Memorandum

MIAMI-DADE COUNTY

Date: July 13, 2010

BPS
Agenda Item No. 7A

To: Honorable Chairman Dennis Moss and Members,
Board of County Commissioners

From: George M. Burgess
County Manager

Subject: Update Report from the Climate Change Advisory Task Force for June 2010

Pursuant to Ordinance 06-113, the Climate Change Advisory Task Force is required to provide quarterly reports to the Committee designated by the Board, in this case the Budget, Planning, and Sustainability Committee.

Attached please find the quarterly report submitted by Harvey Ruvin, Chair of the Climate Change Advisory Task Force, for your review.

Assistant County Manager

Update Report from the Climate Change Advisory Task Force
June 10, 2010

Pursuant to Ordinance 06-113, I am pleased to submit this update report of the Climate Change Advisory Task Force (CCATF) to the Chair and Members of the Budget, Planning & Sustainability Committee. As you are aware, the CCATF is charged with identifying potential future climate change impacts to Miami-Dade County and then providing recommendations to the Board of County Commissioners regarding actions that should be taken to begin adapting for and mitigating these impacts.

In order to effectively address the overlapping issues important in this mitigation and adaptation planning process, six (6) committees and a Steering Committee were formed in 2007. The committees include the following: The Science Committee, chaired by Dr. Hal Wanless; The Greenhouse Gas (GHG) Reduction Committee, chaired by Mr. Richard Pettigrew; The Built Environment Adaptation Committee, chaired by Ms. Elizabeth Plater-Zyberk; The Natural Systems Adaptation Committee, chaired by Mr. Dan Kimball; the Economic, Social, & Health Committee, chaired by Captain Dan Kipnis; and The Intergovernmental Affairs Committee, chaired by Ms. Carolyn Dekle. The GHG Committee meets as two subcommittees: Transportation and Alternate Fuels chaired by Jose K. Fuentes, and Buildings and Energy chaired by Jane Gilbert.

A quorum of CCATF members met twice in 2010. In January, members unanimously reelected me as CCATF Chair and Mr. James Murley as Vice-Chair. Jim and I are greatly appreciative of the CCATF members for their support and service to Miami-Dade County. At that meeting the members also reviewed and approved recommendations formulated in Committee during 2009. The twenty-two (22) supplemental recommendations were submitted to the BCC in the form of an annual report. The report was unanimously accepted by the BCC on April 6, 2010. A full listing of the CCATF recommendations and their status is attached in table format for your review.

The full Task Force met again on April 26th to hear a presentation from the Greenprint planning team. The Greenprint Team, led by Office of Sustainability (OOS) Director, Susy Torriente, shared the progress of the planning efforts; reviewed the draft strategies, goals and initiatives; reviewed how and where CCATF recommendations and concepts fit within the plan; and obtained feedback and input for the plan from the CCATF members. We were advised that the Greenprint Plan should be ready for the Board of County Commissioners this fall.

Also, OOS and the County Attorney's Office are assisting me in reviewing and prioritizing CCATF recommendations that require Board of County Commission approval through appropriate ordinances and/or resolutions. OOS is facilitating the implementation of recommendations that are administrative in nature and can be folded into county operations without specific legislation.

As I highlighted and recommended to you in my cover letter in the April 2010 Annual Report, Green Jobs initiatives for Miami-Dade County and our Climate Compact region deserve your careful review and follow-though. As proposed in draft form, the County's Greenprint includes a Goal for a Vibrant Economy with a strategy for a Green Jobs local action plan to supplement the County's Green Job Pledge, R-747-09, sponsored by Commissioner Sorenson. I have met with County staff and local labor representatives to discuss some options for partnerships. These discussions made very clear just how important a local action plan and Green Jobs Task Force will be to moving forward quickly to take

advantage of and to leverage the stimulus funds available to local governments and NGOs and the tax incentives available to businesses and home owners.

DERM and OOS continue to provide significant administrative assistance and tactical support to the CCATF. I would like to recognize and thank DERM Director, Carlos Espinosa, and OOS Director, Susy Torriente, and their respective staff for our continued success. I also thank the Government Information Center for their help in creating the new CCATF Web pages, where we can now post our meetings and reports. The link is: http://www.miamidade.gov/derm/climatechange/taskforce.asp.

Our various Committees continue to meet on a regular basis to formulate new recommendations and summary papers. A brief summary presented by each Committee Chair at our April 7, 2010 Steering Committee meeting is attached.

Harvey Ruvin, Chair

Summary Reports from CCATF Committee Chairs from the April 2010 Steering Committee

Natural Systems and Adaptation (NSA) Committee

Though the NSA Committee has not been meeting, Chair Kimball has been working with OOS and DERM to advance the CCATF recommendation for a vital signs monitoring workshop focusing on the south part of the County. Mr. Kimball is in receipt of a letter to Everglades National Park from DERM requesting that ENP take part in a collaborative effort that will include DERM, WASD, USGS, SFWMD, and Biscayne National Park. The NPS is already working closely with USGS on sea level rise/salt intrusion models that include CERP and NON-CERP scenarios.

The NPS is also working with Sunshine Communications on how to get the word to the pubic on exotics control. Depending on the outcome, it may be possible for the NPS to offer the County free billboard advertising for Greenprint.

Greenhouse Gas (GHG) Reduction Committees

Mr. Pettigrew reports that Ms. Gilbert had done a great job with successful recommendations for GHG for the built environment and that he would like her to continue her Committee work to address expanding solar recommendations, especially for WASD. Mr. Jose Fuentes has been holding meetings to educate his subcommittee on transportation and alternate fuels, most recently on electric cars. So far, the Sub-Committee has not been ready to make recommendations.

Built Environment Adaptation (BEA) Committee/Economic, Social and Health Adaptation (ESH) Committee Collaborative

Ms. Elizabeth Plater-Zyberk and Captain Dan Kipnis have combined their respective Committees in order to work on adaptive scenario planning that takes into consideration the ESH impacts on the built environment. The group began considering the geographic implications of sea level rise to major infrastructure and neighborhoods. Most significantly, unlike most socio-economic problems, except for along the Miami River, lower income neighborhoods are located on high ground (Miami, Opa Locka, Perrine, Goulds) and so may be more immune to the financial burden of adaptation. Brickell, Downtown Miami, and other high value properties closest to the coast are most vulnerable, but also more able to afford adaptation. Additionally, major rail lines and highways are on high ground.

The group then considered the County's economy with a presentation from Dr. Robert Cruz, the County's Chief Economist. His report that tourism, rockmining, and agriculture are a relatively small piece of the County's job numbers and economic pie greatly changed the perception of the group on just what generates jobs in Miami-Dade. The transportation, financial, and land lease sectors are by far the greatest job and revenue generators, particularly white collar jobs. This makes the Port of Miami and MIA very important for adaptation measures.

Captain Kipnis has been very encouraged by the amount of participation in the Collaborative. Considering what the group has learned in the last few months from presenters, he feels that the group is now ready to actively formulate scenarios and recommendations. Captain Kipnis has also suggested that the mission statement for his committee needs to be updated to reflect that the County has embraced sea level rise as a given.

Science Committee

Dr. Hal Wanless and Committee have completed a revised draft of the Committee's Statement on Sea Level Rise in the Coming Century, which was attached to the CCATF's Second Report and Initial Recommendations in 2008. The report includes newly published data indicating that the Science Committee's original Statement on Sea Level Rise is now more middle of the road than extreme. Dr. David Enfield, previously of NOAA and now with the University of Miami, prepared a statement on hurricane predictions and how hurricanes might affect local weather in the coming century. The statement was unanimously accepted by the Committee in an April 2010 meeting. Dr. Wanless will present both papers to CCATF as soon as they are signed by the Committee members as well as any recommendations that result from the conclusions accepted in the papers.

Intergovernmental Affairs Committee

Ms. Carolyn Dekle reports she wants the IGA Committee to consider the recommendations from the statewide Hurricane Evacuation Study being published in June. She thinks the report will provide a shorter term perspective, especially on interior flooding. New surge data show much more western flooding that was historically expected. This changes assumptions on critical facilities. Ms. Dekle also reported that the SFRPC is nearing completion on a grant application to HUD with the 7 southern counties for adaptation planning. Finally, Ms. Dekle indicated that land use is continuing to be a big IGA issue because Broward County is attempting to annex the Palm Beach wedge. She emphasized those issues like this make regional connectivity issues very critical in planning.

CLIMATE CHANGE ADVISORY TASK FORCE ANNUAL
SUMMARY AND STATUS OF RECOMMENDATIONS JUNE 2010

Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
	Science Recommendations		
A1	The County should use the Science Committee's Statement on Sea Level in the Coming Century to guide future climate change mitigation and adaptation policy.	The CCATF Committees have considered the Science statement in their deliberations since 2007. The Statement has become accepted as mainstream and is cited in many reports and meetings outside of the CCATF. The County will now partner through the regional Climate Compact for a collaborative regional climate statement.	A2
A2	The County should commission detailed maps for all of Miami-Dade County created from calibrated LIDAR (Light Detection and Ranging) surveys (or other elevation survey technology that employs best known practices). The maps will allow identification of which areas will become flooded in association with different sea levels.	In 2008 and 2009, the Department of Environmental Resources Management (DERM) drafted and then updated a Digital Elevation Model (DEM) using three 2003 LiDAR data sources: CSOP-USACOE, IHRC-FIU, and Woolpert-ETSD. These were the most up to date and accurate LiDAR sources available at the time. The County is partnering with the U.S. Geological Survey (USGS) to develop a modeling program for surface and groundwater flows. This will help the County in its climate change adaptation planning process. OOS and NOAA have partnered in 2010 to assist a regional approach to mapping by the South Florida Counties' Climate Compact.	A1
	GHG Recommendations		
B1	Ordinances related to the award/allocation of taxicab medallions include a requirement for all new medallions issued after January 1, 2008 to be allocated to hybrid or other vehicles having a combined average fuel efficiency of 28 MPG or higher	Commissioner Barreiro sponsored Ordinance in July '08 to phase in more fuel efficient vehicles as part of the annual replacement schedule. Following several meetings and taxicab workshops, this item was deferred in November '08 and has not yet been advanced.	B2, B4
B2	Require that taxicabs being retired be replaced with new hybrid or other vehicles having a combined average fuel efficiency of 28 MPG or higher. Implementation of this recommendation is expected to affect 300 owners each year. The County should develop a financing mechanism to either subsidize the initial purchases or provide a revolving loan fund to assist owners to purchase new hybrids on reasonable terms and at reasonable interest rates.	The County has investigated a revolving fund, but has not finalized an action.	B4

CLIMATE CHANGE ADVISORY TASK FORCE ANNUAL
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	GHG Recommendations		
B3	It is recommended that Miami-Dade County regularly evaluate greenhouse gas emission reductions and the net environmental benefit of each fuel and vehicle under consideration for purchase and use in internal operations in order to ensure the use of the most efficient vehicles and sustainably-sourced alternative fuels, including those that are locally produced, and adjust investment accordingly. Net environmental benefit shall be determined.	No action has been taken. The recommendation may require a County Commission action. The Department of Solid Waste Management has purchased 6 hybrid garbage trucks. Smaller departments may find the implementation more difficult.	B4
B4	Procurement Management Department should take necessary steps to improve pricing and access to sustainably-sourced alternative fuels and high efficiency vehicles for County operations. This would include forming a joint committee or committees to pursue collective purchasing opportunities and to evaluate the costs and benefits of collective bids.	The County is negotiating its fuel contract, which contains provisions for alternative fuel sources. Efforts are underway to reduce the number of fuel vendors to one. To avoid interruptions in the dispensing of fuel in the event of hurricanes and other major emergencies, the County is attempting to purchase fuel from Port Everglades. The County is trying to negotiate for competitive pricing by including municipalities. The Department of Procurement Management is working with the U.S. Communities, a national purchasing cooperative, on other commodities and that fuel can potentially be purchased the same way, in lieu of creating another committee.	B3
B5	The Climate Change Advisory Task Force recommends that as Miami-Dade County fueling facilities are built, modified, or upgraded, they be designed and constructed to accommodate alternative fuels, including, but not limited to, E85 and B100. In addition, the County should consider dispensing E85 at two Miami-Dade County fueling stations within 6 months of it becoming locally available as determined by the process described in Recommendation B.3. It is recommended that Miami-Dade re-evaluate the use of E85 six months after dispensing is initiated to assess local availability, overall net costs and environmental impacts. Furthermore, new vehicles being purchased now and in the future by Miami-Dade County should have the capability of using ethanol and biodiesel, without the need for retrofit.	The General Services Administration (GSA) had been converting its single wall tanks to double wall tanks to comply with the Environmental Protection Agency's (EPA's) requirements for storing alternative fuels. GSA is aware of Recommendation B.5, which did not necessarily require County Commission action. Regarding a County Manager memorandum indicating that by April 2009, the County should be using B20 diesel fuel, the County is currently buying E10 and B5 fuels. GSA has determined that using E85 is not economically feasible.	
	GHG Recommendations		

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B6	Require the use of sustainably-sourced biodiesel in all County diesel fleet vehicles and equipment (except standby equipment) as determined by the process described in Recommendation B.3, starting with B5 and increasing to B20 in 6 months. The Climate Change Advisory Task Force recommends that a portion of the local option gasoline tax be used to offset the cost difference for biodiesel.	This recommendation will require County Commission action, since this would require a policy shift. LOGT dollars are currently committed to other efforts for the most part.	
B7	Require that Miami-Dade County develop a vehicle procurement process, which ensures that vehicles owned by MDC increase their mpg by 5% annually per vehicle class (whenever higher MPG vehicles are available) and that the cost of carbon emissions is included in the life cycle cost analysis process.	No action has been taken to date.	
B8	The purchase of a hybrid SUV shall be an allowable alternative for Miami-Dade County fleet procurement if that vehicle is determined to be more fuel-efficient than a light truck or other comparable vehicle.	This recommendation will require County Commission action. The recommendation was made to ensure that the County only purchase heavy vehicles when they were really needed.	
B9	Direct the Office of Sustainability to initiate an energy and fuel conservation incentive and awareness campaign for employees. Department. This campaign should use information from the Chicago Climate Exchange membership, the Climate Change Advisory Task Force (CCATF) Science Committee, and other pertinent sources toconservation incentive and awareness campaign for employees in conjunction with the Miami-Dade County's Resource Conservation Committee, DERM's Pollution Prevention and Environmental Education work groups, and GSA.	The County received an Energy Efficiency and Conservation Block Grant (EECBG) and was using that block grant to develop an energy efficiency public outreach informational campaign in accordance with this recommendation. All County departments are now required to incorporate sustainability efforts into their business plans, and that all department directors' goals and objectives had incorporated sustainability initiatives as well. Employee pledge/challenge cards will be ready for distribution to employees in January 2010, and that every director would be held responsible for obtaining employees' pledges.	
B10	The Climate Change Advisory Task Force supports any recommendations put forth as a result of the most recent Miami-Dade County fleet analysis that lead to an increase in fleet fuel efficiency and a reduction in vehicle miles traveled (VMT). The Task Force recommends that the County further strengthen these recommendations by creating incentives to reduce VMT and by not excluding any departments or vehicle types in reduction initiatives. As an example, it is recommended that hybrid sedans be purchased for non-pursuit police vehicles at the time of replacement.	The County is addressing this recommendation on an ongoing basis. The current year's budget contains a 2% reduction of the County's light fleet. The County is having difficulty purchasing hybrid sedans for non-pursuit police vehicles. She pointed out that the County Manager is encouraging fleet reduction and teleconferencing.	
	GHG Recommendations		

Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
B11	The Task Force recommends that Miami-Dade County implement the following steps to ensure their ability to meet the Cool Counties greenhouse gas reduction commitments:	No action has been taken to date.	
	i. Commit to a 20% reduction in GHG emissions by 2020 through an annual 2% reduction from the base year of 2005 for both County government and County-wide GHG emissions. Provide annual reporting on greenhouse gas emissions for the County government and Countywide GHG emissions. This annual report should include steps taken to reduce GHG emissions internally and geographically, results, and steps needed to meet the next year target.	No action has been taken to date.	
	ii. Recognize this commitment takes dedicated resources to develop, implement and report on these plans. The County Manager intends to adequately resource this initiative to achieve targets established in the Cool Counties resolution and in paragraph (i) of this resolution.	No action has been taken to date.	
	iii. The County establish a countywide alliance of municipalities and large corporations, public and nonprofit institutions that will need to collaborate in order to meet previously established targets. This consortium will be used to:	No action has been taken to date.	
	a. Enlist partners to explicitly adopt all primary goals of the Cool Counties GHG reduction targets and to report on their own GHG reductions.	No action has been taken to date.	
	b. Identify and implement strategies for the financing and performance of energy efficiency and renewable energy upgrades in Miami Dade County/South Florida,	No action has been taken to date.	
	c. Increase purchasing power of energy efficiency related financing, services and products, and	No action has been taken to date.	
	d. Enlist partners to assist with the dissemination of information and incentives designed to assist individuals and small businesses in meeting these reduction goals. (This alliance could also be used to coordinate Countywide adaptation efforts)	No action has been taken to date.	

Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
B12	The CCATF recommends that Miami-Dade County implement the following in order to promote energy conservation and efficiency in buildings owned by Miami-Dade County and support Resolution R-228-09 (Resolution to Reduce Miami-Dade County's Electrical Energy Consumption):	No action has been taken to date.	
	1. Conduct a feasibility study and develop a plan for retrofitting all County-owned outdoor lighting to high efficiency lighting technologies. The study should include a review and summary of current standards and case studies of implementation in other communities. High efficiency light options to be considered may include: Light emitting diodes (LED), induction lighting, with a preference given to solar powered lights. Additionally, an evaluation should be made to improve the efficiency of outdoor lighting with the goal to reduce non-essential outdoor lighting during daytime hours.	No action has been taken to date.	
	2. Require that all county buildings that annually consume more than 500,000 kilowatt hours (kwh) and have not received a comprehensive energy audit in the last 5 years, receive a comprehensive energy audit and/or retro commissioning, with the intent of identifying energy saving and carbon footprint reducing opportunities.	No action has been taken to date.	
	3. Require that all County departments include their goals and plans for greenhouse gas reduction and climate change adaptation in their strategic plans and that each Department Director's performance evaluation include a reporting on outcomes. Present sustainability award to Departments and Directors that achieve most impressive results. One department (e.g., Office of Sustainability, DERM and/or GSA) could be responsible for providing strategies, tools and resources to each department to assist departments in achieving their reduction goals.	No action has been taken to date.	

Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
B.13	The CCATF recommends that Miami-Dade County continue to support funding opportunities available through the American Recovery and Reinvestment Act (ARRA) and other federal programs to retrofit homes, commercial, and housing facilities for energy and water efficiency, and educate residents and homeowners about conservation. The following should be included in order to optimize, leverage, and facilitate energy conservation federal programs and funding. including but not limited to Neighborhood Stabilization Program, Weatherization programs, Public Housing Capital improvements, Community Development Block Grants, Community Services Block Grants, and homelessness prevention.	No action has been taken to date.	
	1. Incorporate educational, behavioral, and operational training programs with all retrofit and renovation options.	No action has been taken to date.	
	2. Monitor and analyze results of retrofits to include but not be limited to obtaining an energy rating of all renovated homes and public housing facilities.	No action has been taken to date.	
	3. Use some or all of the funds created from the resale of foreclosed and renovated homes for further development and promotion of energy and water efficiency outreach programs.	No action has been taken to date.	
	4. Maximize the use of Smart Meters to monitor results and compliment behavioral programs.	No action has been taken to date.	
B.14	The CCATF recommends that Miami-Dade County develop incentives for energy and water efficiency, conservation, and distributed low- and no-carbon energy generation for existing residential, industrial, and commercial buildings. The CCATF recommends that the County:	No action has been taken to date.	
	1. Explore development of a public/private partnership that would provide financing and technical assistance to smaller scale commercial, multifamily and residential facilities to retrofit homes for improved energy and water efficiency. This should support current and future technologies (e.g., metered charging stations in parking garages for electric vehicles and roof hook ups for PV, and, where feasible, the installation of renewable energy technologies such as solar water heaters).	No action has been taken to date.	
	GHG Recommendations		

Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
B14 cont.	2. In the short term, identify potential partners to develop and implement a financing solution for solar water heaters similar to Lakeland Electric.	No action has been taken to date.	
	3. Analyze and maximize GHG reduction opportunities through all county services to residents and businesses.	No action has been taken to date.	
	4. Work with FPL on the installation of a real-time, web-based smart meter program in County government and other large public institutions.	No action has been taken to date.	
	5. Promote the use of green roofs, e.g. vegetative roofing, high reflectivity roofing materials, etc.	No action has been taken to date.	
	6. Include solar reflectance, emissivity and Solar Reflectance Index (SRI) values into the roof system product approval process.	No action has been taken to date.	
	7. Develop incentives for retrofitting buildings to accommodate energy-saving additions such as PV panels on rooftops and metered charging outlets/stations in parking garages for electric vehicles.	No action has been taken to date.	
	8. Develop incentives for the addition of customer-paid electric vehicle (EV) charging stations in portions of public and county-run parking lots.	No action has been taken to date.	
	9. Consider a demonstration retrofit of a County-owned building that could be used as a public outreach and education vehicle for promoting energy-saving retrofits.	No action has been taken to date.	
B.15	The CCATF recommends that Miami-Dade County educate the business sector and the public on energy and water efficiency and conservation. The CCATF recommends that this would best be accomplished if Miami-Dade County collaborates with corporate, nonprofit, and educational organizations to develop a broad scale and culturally competent media and community based educational campaign dedicated to promote the adoption of conservation, efficiency and renewable behaviors, systems and technologies in residences and businesses. CCATF suggests that this educational campaign should:	No action has been taken to date.	

Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
B.15 cont	1. Inform residents and the business sector of the economic benefits of, and resources available for, energy efficiency and appropriate renewable technologies (e.g., green roofs, solar water heaters, smart meters. etc.).	No action has been taken to date.	
	2. Develop two separately designed and targeted campaigns and approaches: one for residents and one for business. For consumer/resident examples, refer to the Home Energy Saver (attached) and Green Homes Challenge (attached) descriptions. For a business example see www.e4s.org, the Entrepreneurs for Sustainability website	No action has been taken to date.	
	3. As part of this education campaign, include information about the Energy Gauge performance rating system for new and existing commercial and residential buildings and encourage property buyers to ask for the rating.	No action has been taken to date.	
B.16	WASD is the County's highest consumer of electricity and one of the highest consumers in the State of Florida. The CCATF recommends that Miami-Dade County undertake an assessment of the County's water and sewer rates and conservation/efficiency programs. The County should:	No action has been taken to date.	
	1. Conduct a long term comparative cost/benefit analyses on the combination of increasing electricity and water generation vs. ramping up conservation and efficiency programs. The CCATF recognizes that both options may be necessary but a preference should be given to increasing conservation and efficiency.	No action has been taken to date.	
	2. Provide consumer education on the current comparatively low rates they have enjoyed and the need for increasing rates to pay for efficiency and conservation efforts. The goal of this education is to build voter acceptance that increased rates are essential to maintaining and improving the quality of life here.	No action has been taken to date.	
	3. Determine the feasibility of using Miami-Dade County's Water and Sewer Department (WASD) facilities for installation of renewable energy technologies, including for water and sewer operations.	No action has been taken to date.	

GHG Recommendations

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Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
B.17	Recognizing that support at the state and federal level are important in facilitating action at the local level, the Climate Change Advisory Task Force recommends that Miami-Dade County advocate that:	No action has been taken to date.	
	1. The Florida Public Service Commission require FPL to achieve at least a 20% reduction in GHG generation from the 2005 baseline by 2020. This would include incorporating the costs of the proposed nuclear power plants by Florida Power and Light at Turkey Point in the comparative costs and benefits of energy efficiency and renewable energy systems and improve and expand incentive structures for energy efficiency, energy conservation and renewable generation. These incentive structures need to promote both customer owned and utility owned energy efficiency and demand side renewable energy systems. Additionally, the cost benefit analysis needs to place a greater emphasis on reducing overall energy consumption, not just capacity reduction, to achieve greater reduction in greenhouse gas emissions.	No action has been taken to date.	
	2. The Florida Building Commission, the Energy Technical Advisory Committee, and the 2010 Energy Code Work Group work to ensure that new construction and significant renovations and replacement equipment requirements increase energy efficiency and promote renewable by requiring a combination of methods and elements to include: solar water heaters, photovoltaic panels, shading devices, vegetative roofing, controllers and monitoring equipment, best practices and quality installation procedures such as HVAC sizing and duct testing, pre-wiring of buildings to accommodate future GHG reducing technologies such as monitoring devices, HVAC zoning, centralized data centers and distributed renewable power sources on rooftops and metered charging outlets in parking garages for electric vehicles. Advocate for the use of green building standards including the National Association of Homebuilders' (NAHB) Green Building Standards and the Florida Green Building Coalition as one of several model options that can be used to reduce GHG emissions and promote energy efficiency.	No action has been taken to date.	

GHG Recommendations

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Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
B.17 cont.	3. Florida and/or the United States pass an energy efficiency resource standard (EERS), a target that will help utility companies reduce electricity usage by 15%.	No action has been taken to date.	
	4. State and Federal Renewable Portfolio Standards of at least 20% by 2020 be implemented.	No action has been taken to date.	
	5. The Federal Clean Energy bill includes a goal of reducing GHG reduction by 20% from 2005 by 2020. (This would parallel's the County's current target.)	No action has been taken to date.	
	6. Federal appropriations for the Energy Efficiency Conservation Block Grant (EECBG) program are continued, at least at current levels.	No action has been taken to date.	

Built Environment Adaptation

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C1	Require all County agencies (and entities that receive County funding for significant infrastructure or built investments) to assess climate change impacts on the agency's/entity's responsibilities. This assessment should be incorporated into their master planning agenda or such a planning process should be initiated if it does not exist. The assessment should include the impact of sea level rise on all public investments and identification of vulnerabilities in order to produce strategies for mitigation and adaptation. These assessments should utilize a 50-year planning horizon.	The County Manager & Office of Sustainability Manager met with department directors in fall 2008, and directed them to begin incorporating climate change planning into their strategic plans. The County Manager announced that the County would be developing and implementing a formal Sustainability Plan in the coming year. The County Administration is beginning to address this recommendation on public investiments, which is a GreenPrint initiative, and it will require administrative and legislative action. Abbie Schwaderer, Assistant County Attorney, has been assigned to work on this.	
C2	Use County charter authority to establish minimum criteria and standards related to climate change (including sea level rise), for public investment for all municipalities in Miami-Dade County.	This recommendation requires legislative action by the County Commission as well as input from affected municipalities. County staff have been seeking input from municipalities on GreenPrint, but can also reach out to them through the League of Cities.	
C3	Expand the mission of the County's Office of Sustainability (OOS), and thus its resources and staffing, to provide a centralized agency for climate change information, monitoring, analysis, and benchmarking. (Note: also see Recommendation F.4) a.) Establish a base case of information at an identified current or recent past date, to which all ensuing data might be compared; b.) Assist in integrating the activities of the various entities including the coordination of data collection so that it can be used across departments/disciplines for analysis and comparison; and determine the appropriate metrics for critical issues; c.) Monitor the effects of climate change on Miami-Dade County using the evolving data base, and publish the results for use by elected leaders, public agencies, and the general public.	The Office of Sustainability responsibilities were expanded to oversee the use of a $12 million Energy Efficiency and Conservation Block Grant (EECBG). Still, the recommendation will require additional funding and legislative action by the County Commission. The EECBG is only for energy and energy efficiency. OOS constantly monitors grants and it will look for those that addressed benchmarking. The EECBG funding allocations to 14 projects were set, although they may be amendable later. a. No action has been taken to date. b. Miami-Dade County was recently chosen (February 2009) by ICLEI (International Council on Local Environmental Initiatives) and New York City, as one of three local governments nationwide to receive technical assistance in developing a sustainability plan and Toolkit for the County and other local governments to utilize. c. No action has been taken to date.	
C4	The CCATF recommends that Miami-Dade County use the on-going cycle of the Evaluation and Appraisal Report to include amendments to the Comprehensive Development Master Plan that will further the principles of Smart Growth (www.smartgrowth.org/default.asp).	No action has been taken to date.	
	Built Environment Adaptation		

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Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
C5	The County should begin a process of planning and public education, coordinated with the South Florida Regional Planning Council and the Metropolitan Planning Organization that integrates the mapping of projected sea level rise and storm surge impacts with the locations of infrastructure and other public investment, and with the locations of projected growth and development. The goal is to ensure the safety and resilience of public investment, and to consolidate private investment on transit-served high ground.	No action has been taken to date.	
C6	The CCATF recommends that Miami-Dade County (by its departments of Planning and Zoning, DERM, MPO, and Public Works) develop a memorandum of understanding for integrated planning efforts with the Florida Department of Transportation and the South Florida Regional Planning Council.	No action has been taken to date.	
C7	The CCATF recommends that Miami-Dade County develop mandates and incentives for building designs that meet green building standards such as those established by Energy Star, the Florida Green Building Coalition, the U.S. Green Building Coalition (USGBC) Leadership in Energy and Environmental Design (LEED) or the National Association of Home Builders (NAHB) Green Building Standards. These standards must comply with the Florida Building Code and not conflict with the Comprehensive Development Master Plan. If the County does develop such mandates and incentives, the CCATF further recommends that:	No action has been taken to date.	
	° Buildings eligible to receive an EPA rating using Energy Star's Portfolio Manager, should achieve an energy performance rating of at least 70.	No action has been taken to date.	
	° Buildings not eligible to receive an EPA rating using Portfolio Manager, demonstrate energy efficiently in at least the 20th percentile for typical buildings of similar type using benchmarking against national median energy source data provided in the Portfolio Manager tool.	No action has been taken to date.	
C8	The CCATF recommends that Miami-Dade County advocate for amendments to the Florida Building Code that will reduce the impact of greenhouse gas emission and improve climate change resiliency.	No action has been taken to date.	
	Natural Systems Adaptation		

CLIMATE CHANGE ADVISORY TASK FORCE ANNUAL
SUMMARY AND STATUS OF RECOMMENDATIONS JUNE 2010

Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
D1	Fully support the Comprehensive Everglades Restoration Plan (CERP), and increase funding and resources for other regional and local habitat restoration and preservation efforts and initiatives.	The County is supporting portions of this very broad recommendation,	
D2	Increase funding and resources for land acquisition and management programs of Miami-Dade County. Investigate new and creative mechanisms to boost funding, such as the creation of a County-administered "carbon credit purchasing" program, as a potential alternative to current development, industry, and government mitigation requirements.	The County Commission would have to create and approve such a program, OOS will meet with DERM staff to consider ways to fund DERM's Environmentally Endangered Lands (EEL) program and ways to offset the costs of the EEL program.	
D3	Acquire all undeveloped lands needed for restoration purposes and for mitigation and adaptation to climate change effects. Secure strategic open lands to provide transition zones to accommodate retreat or spatial shifts in natural areas, such as coastal wetlands and freshwater marshes.	OOS and DERM will consider and report on this recommendation in terms of offsetting costs or funding options.	
D4	Create a plan to locate infrastructure and development outside coastal or flood hazard prone areas using projections of sea level rise to identify those areas. Describe a transitional zone between the hazard area and the built area to be protected and prohibit incompatible land uses that would convert open lands in the transitional zone. Establish a comprehensive planning and zoning policy, such as development setbacks and limits on density and infrastructure in coastal and transitional zones to consider vulnerability to sea level rise and saltwater intrusion. *(Note: see also Recommendations C.2. and E.1)*	No action has been taken to date.	
D5	Encourage the continued funding of the County Agriculture Purchase of Development Rights Program beyond the current funding levels to maintain open lands for aquifer recharge, habitat, and buffers.	The County funded the PDR program with $30 million by the General Obligation Bond. In 2008, Mr. Charles LaPradd, the County's Agricultural Manager, acquired federal grants that matched local dollars 50%. The County will continue the aforementioned funding efforts.	
D6	Provide incentives to study and develop best practices for agricultural management that contribute to carbon sequestration and reduce greenhouse gas emissions.	DERM and Mr. LaPradd acquired a grant this year from the Environmental Protection Agency (EPA), funded with American Recovery and Reinvestment Act dollars, which the County used to provide money to farmers to replace old irrigation pump engines with more energy efficient engines. County staff will seek for additional grants.	
	Natural Systems Adaptation		

Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
D7	Increase funding for County-administered management activities like those programs within Natural Areas Management and Environmentally Endangered Lands. Establish a multi-agency task force to expand County capacity and coordinate conservation activities. Develop a collaborative and integrated approach to conservation involving universities, government agencies, landowners, botanic gardens, zoos, and non-governmental organizations. (Note: see also Recommendation F.2)	The County is doing a lot of work on this as part of the process for developing the GreenPrint assessment section. Mr. Carlos Espinosa, Director, DERM, noted that eliminating unnecessary drainage and limiting saltwater intrusion was part of the critical path of issues in South Dade. The SFWMD is aware of the over drainage problem of existing canals for agriculture and insufficient drainage of urban areas	
D8	Review current stormwater management operations, including the operation of canals and structures, in order to eliminate unnecessary over-drainage and limit the extent of saltwater intrusion into ground and surface water resources. Additionally, require water conservation measures for all users of the Biscayne Aquifer. (Note: see also Recommendations D.2 and D.3)	This recommendation requires legislative action, as well as budget action for the first and second parts.	
D9	Develop a "Vital Signs" monitoring program, following the model of the National Park Service, to serve as a multi-parameter ecosystem monitoring program that will help track climate change effects. Expand current ongoing monitoring efforts, such as those within the Comprehensive Everglades Restoration Plan (CERP), to include specific areas of Miami-Dade County, to provide a better view of how natural areas are changing over time and what forces are responsible. Dedicate a source of funds to collect information and establish and maintain a long-term data management system.	Ms. Torriente met with with Mr. Espinosa and Mr. Doug Yoder on March 20, 2010 to follow up on the idea of holding a Vital Signs workshop. DERM has invited the National Park Service, U.S. Geological Survey, and South Florida Water Management District to participate in a pilot project to expand Vital Signs monitoring to areas in southern Miami-Dade County between Biscayne and Everglades National Park.	
D10	Miami-Dade County should establish partnerships, both formal and informal, with other governmental entities, including local, State, and Federal governments; the private sector; non-governmental organizations; and other stakeholders in the County. Partnerships should focus on cooperative efforts to restore existing natural ecosystems; protect natural and open lands; mitigate impacts; and monitor natural systems and indicators of climate change. Partnerships should also be undertaken to effectively practice adaptive management as we increase our understanding over time of the effects of climate change on natural systems in the County and implement management actions to restore and protect natural systems in the County. (Note: see also Recommendations D.3, D.8, F.2, and F.3)	This recommendation is ongoing, administrative, and legislative.	
	Economic, Social and Health Adaptation		

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Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
E1	The Task Force recommends that the Miami-Dade County Comprehensive Development Master Plan (CDMP) be revised to include a new policy to restrict land uses in areas that would be at risk from sea level rise and associated impacts within the next 50 years as per the CCATF Science Committee's Statement on Sea Level in the Coming Century report and projections. A continuous 50-year planning horizon should be used. (Note: see also Recommendations C.2 and D.4)	No action has been taken to date.	
E2	Initiate an additional long-term CCATF advisory board committee composed of representatives from federal, state, and local environmental agencies (including Miami-Dade County DERM, WASD, Cooperative Extension), the Miami-Dade County Department of Health, local colleges and universities, and community leaders to address potential human infectious disease changes and increases that may accompany climate change and to make technical and funding recommendations to the Miami-Dade County Board of County Commissioners.	This recommendation will require County Commission action. Mayor Alvarez's Sustainability Advisory Board is focused on helping OOS develop GreenPrint. Once GreenPrint is completed, the Mayor's board will also sunset in approximately a year. At that point, the County may want to create a group to act as an implementing partner or facilitator.	
E3	The County shall form an interdisciplinary, community-wide working group, including the media and institutions of higher education, which (a) focuses on public education and information regarding climate change and adaptation and (b) assesses public opinion regarding these subjects.	No action has been taken to date.	
E4	The Task Force recommends that the County bring together all agencies and entities involved in economic development and planning in order to develop a unified and comprehensive response to the challenges of climate change, housing, economic development, and quality of life.	This recommendation will require County Commission action. No action has been taken to date.	
E5	The CCATF recommends the following in reference to green jobs and the economy: 1. The County should sign the Local Government Green Jobs Pledge (attached).	The County adopted the Green Jobs Challenge by Resolution in January 2010.	
	2. The County should establish a full Green-collar Jobs Task Force. This committee should promote green jobs and building a local green economy as follows:	No action has been taken to date.	
	Economic, Social and Health Adaptation		

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Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
E5 cont.	· Establish a local action plan for Miami-Dade County,	No action has been taken to date.	
	· Indentify goals and opportunities, and	No action has been taken to date.	
	· Identify key partners, both governmental and NGO's, for sharing best practices and resources.	No action has been taken to date.	
E6	The CCATF recommends that Miami-Dade County initiate efforts for a county-wide assessment of local public knowledge and opinion on climate change. The effort should:	No action has been taken to date.	
	1. Review and assess existing data on local public knowledge and opinion related to climate change (both mitigation and adaptation), and	No action has been taken to date.	
	2. Supplement available data through additional polling, attitude research, and other appropriate information gathering methods.	No action has been taken to date.	
E7	The CCATF recommends that Miami-Dade County take the following steps to facilitate a county-wide education outreach program on climate change to educate the general public:	No action has been taken to date.	
	Step I - review and assess existing entities (such as internal County departments, Miami-Dade County Environmental Education Providers consortium, local colleges and universities, etc.) that could provide education on climate change	No action has been taken to date.	
	Step II - coordinate relevant entities identified through Step # I in order to share information gathered as a result of County-wide Assessment of Local Public Knowledge and Opinion on Climate Change (as outlined in #1)	No action has been taken to date.	
	Step III - direct funding and resources to relevant entities identified through Step # I	No action has been taken to date.	

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Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
F1	Conduct a survey of Miami-Dade County municipalities to gauge their level of knowledge and engagement in climate change issues, learn about their activities, and begin the creation of an intergovernmental, learning network that allows members to work with each other and the County on adaptation / mitigation issues. Once the survey has been completed, engage the cities in a dialogue about the survey findings and work of the Climate Change Advisory Task Force. This dialogue could happen in a number of ways including a meeting with the Miami-Dade League of Cities and/or a convening of Miami-Dade municipal	A survey was completed by the South Florida Regional Planning Council and the League of Cities. The final report was published December 2009.	
F2	Convene local and state agencies and water and sewer utilities around a discussion of climate change and impacts on water quantity, quality, and availability and implications for infrastructure planning and investment. **(Note: see also Recommendations D.7, D.10, and F.3)**	The regional Climate Leadership Summit set the stage to address this recommendation.	
F3	Convene a broader group of local and state agencies around a discussion of their activities related to climate change. Agencies / groups would include, but not be limited to, DOT 4 & 6, DEP, SFWMD, DCA, Health Planning Agencies, Ecosystem Restoration Task Force, etc. In this conversation we will gain a better understanding if there are issues or concerns that we need to be aware of and identify opportunities for collaboration moving forward. (Note: see also Recommendations D.10, and F.2)	The County is addressing this recommendation through their meetings with NOAA's Digitial Coast Initiative and Dade County case study.	
F4	Develop a County internet website with up-to-date information about the work of the Miami-Dade Board of County Commissioners, the CCATF, and municipalities with links to information and best practices related to climate change, adaptation and mitigation efforts by individuals and organizations. (Note: see also Recommendations C.3 and E.3)	STATUS: Web sites has been established for CCATF and Greenprint: http://www.miamidade.gov/derm/climatechange/taskforce.asp http://www.miamidade.gov/GreenPrint/	
F5	Work with the region's children's museums and foundations to create and fund educational exhibits on climate change, green technologies, clean cities, etc. (Note: see also Recommendation E.3)	The Office of Sustainability has started discussing this recommendation with the Museum of Science and Mr. Michael Spring, Director, Department of Cultural Affairs. Conversations have not been held with the Miami Children's Museum.	

Intergovernmental Affairs

Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
F6	Identify and develop educational materials that can be incorporated into a Miami-Dade Public Schools curriculum on climate change, the environment, and sustainability. The materials should be shared with other educational institutions to facilitate the dissemination of information to Miami-Dade residents. (Note: see also Recommendations C.3 and E.3)	Miami-Dade County Public Schools created a sustainability office. The Office of Sustainability has discussed this recommendation with the staff in this office.	
F7	The CCATF recommends that Miami-Dade County develop as quickly as possible an Action Plan identifying the "who, what, when, where, and how" that will further the objectives identified in the Board of County Commissioners' December 1, 2009 resolution in support of the Southeast Florida Regional Climate Change Compact (Compact) and related activities. Taking immediate action to further the activities highlighted in the Compact and BOCC Resolution will help elevate the importance of mitigating greenhouse gas emissions and adapting to the potential impacts of climate change in Miami-Dade County and the Region. The CCATF recommends that these actions be taken well in advance of the 2010 Climate Summit to allow for stakeholder participation and regional discussion.	No action has been taken to date.	
	The CCATF recommends that a shared regional strategy and plan to mitigate and adapt to climate change and its potential impacts include, but not be limited to:		
	1. Common measures of success and benchmarks;	No action has been taken to date.	
	2. Acknowledgement of the need to create uniform standards and regulations to minimize confusion and business costs associated with conducting business in different parts of the region and to encourage business activity and competition; and	No action has been taken to date.	
	3. A comprehensive outreach strategy that will engage the wide range of stakeholders, acknowledge differing views, and work to reach consensus on a shared course of action moving into the future.	No action has been taken to date.	

Intergovernmental Affairs

Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
F8	The CCATF recommends that the County collaborate with and encourage its regional partners in the development of uniform message on climate change as part of a regional outreach and education campaign. Such a campaign should include the use of high profile media and other appropriate outlets to raise general awareness of climate change in Southeast Florida. This regional message on climate change can be supplemented with county-specific information as needed to educate Miami-Dade County residents on the potential impacts of climate change and make the connection between mitigation, adaptation, and policy changes in the County's climate change and sustainability initiatives.	No action has been taken to date.	
F9	The Office of Sustainability, in partnership with the Miami-Dade County League of Cities, should develop a local government outreach program to raise awareness about climate change science and potential climate change impacts on Miami-Dade County and possible mitigation and adaptation strategies. Local governments should be encouraged to identify a point of contact who will serve as an agency liaison to the County in issues of climate change and sustainability.	No action has been taken to date.	
F10	To enhance coordination between the County and its municipalities and make it easier to incorporate "green technologies" in both residential and commercial settings, the CCATF recommends the following:		
	1. To enhance understanding among code officials and design professionals of what green technologies and innovative approaches are currently allowed in the code, request that the Florida Building Code Commission consider a statewide augmentation of continuing education requirements for Engineers and Architects.	No action has been taken to date.	
	2. Request that the Office of Code Compliance develop checklists that can be used as guidelines for Building Officials and Design Professionals to further the uniform application of codes.	No action has been taken to date.	

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Rec#	Recommendation	Status / Implementation Plan	Related Rec#s
F11	The CCATF recommends that the Board of County Commissioners encourage the convening of a regional discussion around the opportunities and challenges posed to the Region's businesses and economy by potential climate change related impacts. Key partners in a regional discussion include, but are not limited to, the region's economic development organizations, county economic development officials, Chambers of Commerce, key business organizations representing existing and emerging industries in Southeast Florida, Enterprise Florida, and the South Florida and Treasure Coast Regional Planning Councils.	No action has been taken to date.	