cases, federal pre-emption efficiency levels were equal to or greater than the state pre-emption levels. OPM has established a compliance website to address those products that have not been pre-empted by federal standards.	DPUC, OPM	0.205
CCAP 11	Appliance Swapping Program (from 2008)- Develop "pay as you save" program to replace old residential appliances with Energy Star clothes washers, room air conditioner, refrigerators, dishwashers.	DPUC did a program with the electric distribution companies 3 years ago to encourage drop off and recycling program for old air conditioners and refrigerators. Air conditioner turn-in program in 2008 saved 145,497 annual kWh (1.014,547 lifetime), 78 tons CO2 emissions and provided an annual savings of \$26,589. The program was discontinued in 2009 and there are no plans to offer it again in 2010. See details on other appliance/equipment rebates below.	DPUC	0.020

Source of Strategy	Action / Strategy	Implementation Status	Lead Agency	2020 Projected MMTCO2 Reductions from 2005 CCAP
CCAP 11a / C4	Rebates for appliances.	<p>ARRA Rebates for appliances. In January 2010, the CT Recovery Appliance Rebate Program was initiated for Connecticut residents purchasing new appliances and heating/cooling systems. These rebates are funded by the American Recovery and Reinvestment Act of 2009. Appliance rebates are \$100 for clothes washers, \$50 for refrigerators, \$50 for freezers and \$50 for room air conditioners. For residents who participate in the CEEF's Home Energy Solutions program, the CT Recovery Appliance Rebate program rebates can be used in conjunction with the Home Energy Solutions rebates. Rebates are available at: www.ct.gov/opm/ApplianceRebates.</p> <p>CEEF Home Energy Solutions Appliance Rebates. 2009 and 2010 Participants in the CEEF's Home Energy Solutions program are eligible for a number of appliance rebates. These rebates are only for HES participants. Rebates are for dehumidifiers (\$25), refrigerators (\$50), freezers (\$25) and washing machines (\$50). In addition, a \$0.50 per square foot rebate is given to homeowners who need to replace their insulation with cap of 50% of installed cost). Please see CCAP 17c for Home Energy Solutions program energy savings and CO2 emissions reductions.</p>	OPM Administered by CL&P and UI CEEF (CL&P, UI, CNG, SCG, Yankee Gas)	
CCAP 11b / C4	Rebates for HVAC, water heaters, heat pumps and ground source heat pumps.	<p>2010 CEEF rebates are as follows: HVAC: \$500 for ENERGY STAR-rated central air, heat pumps (including ductless heat pumps), and \$1,000 for qualifying ductless heat pumps for homes who heat with electricity. Natural Gas Water Heaters: \$300 for ENERGY STAR tankless or ENERGY STAR boilers with indirect hot water. Ground Source Heat Pumps: \$500 per ton for VIP Commissioned systems with a cap of \$1,500.</p> <p>In 2009, 838 natural gas hot water rebates were submitted resulting in 79,300 annual ccf savings, 1,982,538 lifetime ccf savings, and 478 CO2 emissions reduced. More than 4,551 HVAC (including geothermal heat pump) rebates were submitted in 2009. Their savings and resulting CO2 emissions reductions are detailed in CCAP 17c.</p>	CEEF (CL&P, UI, CNG, SCG, Yankee Gas)	
CCAP 12	Heat Pump Water Heater Replacement Program - Develop "pay as you save" program for WatterSaver	CL&P ceased its Heat Pump Water Heater Replacement program in 2003. This program did not materialize due to commercialization issues. Currently have Heat Pump Air Source HVAC Rebate program. UI pilot of approximately 12 customers to gather technical/performance info on stand alone HPWH to be used in conjunction with UI's off-peak water heaters. Beginning to pilot some integrated HPWH units through CLM fund. Product availability in near term will be limiting factor for even the operation of a pilot.	DPUC	0.013
CCAP 13a / C4	Bulk Purchasing of Appliances - CEEF HES Program.	CEEF does not do bulk purchasing of appliances for either its Home Energy Solution or Limited-Income Programs.	CEEF (CL&P, UI)	0.046
CCAP 13b / C4	Bulk Purchasing of Appliances - CEEF limited-income program.	CEEF does not do bulk purchasing of appliances for either its Home Energy Solution or Limited-Income Programs. The CEEF's limited-income program does replace inefficient refrigerators for free in qualifying homes only based on efficiency of old unit.	CEEF (CL&P, UI)	
CCAP 14	Mandate Upgrades to Residential and Commercial Building Energy Code - Adopt updates of residential and commercial energy codes within 18 months of availability of International Energy Conservation Code.	Ongoing-State building code revised within 18 months of the release of IECC and/or ASHRAE 90.1 updates.	DPS, OPM	0.212
CCAP 15	Promote Energy Efficient and Energy Improvement Mortgages - Increase awareness of financial products to encourage purchase of energy efficient homes.	<p>No action - insufficient staff resources. The Connecticut Housing Investment Fund currently offers low-interest loans to single and multi-family homes making energy conservation improvements.</p> <p>In 2009 and 2010, the Energy Conservation Management Board who oversees the CT Energy Efficiency Fund has a Residential Committee who is exploring alternative financing options for homeowners wanting to make energy-efficient improvements to their homes.</p>	OPM, CEEF	0.014
CCAP 16	Revise Energy Conservation Loan Program (ECL) - Improve current ECL run by DECD.	PA 07-242 extended interest rate reduction to 6/2008 and increased maximum loan amount. Data for the two years 2008 and 2009 suggests that 28% of the loans are for "non-efficiency" measures (22% for roofing and 6% for siding). The remaining # of loans are for Windows (25%), Furnaces/Boilers (43%), and Solar (4%). These percentage numbers are based on 359 loans in 2008 and 335 loans in 2009. No action has been initiated to improve the program due to lack of staff resources.	OPM, DECD	0.000
CCAP 17 / C4	Residential Weatherization programs- see various programs and savings detailed below.			
CCAP 17a / C4	Weatherization Program - State provide funding to double number of households served by Federal Weatherization Assistance Program.		DSS, OPM	0.006
CCAP 17b / C4	ARRA Weatherization program.	\$64.3 million has been added to this program as a part of the federal stimulus package.		
CCAP 17c / C4	CEEF Home Energy Solutions Weatherization program.	<p>The CEEF's Home Energy Solutions program is a whole-home solution that reduces energy consumption and costs. Technicians perform an energy assessment of the home and provide a variety of efficiency and weatherization services.</p> <p>2009 CEEF Home Energy Solutions program results: 16,342 customers served (includes HVAC rebates), annual kWh savings of 11,348,776, lifetime kWh savings of 134,133,221, annual ccf savings of 300,033, lifetime ccf savings of 5,831,132, annual oil gallons savings of 422,693, lifetime oil gallons savings of 8,653,764, and CO2 emissions reductions of 13,464 tons (annual).</p> <p>2008 CEEF Home Energy Solutions program results: 13,884 customers served, annual kWh savings of 12,698,378, lifetime kWh savings of 140,587,688, annual ccf savings of 362,624, lifetime ccf savings of 6,533,389, and CO2 emissions reductions of 8,996 tons (annual).</p>	CEEF (CL&P, UI, CNG, SCG, Yankee Gas)	

Source of Strategy	Action / Strategy	Implementation Status	Lead Agency	2020 Projected MMTCO2 Reductions from 2005 CCAP
CCAP 17d / C4	CEEF Limited-Income Program weatherization (WRAP and UI Helps).	The CEEF's limited-income programs (WRAP and UI Helps) provide valuable weatherization measures to help renters and homeowners reduce their energy bills. 2009 CEEF Limited-Income program results: 15,132 customers served, annual kWh savings of 15,256,224, lifetime kWh savings of 136,608,214, annual ccf savings of 739,476, lifetime ccf savings of 13,659,543, annual oil gallons savings of 500,532, lifetime oil gallons savings of 9,096,951, and CO2 emissions reductions of 19,571 tons (annual). 2008 CEEF Limited-Income program results: 11,213 customers served, annual kWh savings of 15,006,187, lifetime kWh savings of 135,686,907, annual ccf savings of 248,438, lifetime ccf savings of 3,464,191, and CO2 emissions reductions of 9,545 tons (annual).	CEEF (CL&P, UI, CNG, SCG, Yankee Gas)	
CCAP 18a / C4	CEEF Residential New Construction Program - Double participation in Energy Star Homes program.	The CEEF's Residential New Construction program provides financial incentives and technical assistance to make integrating efficient design and technologies feasible in residential construction projects. 2009 CEEF Residential New Construction program results: 550 customers served, annual kWh savings of 906,954, lifetime kWh savings of 13,539,88, annual ccf savings of 50,950, lifetime ccf savings of 1,019,008, and CO2 emissions reduced by 799 tons (annual). 2008 CEEF Residential New Construction program results: 938 customers served, annual kWh savings of 2,337,593, lifetime kWh savings of 32,537,621, and CO2 emissions reduced by 1,253 tons (annual).	DPUC CEEF (CL&P, UI, CNG, SCG, Yankee Gas)	0.044
CCAP 18b / C4	CEEF Residential New Construction Program - Zero Energy Challenge.	In 2009, the CEEF initiated Connecticut's first residential design and build competition for single- and multi-family homes--the CT Zero Energy Challenge. In addition to energy-efficiency measures, each home must incorporate clean, renewable energy technologies into the project's design. Zero net energy simply means that a home uses no more energy from the electrical grid over a given period than it produces on site. Eighteen home construction projects are competing in the 2009 CT Zero Energy Challenge that ends December 2010.	CEEF (CL&P, UI, CNG, SCG, Yankee Gas)	
CCAP 19	High Performance Schools and State-Funded Buildings - Mandate high performance energy requirements for schools and other state-funded projects	Green building regulations adopted 9/09 for new State buildings >\$5 million, renovations > \$2 million, new schools >\$5 million with >\$2 million in State funding, and school renovations > \$2 million with > \$2 million in State funding. CEEF's High Performance Schools Program provides education and incentives for renewable systems, feasibility studies and project certification. CEEF also provides incentives for energy efficiency measures.	OPM, CCEF, CEEF, ISE	0.058
CCAP 20	Program to encourage and incent high performing commercial/industrial private buildings - see programs and savings below.			
CCAP 20a / C4	High Performance Buildings: Privately-Funded Projects - Encourage high performance buildings in privately funded projects. (DOE Grant from 2005)	5 large buildings in SW CT (3 million square feet total) retrofitted under DOE grant. Results indicate a 7% average savings, equivalent to 4.2 million kWh annually. Utilities have initiated a retro commissioning program as a result. (see CCAP 20 b)	OPM	0.052
CCAP 20b / C4	CEEF Retro-Commissioning Program.	For building > 100,000 s.f with a direct digital control system, CEEF's Retro-Commissioning Program provides technical, engineering and implementation support to optimize the operation of facilities without installing capital equipment. (2009 savings data pending)		
CCAP 21	Shared Savings Program for Government Agencies - Allow state agencies to reinvest savings from energy efficiency cost savings.	Difficult to overcome budget barriers. Action changed to CCAP 21a - Energy Efficiency in Government Agencies. A new shared savings provision has been included in proposed in HB 5361 (2010).	OPM	0.198
CCAP 21a / C4	Energy Efficiency in Government Agencies - Provide incentives for energy efficiency projects by state agencies.	Energy Star benchmarking performed on over 115 State buildings representing 11 state agencies. \$5 million in stimulus funding to be spent targeting state buildings. \$5.9 million has been received by the State from Demand Response program participation, which is being reinvested in energy efficiency retrofits at the participating agencies.	OPM	
CCAP 22	Training of Building Operators - train building operators to use maintenance approaches that improve energy efficiency.	Building operator certification courses held, using DOE funds. As a result of strong support, stimulus funds were set aside to continue this series into 2012.	OPM	0.033
CCAP 23	Green Campus Initiative - Promote green campus initiative with all CT colleges, universities, private, and secondary schools.	Very little state-level direction, but many programs have engaged CT campuses, including: 11 CT colleges signed on to ACU Presidents' Climate Commitment (C neutral), ISE outreach, CCEF outreach in collaboration with Clean Water Fund, Clean Air-Cool Planet outreach, plus many strong CT campus climate programs (e.g., Yale, UConn, Conn College, ECSU).	DEP, ISE	0.190
CCAP 24	Energy Benchmarking and Tracking Program for Municipal Buildings-Promote energy measurement, tracking, benchmarking and strategic planning at municipal facilities, including public schools.	The CEEF's Clean Energy Communities and CEEF's eeCommunities program require municipalities to join the U.S. EPA's Community Energy Challenge. This challenge requires all participants to benchmark their town's buildings to compare their energy consumption with similar buildings across the United States. This benchmarking is done through the EPA's Portfolio Manager online software system. In August 2009, the EPA, CCEF, CEEF and ISE held two workshops in New Britain and Bridgeport to train municipalities and clean energy task forces on how to utilize the Portfolio Manager software system. In the spring and summer of 2010, more workshops will be held across the state to train the 42 (as of February 2010) municipalities who have signed up for the EPA Community Energy Challenge.	OPM, ISE, CCEF, CEEF (CL&P and UI)	0.190
CCAP 25	Pilot Fuel Switching Project - Perform pilot project for B20 biodiesel blend for heating at 2 State facilities.	One pilot performed at ECSU, but testing conditions were not optimal. RECOMMEND DROPPING THIS ACTION FROM THE LIST AND REPLACING IT WITH WORK ON LOW CARBON FUEL STANDARD.	DEP	< 0.001
CCAP 26a / C4	Remove Current Barriers to 3rd Party Load Management Techniques - Remove regulatory barriers that prohibit increased market diffusion of third-party load management for non-intrusive commercial loads.	As a result of both the '05 and '07 Energy Independence Act, several initiatives were undertaken to encourage the deployment of more demand/load management resources. In 2005-2007 nearly 300 grants were awarded to support the expansion of distributed generation in the state creating nearly 400 new megawatts for CT. The DG program is now completed. Also, the DPUC, in conjunction with the CCEF, has conducted three rounds of Project 150 request for proposals that have resulted to date in the approval of approximately 124 megawatts of new renewable generation. Unfortunately, some of the chosen projects are experiencing challenges in securing additional needed financing which will result in delays to their projected operating dates.	DPUC	0.033

Source of Strategy	Action / Strategy	Implementation Status	Lead Agency	2020 Projected MMTCO2 Reductions from 2005 CCAP
CCAP 26b / C4	Utility Load Response Programs.	Load management programs offered by the utilities are designed to reduce peak demand. Programs result in benefits including a reduction in Federally Mandated Congestion charges on electric bills, decrease in power plant and capital cost improvements, and improvement in transmission system reliability. When demand reduction is implemented, it reduces the necessity for electricity from less efficient, dirtier fossil fuel plants. In 2009 the ISO Demand Response Program, ISO-NE Demand Response Program (P.A. 05-01, Energy Independence Act) and ISO's Price Response Program collectively resulted in a demand reduction of 259,435 kW.	DPUC	
CCAP 26c / C4	Utility Emergency Generation and Distributed Generation (EGDG) programs.			
CCAP 27	State Procurement of Environmentally Preferable Services and Products - Increase preferences for products and service that decrease GHG emissions.	DAS continues to contract for Environmentally Preferable Products (EPP) whenever possible and encourages agencies to reuse rather than purchase supplies and materials. Continue to keep DAS EPP website up to date and hope to expand, showing recycled content separate from EPP. Working closely with DEP on larger scale projects.	DAS	0.000
CCAP 28	Review New England Demand Response Initiative Recommendations.	Working well. See American Council for an Energy-Efficient Economy (ACEEE) Sept. 2009 Report, that documents that CT's EE and DR Programs are one of the best in the country.	DPUC	0.000
CCAP 29	Promote Voluntary Programs and Actions.	There is significant CT participation in the following voluntary programs that reduce GHGs: CCEF Clean Energy Communities Program, CCEF's eeCommunities program, Cities for Climate Protection, EPA Green Power Partnership, voluntary LEED building certification (private and public buildings). State should engage in other useful partnership programs as noted under individual action items.	DEP, CCEF	0.000
CCAP 30	Encourage Clean Combined Heat and Power (CHP).	Class III Renewable Portfolio Standard includes CHP (effective 2007). Grants provided for CHP. Grants established through P.A. 05-01 legislation. 1/3 of the overall rate-payer subsidized grant money went to the installation of over 100 units of CHP throughout CT in schools, towns, hospitals and businesses. CCEF supporting fuel cells through ratepayer and ARRA funding.	DPUC, (DEP, CCEF)	1.414
CCAP 31	Restore Conservation and Load Management Fund - Restore and increase funding for CT Energy Efficiency Fund.	Until July 2008, CEEF programs operated on reduced funding due to the CEEF's continued obligation to cover securitization bonds related to the diversion of ratepayer conservation funds to the state's General Fund in 2004 to pay for deficit reductions. 2004: Transfer to State Fund was \$12 million (30% of CEEF budget). 2005: Transfer to State Fund (General Fund and Rate Reduction Bonds) was \$46,905,998 (37% of CEEF budget). 2006: Transfer to State Fund (General Fund and Rate Reduction Bonds) was 26.8% of CEEF budget. 2007: Transfer to State Fund (General Fund and Rate Reduction Bonds) was 21.0% of CEEF budget. 2008: Transfer to State Fund (General Fund and Rate Reduction Bonds) was 15.1% of CEEF budget. 2009: Transfer to State Fund was \$0 or 0% of the CEEF budget.	DPUC	0.606
CCAP 32	Oil Conservation Fund - Create and monitor a fund dedicated to implementation of oil efficiency measures.	Fuel Oil Conservation Board established 2007. Board created in early 2008. Received and spent \$2.5 million from budget surplus. Remaining authorized funds of \$7.5 M never allocated.	DPUC	1.890
CCAP 33	Natural Gas Conservation Fund programs - Create and monitor a fund dedicated to implementation of natural gas efficiency measures.	Please see CEEF Commercial & Industrial program write-ups below for energy savings and carbon emission reductions from projects that result in the conservation of natural gas. The CEEF currently has joint electric and natural gas energy-efficiency programs. 2009 CEEF commercial, industrial and municipal building programs served 3,163 customers resulting in annual kWh savings of 152 million, lifetime kWh savings of 2.0 billion, annual ccf (natural gas) savings of 1.1 million and lifetime ccf savings of 15.9 million. 2009 C&I programs resulted in reduced CO2 emissions of 89,158 tons (annual). These 2009 savings are broken out separately by CEEF C&I programs below	CEEF (CL&P, UI, CNG, SCG, Yankee Gas) & CMEEC	2.070
CCAP 33a / C4	Natural gas measures under CEEF's Energy Conscious Blueprint Program (including CoolChoice and MotorUp) for C&I sector new construction, major renovation and new equipment.	2009 CEEF Energy Conscious Blueprint program results: 728 businesses served, annual kWh savings of 35,541,908, lifetime kWh of 650,957,217, annual ccf savings of 333,427, lifetime ccf savings of 5,130,490, and CO2 emissions reduced by 23,448 tons (annual). 2008 CEEF Energy Conscious Blueprint program results: 983 businesses served, annual kWh savings of 64,241,087, lifetime kWh of 968,216,123, annual ccf savings of 194,729, lifetime ccf savings of 2,938,327, and CO2 emissions reduced by 35,621 tons (annual).	CEEF (CL&P, UI, CNG, SCG, Yankee Gas & CMEEC)	
CCAP 33b / C4	Natural gas measures under CEEF's Energy Opportunities Program (including CoolChoice, Motor Up and Express Lighting) for C&I sector retrofits.	2009 CEEF Energy Opportunities program results: 1,021 businesses served, annual kWh savings of 78,086,994, lifetime kWh savings of 965,325,610, annual ccf savings of 742,721, lifetime ccf savings of 10,677,234, and CO2 emissions reduced by 46,814 tons (annual). 2008 CEEF Energy Opportunities program results: 779 businesses served, annual kWh savings of 115,467,004, lifetime kWh savings of 1,500,066,430, annual ccf savings of 35,890, lifetime ccf savings of 443,214, and CO2 emissions reduced by 62,132 tons (annual).	CEEF (CL&P, UI, CNG, SCG, Yankee Gas & CMEEC)	
CCAP 33c / C4	Natural gas measures under CEEF's Small Business Energy Advantage Program retrofit opportunities for small businesses.	2009 CEEF Small Business Energy Advantage program results: 1,344 businesses served, annual kWh savings of 31,164,251, lifetime kWh savings of 363,297,382, and CO2 emissions reduced by 16,896 tons (annual). 2008 CEEF Small Business Energy Advantage program results: 1,999 businesses served, annual kWh savings of 46,734,459, lifetime kWh savings of 557,060,249, and CO2 emissions reduced by 25,060 tons (annual).	CEEF (CL&P, UI, CNG, SCG, Yankee Gas & CMEEC)	
CCAP 33d / C4	Natural gas measures under CEEF's Operations and Maintenance Services Program for C&I sector.	2009 CEEF Operations & Maintenance program results: 32 businesses served, annual kWh savings of 3,614,613, lifetime kWh savings of 32,279,903, annual ccf savings of 6,683, lifetime ccf savings of 66,830, and CO2 emissions reduced by 2,000 tons (annual). 2008 CEEF Operations & Maintenance program results: 65 businesses served, annual kWh savings of 9,264,937, lifetime kWh savings of 86,718,708, annual ccf savings of 1,377, lifetime ccf savings of 13,770, and CO2 emissions reduced	CEEF (CL&P, UI, CNG, SCG, Yankee Gas & CMEEC)	
CCAP 33e / C4	Natural gas measures under CEEF's Multi-Family program.		CEEF (CL&P, UI, CNG, SCG, Yankee Gas)	

Source of Strategy	Action / Strategy	Implementation Status	Lead Agency	2020 Projected MMTCO2 Reductions from 2005 CCAP
CCAP 53	Regional Cap and Trade Program - Work with other Northeastern states to develop a regional cap and trade program	Regional Greenhouse Gas Initiative (RGGI) caps carbon dioxide emissions from the region's large power plants and reduces emissions by 10% by 2018 (effective January 2009). Caps vs. emission levels will be reviewed in 2012. Minimum 90% of allowances to be sold or auctioned annually, resulting in additional funds for EE and RE.	DEP	2.260
2008 stakeholder	Expand RGGI to include smaller EGUs, other sectors		RGGI states	
DEP	Explore and develop smart grid technologies and utility infrastructure		DPUC	
DEP	Enhanced north-south transmission to support increased renewable generation in the northeast		ISO-NE states	
2008 stakeholder	Require RPS for municipal utilities; create parity in programs and opportunities		DPUC	
2008 stakeholder	Assess tidal energy (electricity generation) using submerged turbines		CCEF	
2008 stakeholder	Use storage systems to shift electric generation from peak to off-peak		TBD	
2008 stakeholder	Design rate structures that encourage less consumption		TBD	
2008 stakeholder	Create a base load CO2 performance standard that allows new power plants that only have emissions less than an equivalent gas combined cycle plant		TBD	
C4	Solar Hot Water Heater Program	CCEF launched solar hot water incentive program for commercial and residential customers with ARRA funds in 2009		
C4	Explore financing options to expand renewables	CCEF exploring financing options for renewables, including proposed legislation		
C4	Expand In-state Renewable Energy Generation Resources	DPUC, in conjunction with the CCEF, has conducted three rounds of Project 150 request for proposals that have resulted to date in the approval of approximately 124 megawatts of new renewable generation. This new generation will help satisfy RPS requirements. Unfortunately, some of the chosen projects are experiencing challenges in securing additional needed financing which will result in delays to their projected operating dates.	DPUC CCEF	
Transportation / Mobile Source Sector				
CCAP 1	LEV II - Adopt California Low Emission Vehicle II standards	LEV II standards effective with 2008 model year vehicles. LEV III envisioned for 2016+ model year vehicles.	DEP	0.470
CCAP 2	GHG Feebate Program - Develop system where purchasers of high GHG vehicles pay a fee and purchasers of low GHG vehicles receive a rebate	Goal changed. DEP Feebate report (1/06), noting tax structure obstacles. Action changed to Environmental Performance labels for cars - see CCAP 2a.	DEP	0.109
CCAP 2a	Environmental Performance Label	Environmental Performance labels with "global warming score" effective with 2009 model year vehicles. Rule adopted. Labels affixed to vehicles but outreach program suspended due to funding reprogramming.	DEP	
CCAP 3	Fleet Vehicle Incentives and Initiatives - Establish incentives/initiatives to encourage acquisition of low-GHG vehicles in public, private, and State fleets.	No vehicle purchases expected through FY 7/10, probably 7/11. State purchasing contracts include low GHG vehicles, towns use these contracts. State fleet includes 11.54% hybrid vehicles.	DAS	included in #4
CCAP 4	Tailpipe GHG Standards - Amend LEVII regulations to include GHG standards.	CT adopted LEV II GHG provisions (12/05, amended 8/09). EPA granted waiver to CA for tailpipe GHG standards (6/09). Program modifications this year to account for EPA/NHTSA national GHG standards 2012-16.	DEP	2.630
CCAP 5	Public Education Initiative on Low GHG Vehicles	See action CCAP 2a and CCAP 4 - Environmental Performance labels for vehicles in effect (see CCAP 2a). Public education campaign to be funded through fee on new car registration delayed due to budget crisis.	DEP	included in #4
CCAP 6	Hydrogen Infrastructure R&D Program - Support research on low GHG vehicle technology, such as fuel cells, assess how to facilitate development of alternative fuel infrastructure and refueling networks.	CT Hydrogen Fuel Cell Coalition is working to demonstrate and advance fuel cell and hydrogen technologies and fueling systems in CT. Preparing for the Hydrogen Economy: Transportation report (6/06).	CCEF, OPM	Reductions after 2020
CCAP 7a	Transit - double transit ridership by 2020.	Several transit improvements are being planned and programmed that include rail, a potential transportation intermodal center in New London, and Bicycle and Pedestrian concerns.	DOT	0.490
CCAP 7b	Smart Growth	Governor's Executive Order 15 expanded planning capability at OPM and created the Office of Responsible Growth. The Office of Responsible Growth is looking at land use, housing, and transportation policies and projects which would promote transit oriented development and thus reduce greenhouse gas emissions. Some progress has been made, however, significant advances will not be made prior to the completion of a legislative study due to be released around 4/1/10.	DOT, OPM	
CCAP 7c	VMT Reduction	The TelecommuteCT and NuRide programs continue to offer alternative ways to reduce vehicle miles traveled.	DOT	
CCAP 8	Multi-State Intermodal Freight Initiative - Develop infrastructure plan for alternatives to freight trucks, including enhanced freight rail and intermodal transfer (shift 5% of truck traffic by 2020).	CTDOT is participating in an on-going I-95 Corridor Coalition "Northeast Rail Operations Study" (NEROPs) to identify "chokepoints" along the rail corridor and the opportunity for enhanced use of rail to transport freight. A Memorandum of Agreement (MOA) was initiated, which would have provided for the transport of "feeder barges" between the Ports of New York and New Jersey. This service would have been a component of the NY/NJ Port Inland Distribution Network (a short sea shipping initiative). It was intended to help alleviate roadway congestion along the I-95 corridor, thus reducing greenhouse gases. Delays in acquiring landing rights in the Port of New York and New Jersey resulted in the expiration of the MOA before the initiative was realized.	DOT	0.140
CCAP 9	Clean Diesel & Black Carbon - Accelerate use of ultra-low sulfur diesel, engine improvements, tailpipe control technology.	National transition to ultra-low sulfur diesel (ULSD) is complete. Additional DERA funding going toward more retrofits.	DEP	2.400
EPA	EPA and NHTSA Propose National Program to Cut Greenhouse Gas Emissions and Improve Fuel Economy for Cars and Trucks	EPA Proposed Rule was published September 22, 2009; Comment period closed on November 23, 2009.	Federal (EPA)	
EPA	California Greenhouse Gas Waiver Request	EPA granted waiver to CA for tailpipe GHG standards (6/09).	Federal (EPA)	
EPA	Renewable Fuel Standard 2 (RFS)	EPA proposed rule was published May 26, 2009. Comment period closed on July 27, 2009.	Federal (EPA)	
2008 stakeholder	Consider congestion/value pricing, fuel efficiency/carbon tax, commercial/municipal parking fees, VMT tax, insurance rates tied to VMT/gas purchased, GHG tax on gasoline.			

Source of Strategy	Action / Strategy	Implementation Status	Lead Agency	2020 Projected MMTCO2 Reductions from 2005 CCAP
DEP	Implement idling reduction programs to reduce GHG from freight, transit, and passenger vehicles	DEP "Waste Busters: Idling Myths" educational DVD for passenger vehicles. Anti-Idling promotion for trucks rolled out in 2008. New Haven truck stop electrification project (2010).	DEP, DMV, CCIA, CT Motor Transport, DOT	
C4	Plug-In Hybrid Electric Vehicle (PHEV) initiatives	no commercially available PHEVs		
Rail & Rail Transit				
DEP	Rail (locomotives) – genset repower, idle reduction (APU, AESS, shore power), after treatment (DOC), hybrids	NESCAUM and DEP are using ARRA funds for locomotive genset conversions in CT	DEP, NESCAUM & NEDC	
2008 stakeholder	Improve parking access to rail service.	Strategy under review.	DOT	
Marine				
2008 stakeholder	Identify opportunities to reduce GHG from seaports and shipping operations.	Strategy under review.	NEDC, OTC strategy & 2008 CT Stakeholder process	
DEP	Drayage Truck Idle Reduction through TSEs, APUs or gate management strategies	ARRA funds to be used for 14 TSE units at Port of New Haven	DEP & NEDC	0.007
DEP	Marine – dry (cargo handling equipment) – engine repower & upgrade, after treatment (DOC, DPF), replacement	Project to repower and retrofit shipyard air compressor under development.	DEP, NESCAUM & 2008 CT Stakeholder process	
DEP	Marine – wet (ferries, tugs, work boats, excursion boats) – propulsion & auxiliary engine repower, idle reduction (shore power) and lightering	Multiple marine engine repowers being underway with DERA funds; additional DERA funds being sought by NESCAUM and CT port authorities.	DEP, NESCAUM, NEDC	0.016 (shore power)
Light Duty Vehicle				
DEP	Governor Rell's Electric Vehicle Infrastructure Task Force	Infrastructure strategies being developed.	Task force agencies and stakeholders.	
DEP	Clean Cities ARRA Grant for Plug-In Hybrid & CNG Infrastructure and CNG Conversion	Grant Awarded to Clean Cities of New Haven 2009; Implementation by Clean Cities in progress.	Clean Cities and DOE	
DEP	Next Gen Clean Cars: LEV 3 and Pavley 2 (2016+MY): Relate to Action #1 above)	CARB proposals being monitored for possible application in CT.	NESCAUM, CARB & DEP	
DEP	Plug in Hybrids	Strategy under review; infrastructure will be required.	EV Task Force	0.268
DEP	Cool Paints for Automobiles	CARB regulation: Public Hearing 6/25/09; 15-day notice 10/12/09. Strategy under review for CT.	CARB, DEP doc draft 11/14/2008	0.00000248
2008 stakeholder	Vehicle Speed Reduction:	Strategy under review.	DMV, State Police	
2008 stakeholder	65 mph	Strategy under review.	DMV, State Police	0.133
2008 stakeholder	60 mph	Strategy under review.	DMV, State Police	0.251
2008 stakeholder	55 mph	Strategy under review.	DMV, State Police	0.363
DEP	Catalyst Replacement: require replacement with new catalyst.	OTC standard under development. Strategy under review for CT.	DMV, DEP	
DEP	HFC Reduction in Mobile Sources:	Strategy under review.	DMV, DEP	
DEP	Professional Servicing of Mobile Source AC Systems or Refrigerant Cans with Self-Sealing Valves, Improved Instructions & Recycling	Strategy under review.	DMV, DEP	0.188
DEP	I&M: Leak Testing	CARB passed of this concept as a regulation in 2009. Strategy under review for CT.	DMV, DEP	
DEP	Replace with Low Global Warming Potential (GWP) Refrigerant	Strategy under review.	DMV, DEP	0.042
DEP	Replace with Low Global Warming Potential (GWP) Refrigerant	Strategy under review.	DMV, DEP	0.235
Heavy Duty Vehicles				
DEP	SmartWay for Trucks: Aerodynamics and Wide Tires.	Strategy under review.	DMV, DEP	0.276
DEP	Trucking (short & long haul trucks) – replacement, hybrids, idle reduction (APUs, auto-shutoff), aerodynamics, green warehousing.	Plan to provide assistance in purchasing APUs to reduce idling for short haul fleets is under development.	CCIA, CT Motor Transport, DEP, DMV	
DEP	Truck Stop Electrification (TSE) for idle reduction	Truck stop off I-95 in North Stonington contains 116 spaces to reduce idling, stop engine noise and reduce air pollution. ARRA funds to be used for 14 spaces at Port of New Haven; in progress.	CCIA, CT Motor Transport, DEP, DMV, DOT	0.095
DEP	Tire Inflation Strategy.	CARB regulation: Public Hearing 2/5/09; 15-day notice 10/23/09. Strategy under review for CT.	CARB, DEP doc draft 11/14/2008	0.019
DEP	Retrofit state and municipal fleets with emission controls to reduce particulate matter, which contributes to black carbon.	DOT dump trucks retrofitted with DOCs using DERA and DERA/ARRA funds, 139 complete; All DEP maintenance fleet trucks retrofitted with DOCs; Plan to fund municipal fleet retrofits under development.	DEP, DMV	
2008 stakeholder	Expand diesel retrofitting to include diesel particulate filters on all state construction projects.	Strategy under review.	DMV, DOT, DEP, CCIA, CT Motor Transport	
All On-road Vehicles				
DEP	Low Carbon Fuel Standard.	Evaluate the possibility of reducing the carbon intensity of fuels.	RGGI States, DOT, DPUC, CPC, ICPA, ENE, Clean Cities	
DEP	Transportation Conformity Initiative (reduce conformity budgets by x%).	Strategy under review.	OTC States, DOT, DEP	
Nonroad Engines & Sources				
DEP	In-Use Nonroad Diesel Equipment Anti-Idling Measure.	Strategy under review.	NEDC & OTC strategy	
DEP	Construction Equipment Retrofit: engine repower & upgrade, after treatment (DOC, DPF), replacement, idle reduction (auto shutdown).	ARRA funds to be used for construction retrofits on DOT highway projects; project underway.	NESCAUM, NEDC and DEP doc draft 11/14/2008	0.28
DEP	Lawn and Garden Equipment: funding and incentives for replacement.	Plan to assist in funding equipment replacement for municipalities is under development.	DEP	
Airports				

Source of Strategy	Action / Strategy	Implementation Status	Lead Agency	2020 Projected MMTCO2 Reductions from 2005 CCAP
DEP	Airports (ground support equipment, aircraft at the gate) – equipment replacement, idle reduction (gate electrification).	Strategy under review.	NESCAUM & NEDC	
Transit: On-road				
2008 stakeholder	Create express service from New London to New Haven.	Strategy under review.	DOT	
2008 stakeholder	Increase transit operating funds & improve quality of bus service.	Strategy under review.	DOT	
2008 stakeholder	Improve parking access to bus service.	Strategy under review.	DOT	
2008 stakeholder	Develop a program to promote/increase school bus ridership (decrease VMTs from parents).	Strategy under review.	DOT	
Other Sectors				
Planning & Coordination				
CCAP 44	Voluntary Carbon Offset Program - Encourage voluntary carbon offsets from agriculture, forestry, and waste reductions	There are a number of voluntary carbon offset programs available to Connecticut residents and businesses.	DEP	0.000
2008 stakeholder	Incorporate carbon emissions and life cycle GHG impacts into state, regional, and local growth management and transportation planning processes (e.g., NEPA/CEPA).	Strategy under review.	OPM, DEP, DOT, RPAs	
2008 stakeholder	Ensure better coordination of GSC and other agencies on climate change at Commissioner level and build other organizations into climate change implementation structure		GSC	
2008 stakeholder	Develop tax and other incentives for efficient vehicles (vehicle dealers, commercial & town fleets).	There is a currently sales tax exemption for purchases or leases of high miles per gallon (mpg) passenger motor vehicles in effective for purchases or leases occurring on or after January 1, 2008, and on or before June 30, 2010.	TBD	
2008 stakeholder	Develop alternative fuel infrastructure investment (hydrogen & electric plug-ins).		EV Task Force	
2008 stakeholder	Evaluate telecommuting, alternative worksites & schedules to reduce state employee VMT (Show state leading by example)		DOT, DAS	
Recycling and Waste Management Sector				
CCAP 35	Install Centralized Manure Digesters (1 by 2010, 2 by 2015, 3 by 2020)	Landfill Methane Capture and Destruction is an eligible off-set category under CT's RGGI program. Clearview Dairy Farm has a contract under CCEF's Project 150 and scheduled to come on-line between 2010 & 2015 barring financial problems for project.	CCEF	0.052
CCAP 42	Support Economically Viable Landfill Gas-to-Energy Projects	Very limited viable landfills in state.	CCEF	0.452
CCAP 43	Increase Recycling, Source Reduction to 40%	CT Solid Waste Management Plan (12/2006) established 58% disposal diversion rate by 2024. The current state source reduction/recycling rate is approximately 26%. RECOMMEND REVISING THIS TO MATCH CURRENT 58% STATE GOAL.	DEP	0.970
2008 stakeholder	Provide state agency staff and resources to increase statewide recycling rate.			
DEP	Landfill Gas Capture	Opportunities still available? Update status from previous state-wide efforts.	TBD	0.089
High GWP Emissions (Refrigerants) Sector				
DEP	Additional Refrigerant Based Strategies:		DPUC, DEP, ECMB	
DEP	Residential Refrigeration		DPUC, DEP, ECMB	1.194
DEP	High GWP Tracking, Reporting, & Deposit Program		TBD	---
DEP	Decommissioned Shipping Containers		TBD	0.016
DEP	Residential Refrigeration Program – Reduce high GWP GHG emissions from domestic refrigerators, freezers, and ACs at end-of-life (EOL).		DPUC, DEP, ECMB	0.009
DEP	Specification for Commercial Refrigeration		DPUC, DEP, ECMB	0.450 - 0.638
DEP	Leak Detection Program for Commercial Refrigeration		RGGI states collaboration / DPUC/ECMB	
Land Use Sector				
EPA	Geologic Sequestration of Carbon Dioxide		Federal (EPA)	
DEP	Reinvigorate a land ethic for the next generation, including public support for maintaining forest and agriculture lands and acknowledging the benefits of public and private forest and agriculture lands.		CT DEP Forestry	
2008 stakeholder	Expand and enhance training and education on green building construction standards		TBD	
2008 stakeholder	Promote greater use of clean energy technologies through a broad array of incentives and expand renewable installation infrastructure		CCEF	
2008 stakeholder	Develop Carbon neutral requirements for state funded buildings, then buildings codes.		TBD	
Agriculture & Forestry				
CCAP 36	Reduce Non-Farm Fertilizer Use (by 7.5% by 2010 and 15% by 2020).	Organic land care standards, training, and certification program (NOFA). DEP organic landcare DVD for towns, pilot projects in some towns.	DEP, DOAG	0.006
CCAP 37	Buy Local Produce - Increase amount of food consumed by CT residents from locally grown sources by 10% in 2010 and 2020.	Numerous programs have developed/grown to promote local foods: CT Grown, Farm to School, Farm to Chef, farmers markets, Farm link, Agriculture grants, CT Seafood Council, CT Farm Wine Development Council, etc.	DOAG, DEP	0.003

Source of Strategy	Action / Strategy	Implementation Status	Lead Agency	2020 Projected MMTCO2 Reductions from 2005 CCAP
CCAP 38	Forest Management and Forest Carbon Offsets - Foster a research program on CT public and private forest management to maximize carbon sequestration and develop markets for offsets.	There is no specific CT research program on carbon sequestration and offset markets. However, DEP has numerous assistance and outreach programs on forest management, maintaining healthy forests. Sequestration of Carbon due to Afforestation is an eligible off-set category under CT's RGGI program.	DEP	0.000
CCAP 39	Urban Tree Planting Program - Plant 15,000 more sufficiently sized urban trees in 2010 and an additional 20,000 by 2020.	This goal is reasonable, but it is difficult to verify number of trees planted statewide and to determine how much of this results in a net increase (rather than tree replacements). CT towns have begun to set targets for tree planting. More tools available to determine urban tree canopy cover.	DEP	0.0019
CCAP 40	Forest and Agricultural Land Preservation - Preserve existing forest and agricultural land.	Various programs support forest and agricultural land preservation: Forest Legacy, PA 490 tax incentives (passed in 1963, codified in §12-107a - 107f of the CGS), Farmland Protection Program, land acquisition, land trusts, etc. 2009 New England Governors' Land Conservation resolution establishes Keep Forests as Forests and Keep Farmlands in Farming initiatives.	DEP, DOAG	0.283
2008 stakeholder	Create opportunities for farmers to receive carbon credits for C sequestration (e.g., reduce synthetic fertilizer use, organic methods, low till planting, farm and forest maintenance practices, increasing forestation on under producing lands)		TBD	
2008 stakeholder	Reevaluate CT biofuel policies and goals, considering lifecycle GHG impacts and impacts on agriculture and food production		TBD	
2008 stakeholder	Review and reduce barriers, where appropriate, to farmers from regulations (e.g., DEP permitting for on-farm composting, regional composting, regulations to allow other businesses such as gravel, wood burning furnaces for heating greenhouses, wind turbine siting)		TBD	
2008 stakeholder	Review and reduce barriers, where appropriate, to locally grown foods (e.g., lack of USDA certified slaughterhouses, land preservation, urban markets, ethnic crops)		TBD	
2008 stakeholder	Assist farmers with waste disposal issues, e.g., plastic pots and sheeting from greenhouses.		TBD	
Education				
CCAP 41	Promote Use of Durable Wood Products Over Other Construction Materials - voluntary education campaign	DAS contracts contain durable wood construction materials as well as durable wood furniture. The following options are preferable to promoting the purchase of new wood furniture: state surplus, a used/refurbished furniture contract, availability of new product with recycled metal/plastic content.	DAS	0.000
CCAP 54	Public Education Initiative - Promote awareness and education of CT citizens about the solutions and impacts of global warming.	Accomplishments include: state climate change website - www.ctclimatechange.com, establishment of annual competition for middle/high school students - Keep CT Cool, establishment of CT Science Center Collaborative, ongoing Climate Change Education Committee, newly formed CT Partnership for Sustainability in Education, development of numerous climate/energy education curricula and resources - ctenergyeducation.com, Clean Energy Climate Solutions., CT Science Center Energy City Gallery, etc. eesmarts eesmarts is an energy efficiency and clean, renewable learning initiative funded by the CT Energy Efficiency Fund. The eesmarts program offers professional development workshops through a partnership with Wesleyan University's Project to Increase Mastery of Mathematics and Science for Grade PreK-9 teachers for all educators throughout the state and offers an annual essay contest on energy and climate change each spring for Grades 3-8 students. More recently, eesmarts has worked closely with the CT Technical High School System to train its electrician (for 4 years) and science teachers regarding energy consumption and its inextricable link to climate change. eesmarts lessons and workshops are fully aligned with the CT Mastery Test, CT State Science Framework and the National Science Standards. In 2008 and 2009, the eesmarts program trained 382 and 418 educators, respectively.	DEP	0.00
2008 stakeholder	Require the incorporation of conservation, energy efficiency, clean energy, and climate change into school curriculum at every level, ensure all educational efforts are aligned with CT Dept of Education.		TBD	
2008 stakeholder	Set up mentor relationships for businesses, peer to peer on all levels, and bring companies together to share successes and challenges.		TBD	
2008 stakeholder	Educate the public on climate benefits of driving the speed limit and anti-idling		TBD	

Source of Strategy	Action / Strategy	Implementation Status	Lead Agency	2020 Projected MMTCO2 Reductions from 2005 CCAP
2008 stakeholder	Develop public education to promote car sharing, zip cars and mass transit usage, information on real cost of commuting alone, better bus/rail connections.		TBD	
2008 stakeholder	Explore public education and outreach activities regarding plug-in hybrid electric vehicles		TBD	
	GLOBAL WARMING SOLUTIONS ACT	Implementation Status	Lead Agency	
GWSA	Charge \$5 fee on registration of each new motor vehicle - "GHG reduction fee." Authorizes use of 60% of funding for air pollution and GHG reductions.	Funds reprogrammed by PA 09-02.	DMV, DEP	
GWSA	Publish GHG inventory	Inventory and baseline drafted, with assistance from NESCAUM. Draft GHG inventory available Nov 2009.	DEP	
GWSA	Publish summary of GHG reduction strategies on DEP website	Work ongoing.	DEP	
GWSA	Establish Adaptation Subcommittee.	Subcommittee established and has been meeting regularly. Workgroups established to draft climate impacts report and to recommend adaptation strategies in a second report.	GSC, DEP	
GWSA	Submit report to GSC on projected impacts of climate change on infrastructure, natural resources and ecological habitats, public health, agriculture.	Adaptation Subcommittees drafted reports on impacts on infrastructure, natural resources and ecological habitats, public health, agriculture. Final impacts report to be available March 2010.	GSC Adaptation Subcommittee, DEP	
GWSA	Submit report on recommendations on adapting to climate change impacts and mitigate such impacts	Adaptation Subcommittee workgroups will focus on this 1st and 2nd quarter of 2010.	Adaptation Subcommittee report to GSC and GA	
GWSA	Submit report on energy savings for state agencies, policies and regulations to reduce GHGs.	Report to be drafted by C4. Final report to be available March 2010.	GSC agencies to submit report to OPM and DEP	
GWSA	Publish results of GHG modeling scenarios. Include evaluation of potential economic and environmental benefits and opportunities for economic growth based on scenarios.	Developing strategies. Assessment of need for modeling depends on federal legislative and regulatory action.	DEP	
GWSA	Recommend GHG reduction strategies	See above.	DEP	
GWSA	Report quantifiable GHG reductions and schedule of regulations to meet GHG limits	See above.	DEP in consultation with OPM and GSC	
GWSA	Develop schedule of recommended regulatory actions and policies to show progress on achieving GHG limits	See above.	DEP	
GWSA	Report on differences between federal and state cap and trade programs	DEP is tracking and providing input on proposed federal legislation and regulations.	DEP, OPM	
GWSA	Reduce GHGs to 10% below 1990 levels	Progress on meeting this goal depends on progress on implementing all actions in this table and other efforts.		
GWSA	Reduce GHGs to 80% below 2001 levels	Progress on meeting this goal depends on progress on meeting 2020 target and developing additional measures.		
GWSA	Adopt regulations to implement RGGI	Adopted July 23, 2008. RGGI effective January 2009.	DEP	
GWSA	Auction emissions allowances and invest proceeds in energy conservation, load management, and Class I renewable energy programs	First auction held September 2008. Auctions are being held quarterly. 6 auctions have been held so far. Total 2009 auction proceeds for CT projected to be \$27 million, with \$20.5 million allocated to CEEF and \$6.6 million allocated to CCEF.	DEP, DPUC	
GWSA	Monitor development of low carbon fuel standards in other states	CT is participating in regional Low Carbon Fuel Standard workgroup with Northeast and Mid-Atlantic states. Plan is to sign MOU by 12/31/09.	DEP	
GWSA	Investigate GHG reducing improvements to state transportation system	CT DOT participating in quarterly discussions with transportation commissioners from New England.	DOT	
GWSA	May work with interested states and Canadian provinces to develop and implement market-based compliance mechanisms to achieve GHG limits	RGGI is holding ongoing discussion directed at leveraging regional cooperation to secure further GHG reductions from other sectors.	DEP	