RESOLUTION NO. 10-303

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AUTHORIZING THE ATTACHED INTERLOCAL AGREEMENT BETWEEN THE CITY OF KEY WEST AND MONROE COUNTY FOR ENERGY EFFICIENCY & CONSERVATION BLOCK GRANT (EECBG), FLORIDA ENERGY COMMISSION OF THE STATE OF FLORIDA GRANT AGREEMENT NO. ARS010; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, in Resolution No. 09-268 the City Commission adopted a Climate Action Plan and directed the City Manager to apply for grants to fund the plan; and

WHEREAS, the City of Key West, in partnership with the Board of Commissioners of Monroe County, City of Marathon and Islamorada, City of Islands obtained an EECBG grant under the Florida Energy and Climate Commission Grant Agreement No. ARS010, pursuant to the American Recovery and Reinvestment Act in order to implement a comprehensive energy savings project which includes several cross-jurisdictional and individual community energy savings activities; and

WHEREAS, it is necessary for parties under the Grant Agreement to enter into an interlocal agreement to define the contributions of each party under the Grant Agreement;

WHEREAS, with funding through the EECBG grant and in-kind assistance from the City and Keys Energy Services, the City of Key West intends to retrofit lighting in six public parks with energy efficient light fixtures.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That the attached Interlocal Agreement between Monroe County and the City Of Key West regarding State of Florida, Florida Energy Commission Grant Agreement No. ARS010 is approved.

Section 2: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 19 day of October, 2010.

Authenticated by the presiding officer and Clerk of the Commission on October 20, 2010.

Filed with the Clerk October 20, 2010.

CRAIG CATES, MAYOR

ATTEST:

CHERYL SMITH, CITY CLERK

EXECUTIVE SUMMARY

TO: Jim Scholl, City Manager

COPIES: David Fernandez, Assistant City Manager-Operations
Mark Finigan, Assistant City Manager- Administration
Greg Veliz, Director of Community Services

FROM: Rod Delostrinos, Deputy Director Community Services

DATE: September 28, 2010

SUBJECT: **Board of Commissioners of Monroe County and the City of Key West Inter-local Agreement.**

Action statement:
This resolution authorizes the City of Key West to enter into an inter-local agreement with the Monroe County Board of Commissioners pursuant to the terms outlined in the Energy Efficiency & Conservation Block Grant (EECBG) under the Florida Energy Commission of the State of Florida Grant Agreement No. ARS010.

Background:
On October 20, 2009, the City of Key West City Commission passed Resolution 09-268 which adopted the City of Key West Climate Action Plan of October 1, 2009 and directed the City Manager to apply for all applicable potential grant money, including EPA, DOE and State of Florida, to fund the plan. Under the Climate Action Plan Section 6, reduction of annual greenhouse emissions through the use of renewable energy, conversation, and more efficient power was recommended.

The City of Key West, in partnership with the Board of Commissioners of Monroe County, City of Marathon and Islamorada, Village of Islands, obtained an Energy Efficiency & Conservation Block Grant (EECBG) under the Florida Energy and Climate Commission Grant Agreement No. ARS010 pursuant to the American Recovery and Reinvestment Act in order to implement a comprehensive energy savings project which will include several cross-jurisdictional and individual community energy savings activities.

The City of Key West intends to retrofit lighting in six public parks with new energy efficient light fixtures. The parks include the Clayton Sterling Sports Complex, Dewitt

Roberts Softball Field, Rosa Hernandez Softball Field, George Mira Football Field, Nelson English Park and Pepe Hernandez Park. These parks are located in the City of Key West.

Purpose and Justification:
Retrofitting the lighting in the six public parks with new energy efficient light fixtures will reduce the power requirements from approximately 340 Kilowatts to 238 Kilowatts. The projected savings is 30%.

Financial Impact:
The total project cost of $842,310 is 100% funded through reimbursement and "in-kind" funding. The breakdown is as followed:

1. $744,790 is the amount funded by the grant
2. $97,520 are funds derived from an "in-kind" match by the City of Key West and Keys Energy Services for salaries, fringe benefits, supplies, and equipment.

Recommendation:
Staff recommends approval of the inter-local agreement between Monroe County and the City of Key West.

ORIG

INTERLOCAL AGREEMENT BETWEEN MONROE COUNTY AND THE CITY OF KEY WEST FOR JOINT PARTICIPATION IN GRANT AGREEMENT # ARS010

THIS INTERLOCAL AGREEMENT is made and entered into this 15th day of December, 2010, by and between the MONROE COUNTY BOARD OF COMMISSIONERS, a political subdivision of the State of Florida, whose address is 1100 Simonton Street, Key West, FL 33040 ("COUNTY") and the CITY OF KEY WEST, whose address is _____ ("CITY").

WITNESSETH

WHEREAS, the STATE OF FLORIDA, EXECUTIVE OFFICE OF THE GOVERNOR, FLORIDA ENERGY COMMISSION ("COMMISSION") has entered into a Grant Agreement NO. ARS010 ("Grant Agreement") with the COUNTY to provide financial assistance for the Energy Efficiency and Conservation Project in which the COUNTY is the named grantee on the Grant Agreement, and

WHEREAS, the United States Department of Energy (USDOE) awarded funding to the COMMISSION pursuant to USDOE through American Recovery and Reinvestment Act (AARA) Grant Agreement No. DE-E0000241, and

WHEREAS, the COUNTY and the CITY developed a mutual project, which would include mutual participation with various entities to assist both the incorporated and unincorporated areas of the Florida Keys to improve energy conservation for the citizens of Monroe County, and

WHEREAS, the CITY has agreed to participate along with the COUNTY under the Grant Agreement #ARS010, and the CITY has developed certain project tasks for the benefit of its citizens. The CITY agrees to participate, contribute its resources pursuant to the requirements of the Grant Agreement in order to secure funding for the project tasks defined by the CITY.

WHEREAS, The sole purpose of this Interlocal Agreement is to define the contributions of the parties under the Grant Agreement, and

WHEREAS, CITY acknowledges that COUNTY will serve as the grantee/recipient under the Grant Agreement, and

WHEREAS, CITY hereby agrees to abide by the requirements of the Grant Agreement entered into between the COMMISSION and the COUNTY, and

WHEREAS, this Interlocal Agreement is entered into pursuant to the authority provided in Florida Statute 163.01, known as the Florida Interlocal Cooperation Act of 1969, and

NOW THEREFORE, in consideration of the mutual understandings and agreements set forth herein, the COUNTY and CITY agree as follows:

1. INCORPORATION BY REFERENCE - The provisions of that certain document entitled "FLORIDA ENERGY AND CLIMATE COMMISSION GRANT AGREEMENT NO. ARS010" (Grant Agreement) and its attachments is incorporated by reference as

Exhibit A to this Interlocal Agreement and made a part hereof as if fully set forth in the body of the Interlocal Agreement and all laws, rules and regulations relating thereto are also incorporated by reference.

2. PROJECT TASKS – CITY has developed certain project tasks to be funded by the Grant Agreement, and CITY and COUNTY agree that they are to be bound by the Grant Agreement, and CITY is responsible to provide COUNTY all the documentation and/reporting relative to the CITY'S project tasks which are required under the Grant Agreement.

3. TERM - The term of this Agreement begins on the date of execution by both parties and ends no later than April 30, 2012, the date the Grant Agreement ends unless earlier terminated or extended under the provisions of the Grant Agreement.

4. DOCUMENT REVIEW AND COMPLIANCE – CITY agrees to comply with the Grant Agreement and its attachments in its entirety, references in this agreement to specific paragraphs of the Grant Agreement are for convenience only. For purposes of the agreement between COUNTY and CITY any obligations called for under the Grant Agreement to be performed by the grantee related to CITY project tasks will also apply as if fully set out between the CITY and COUNTY.

5. RESPONSIBILITY OF CITY - CITY agrees to perform those project tasks attributable to CITY in the Grant Agreement and to provide the matching funds either in-kind or financial as provided in the Grant Agreement; and to provide to the COUNTY all the required reports, attachments fully completed, invoices or other documentation required by COMMISSION in order for CITY to be approved for reimbursement related to a project task.

6. FUNDS – CITY acknowledges and agrees that funding for its tasks under the Grant Agreement will be provided from the COMMISSION through the COUNTY on a reimbursement rather than an up-front basis; and that COUNTY is not financially responsible to CITY for funds expended by CITY which are not approved by COMMISSION. CITY also acknowledges and agrees that expended funds will be reimbursed as approved by the COMMISSION and related to each individual request for reimbursement submitted to the COUNTY by the CITY. All funds shall be distributed and expended in accordance with the Grant Agreement. CITY agrees that it shall not receive advances of any type from the COUNTY. All reimbursements to CITY are dependent on approval of specific reimbursement requests submitted from the CITY as paid by the COMMISSION.

7. REIMBURSEMENT. All reimbursement requests from CITY shall be submitted to COUNTY, not directly to the COMMISSION.

   (a) Reimbursement requests shall be submitted to COUNTY and properly documented by CITY as required in the Grant Agreement. All reimbursement requests under this Interlocal Agreement and the Grant Agreement shall be submitted using the Attachment B of the Grant Agreement, Payment Request Summary Form, format in detail sufficient for a proper pre-audit and post-audit thereof. CITY shall submit to

COUNTY a properly completed Attachment B, Payment Request Summary Form, with supporting documentation of allowable costs, including the final reimbursement request, as described in paragraph 4.D. of the Grant Agreement.

(b) CITY agrees and acknowledges that pursuant to the Grant Agreement at paragraph 4.C., ten percent (10%) of each approved reimbursement request shall be retained by the COMMISSION pending the compliance with Section 8 of the Grant Agreement, and that this amount will not be distributed to CITY prior to being received by COUNTY.

(c) If a Request for Reimbursement from CITY does not comply with the Grant Agreement requirements under the Grant Agreement the COUNTY will confer with CITY to identify what the COMMISSION requires in order for the CITY to be able to comply and receive reimbursement. It is the responsibility of the CITY to provide the necessary documentation or other requirements.

(d) Upon distribution of funds from the COMMISSION to the COUNTY, the COUNTY shall distribute the reimbursement received from the COMMISSION to the CITY for items related to the individual reimbursement request being paid by the COMMISSION.

(e) All reimbursements under the Grant Agreement shall be in compliance with the laws, rules, and regulations applicable to the expenditure of State and Federal funds. The State of Florida guidelines for allowable costs include, but not limited, to the Florida Department of Financial Services' Reference Guide for State Expenditures located at http://www.myfloridacfo.com. Federal program guidelines for allowable costs and related topics are listed in Attachment E of the Grant Agreement, Federal Regulations and Attachment F of the Grant Agreement, Federal Funding Grantee, Sub-grantee and Contractor Provisions. The CITY shall provide to COUNTY a detailed listing of expenditures made under the Grant Agreement as support for the Payment Request Summary Form. The listing shall include, at a minimum, a description of the goods or services purchased, date of the transaction, check or voucher number, amount paid and vendor name.

(f) In addition, to the requirements contained in paragraphs 4.C. & D of the Grant Agreement, the COMMISSION may periodically request additional proof of a transaction to evaluate the appropriateness of costs to the Grant Agreement pursuant to State of Florida guidelines. When requested by the COMMISSION related to a transaction performed by the CITY, the CITY shall provide the required information to COUNTY within 20 calendar days of such request, so that COUNTY can comply with the Grant Agreement and provide this information to the COMMISSION within 30 calendar days of receipt of such request pursuant to paragraph 4.E. of the Grant Agreement.

8. REPORTING – The Grant Agreement requires various reports, including but not limited to Monthly Progress Reports, Annual Reports, and Final Reports. CITY shall complete

reports, provide documents or information as requested by COUNTY in the manner described in the Grant Agreement for the project tasks under it's control and for it's benefit. CITY recognizes that failure to comply with the reporting jeopardizes funding for the entire grant for CITY, COUNTY and for other cities. CITY agrees to complete Monthly Reports in a timely manner and to provide the reports, documents or information documents or information to COUNTY at least 48 hours before the Monthly report is due from the COUNTY to the COMMISSION, at least 5 calendar days before the Annual documents or information report is due from the COUNTY to the COMMISSION, and at least 5 calendar days before the Final Report is due from the COUNTY to the COMMISSION.

9. COMPLIANCE MONITORING – CITY agrees to cooperate with the COUNTY and to participate in any compliance monitoring which may be required pursuant to the Grant Agreement, including but not limited to the requirements of paragraph 10 of the Grant Agreement. CITY further agrees to provide to the COUNTY the documentation required by the COMMISSION related to CITY'S project tasks due to compliance monitoring.

10. TERMINATION – If the COMMISSION terminates the Grant Agreement this Interlocal Agreement will automatically be terminated; termination by COMMISSION is set out in the Grant Agreement, including but not limited to, paragraphs 10C, 11, 12, 13, 14, and 15. Termination may also occur by mutual agreement of the parties.

11. NOTICES - Whenever either party desires to give notice unto the other, it must be given by written notice, sent by registered United States mail, with return receipt requested, and sent to:

FOR COUNTY
County Administrator
1100 Simonton Street
Key West, Florida 33040

FOR CITY
City Manager
Jim Scholl
Key West, Florida 33040

AND

Monroe County Grants Administrator
1100 Simonton Street
Key West, FL 33040

Either of the parties may change, by written notice as provided above, the addresses or persons for receipt of notices.

12. UNAVAILABILITY OF FUNDS - If the COUNTY learns that funding cannot be obtained under the Grant Agreement or cannot be continued at a level sufficient to allow for the services specified herein, this Interlocal Agreement may then be terminated immediately, at the option of the COUNTY, by written notice of termination delivered in person or by mail to the CITY at its address specified above. The parties acknowledge that the COUNTY has no funding without the funding by the COMMISSION and agree

that the COUNTY has no liability for funds expended by the CITY that were not covered for any reason by the COMMISSION.

13. PERFORMANCE AND OBLIGATION – The COUNTY'S performance and obligation to pay under this Interlocal Agreement is contingent upon an annual appropriation by the Board of County Commissioners and upon the COMMISSION'S performance and obligation to pay under the Grant Agreement which is contingent upon annual appropriation by the Legislature of the State of Florida and the availability of federal funding for the specific purpose of funding the COMMISSION'S obligations under the Grant Agreement. In the event of a State revenue shortfall, withdrawal of State budget authorization and/or rescission of federal funding, the total funding will be reduced accordingly. The COMMISSION, in accordance with direction from the Governor and/or the Florida Legislature, shall be the final determiner of the availability of any funds.

14. COMPLIANCE WITH LAWS AND REGULATIONS - In providing all services pursuant to this Interlocal Agreement, the CITY shall abide by all statutes, ordinances, rules, and regulations pertaining to, or regulating the provision of, such services, including those now in effect and hereafter adopted. Any violation of said statutes, ordinances, rules, or regulations shall constitute a material breach of this agreement.

15. MAINTENANCE OF BOOKS AND RECORDS - CITY agrees to maintain books, records, and documents directly pertinent to performance under the Grant Agreement and this Interlocal Agreement in the same manner as set out in paragraph 17 of the Grant Agreement. CITY agrees to provide the books, records and documents to the COUNTY in order for the COUNTY to comply with the Grant Agreement.

16. SUBCONTRACTING – Parties may hire contractors to achieve the individual project tasks applicable to their jurisdiction under the Grant Agreement. CITY agrees to comply with, and to include in subcontracts, all the applicable federal, state, and local health and safety rules and regulations required in the Grant Agreement or this Interlocal Agreement.

17. FLORIDA STATUTE SECTION 768.28 – Each party agrees that it shall be solely responsible for the negligent or wrongful acts of its employees and agents. However, nothing contained herein shall constitute a waiver by either party of its sovereign immunity or the provisions of Section 768.28, Florida Statutes.

18. DISPUTES - COUNTY and CITY agree that they will seek to resolve any disputes between them regarding their responsibilities as soon as possible and at the lowest level reasonable, in order to conserve the resources of the parties. The parties further agree to use their best efforts to assure speedy and non-confrontational resolution of any and all disputes between them. In the event any cause of action or administrative proceeding is initiated or defended by any party relative to the enforcement or interpretation of this Interlocal Agreement, the prevailing party shall be entitled to reasonable attorney's fees and court costs, as an award against the non-prevailing party, and shall include attorney's fees and courts costs in appellate proceedings, as an award against the non-prevailing

party. Mediation proceedings initiated and conducted pursuant to this Interlocal Agreement shall be in accordance with the Florida Rules of Civil Procedure and usual and customary procedures required by the circuit court of Monroe County.

19. AMENDMENT AND ASSIGNMENT - No agent, employee, or other representative of either party is empowered to modify or amend the terms of this Interlocal Agreement, unless executed with the same formality as this document with approval of the COMMISSION. This Interlocal Agreement or duties under the Grant Agreement shall not be assignable by either party unless such assignment is first approved by the COMMISSION.

20. SEVERABILITY - If any term, covenant, condition or provision of this Interlocal Agreement (or the application thereof to any circumstance or person) shall be declared invalid or unenforceable to any extent by a court of competent jurisdiction, the remaining terms, covenants, conditions and provisions of this Agreement, shall not be affected thereby; and each remaining term, covenant, condition and provision of this agreement shall be valid and shall be enforceable to the fullest extent permitted by law unless the enforcement of the remaining terms, covenants, conditions and provisions of this Agreement would prevent the accomplishment of the original intent of this Agreement. COUNTY and CITY agree to reform the Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision.

21. INDEPENDENT CONTRACTORS, WORKERS COMPENSATION –

(a) CITY and its employees, volunteers, agents, vendors and subcontractors shall be and remain independent contractors and not agents or employees of the COUNTY or the COMMISSION with respect to all of the acts and services performed by and under the terms of this agreement. COUNTY and its employees, volunteers, agents, vendors and subcontractors shall be and remain independent contractors and not agents or employees of the CITY or the COMMISSION with respect to all of the acts and services performed by and under the terms of this Interlocal Agreement.

(b) CITY will be self-insured against or will secure and maintain during the life of this agreement, Workers Compensation for all of its employees connected with the work of this agreement. CITY shall require their subcontractors similarly to provide Workers Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the CITY. Such coverage shall comply fully with Florida's Worker's Compensation Law. This Agreement shall not in any way be construed to create a partnership, association or any other kind of joint undertaking, enterprise or venture between the parties.

22. WAIVER OF PROVISIONS - The failure of either party to this Interlocal Agreement to object to or to take affirmative action with respect to any conduct of the other which is in violation of the terms of this agreement shall not be construed as a waiver of the violation or breach, or of any future violation, breach or wrongful conduct.

23. PROCESS FOR APPROVAL - This Interlocal Agreement shall be approved by the CITY initially and after approval by the CITY shall be presented to the Board of County Commissioners for approval of the COUNTY. The Interlocal Agreement may be executed in several counterparts, each of which shall be deemed an original and such counterparts shall constitute one and the same instrument.

24. AUTHORITY - Each party represents and warrants to the other that the execution, delivery and performance of this Agreement have been duly authorized by all necessary governmental action, as required by law.

25. ENTIRE AGREEMENT -

(a) It is understood and agreed that the entire agreement of the parties is contained herein and that this Interlocal Agreement supersedes all oral agreements and negotiations between the parties relating to the subject matter hereof as well as any previous agreements presently in effect between the parties relating to the subject matter hereof.

(b) Any alterations, amendments, deletions, or waivers of the provisions of this Interlocal Agreement shall be valid only when expressed in writing and duly signed by the parties.

IN WITNESS WHEREOF, the parties to this Interlocal Agreement have caused their names to be affixed hereto by the proper officers thereof for the purposes herein expressed at Monroe County, Florida, on the day and year first written above.

(SEAL)
ATTEST: DANNY L. KOLHAGE, Clerk

By: _____
Deputy Clerk

Date:

BOARD OF COUNTY COMMISSIONERS
OF MONROE COUNTY, FLORIDA

By: Sylvia J. Murphy
Mayor/Chairman

Date: DEC 15 2010

CITY OF KEY WEST

By: _____

Title: Mayor

Date: 10-21-10

Witness for Key West
Angela Brodie

Print Name

Date: 10-21-10

MONROE COUNTY ATTORNEY
APPROVED AS TO FORM
NATILEENE W. CASSEL
ASSISTANT COUNTY ATTORNEY
Date 11-24-10

FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARDS

THIS AGREEMENT is entered into between the STATE OF FLORIDA, EXECUTIVE OFFICE OF THE GOVERNOR (EOG), FLORIDA ENERGY AND CLIMATE COMMISSION whose address is 600 South Calhoun Street, Suite 251, Tallahassee, Florida 32399-0001 (hereinafter referred to as the "Commission") and the MONROE COUNTY BOARD OF COUNTY COMMISSIONERS, whose address is 1100 Simonton Street, Key West, FL 33040-3110 (hereinafter referred to as "Grantee" or "Recipient"), a local government, to provide financial assistance for the Keys Energy Conservation Initiative.

In consideration of the promises and mutual agreements contained herein, the Commission and the Grantee acknowledge and agree as follows:

1. The United States Department of Energy (USDOE) awarded funding to the Commission pursuant to USDOE through American Recovery and Reinvestment Act (ARRA) Grant Agreement No. DE-EE0000241. The Grantee shall be a sub-grantee of federal financial assistance from USDOE. The Grantee is responsible for complying with the appropriate state and federal guidelines in the performance of its activities pursuant to this Agreement.

2. The Grantee agrees to perform in accordance with the terms and conditions set forth in this Agreement, its attachments and exhibits named and incorporated by reference. For purposes of this Agreement the terms "Grantee" and "Recipient" are used interchangeably.

3. This Agreement shall begin upon execution by both parties and end no later than March 31, 2012, inclusive. If allowed by USDOE, this Agreement shall be effective upon execution for purposes of reimbursement of allowable costs resulting from obligations incurred and meeting the cost share or match requirements as described in Attachment A, Grant Work Plan. Profit to the Grantee, or any of its subgrantees, is prohibited by 10 Code of Federal Regulations (CFR) Part 600. This Agreement may be amended to revise Attachment A, Grant Work Plan, if additional funding is made available by the USDOE and/or the Florida Legislature.

4. A. The Grantee shall be eligible for reimbursement of allowable costs resulting from obligations incurred during the term of this Agreement. The Commission shall reimburse the Grantee for allowable costs on a not more frequently than monthly cost reimbursement basis in an amount not to exceed $2,687,288 after receipt and approval by the Commission's Grant Manager of satisfactory reports and documentation as required in this Agreement. The parties agree that the Grantee is responsible for providing a minimum match of $602,896 toward the project described in Attachment A, Grant Work Plan. All cost sharing or match shall meet any applicable federal requirements.

B. Prior written approval from the Commission's Grant Manager shall be required for changes between approved, funded budget categories up to 10% of the total, approved Grant funds. Approval of such changes will be contingent upon submission of a revised Project Budget. Budget category changes greater than 10%, the addition of previously unapproved or unfunded budget categories or the addition of previously unapproved or unfunded budget line-items, will require a formal written amendment to the Agreement. The Commission agrees to review a request by the Grantee to modify Attachment A, Grant Work Plan, should the Grantee find, after receipt of competitive bids, that the project described in Attachment A, Grant Work Plan, cannot be accomplished for the current estimated project cost. If the Commission agrees to a modification of Attachment A, Grant Work Plan, it may be modified not to exceed the awarded funding identified above. Any such modification would be by formal written amendment, in accordance with Section

37. Nothing in this Section or Agreement is intended nor implies to guarantee approval of a request to modify or adjust Attachment A, Grant Work Plan, or the available project funding.

C. All reimbursement requests under this Agreement shall be submitted using the Attachment B, Payment Request Summary Form, format in detail sufficient for a proper pre-audit and post-audit thereof. The Grantee shall submit a properly completed Attachment B, Payment Request Summary Form, with supporting documentation of allowable costs, including for the final reimbursement request, as described below in paragraph 4.D. Ten percent of each approved reimbursement request shall be retained by the Commission pending Grantee's compliance with Section 8.

D. All reimbursements under this Agreement shall be in compliance with the laws, rules and regulations applicable to the expenditure of State and federal funds. The State of Florida guidelines for allowable costs include, but are not limited, to the Florida Department of Financial Services' Reference Guide for State Expenditures located at http://www.myfloridacfo.com. Federal program guidelines for allowable costs and related topics are listed in Attachment E, Federal Regulations and Attachment F, Federal Funding Grantee, Sub-grantee and Contractor Provisions. The Grantee must provide a detailed listing of expenditures made under this Agreement as support for the Payment Request Summary Form. The listing shall include, at a minimum, a description of the goods or services purchased, date of the transaction, check or voucher number, amount paid and vendor name. All requests for reimbursement of travel expenses shall be in accordance with the travel requirements including mandated forms required by Section 112.061, Florida Statutes.

E. In addition to the requirements contained in paragraphs 4.C & D above, the Commission may periodically request additional proof of a transaction to evaluate the appropriateness of costs to the Agreement pursuant to State of Florida guidelines. When requested, this information must be provided within 30 calendar days of such request.

5. The Commission's performance and obligation to pay under this Agreement is contingent upon an annual appropriation by the Legislature of the State of Florida and the availability of federal funding for the specific purpose of funding the Commission's obligations under this Agreement. In the event of a State revenue shortfall, withdrawal of State budget authorization and/or rescission of federal funding, the total funding may be reduced accordingly. The Commission, in accordance with direction from the Governor and/or the Florida Legislature, shall be the final determiner of the availability of any funds.

6. The Grantee shall submit, using Attachment C, Monthly Progress Report, monthly updates. to describe the project progress, work performed, problems encountered, problem resolution, schedule updates and proposed work for the next reporting period. Attachment B, Payment Request Summary Form may not be submitted more frequently than on a monthly basis and must be accompanied by an Attachment C, Monthly Progress Report, for the corresponding month. Attachment C, Monthly Progress Reports shall be submitted to the Commission no later than three calendar days following the completion of the monthly reporting period. The Commission's Grant Manager may request additional information if the Commission's Grant Manager determines it is necessary. The Commission's Grant Manager shall have ten calendar days to review deliverables and payment requests submitted by the Grantee.

7. The Grantee shall submit an Annual Report 15 calendar days after the end of the first year of the project, if the term of the project exceeds one year. The Annual Report shall provide a narrative detailing and evaluating the accomplishments and impact of the project in the prior twelve months. The Annual Report shall follow the format described in Attachment K, Annual Report.

8. The Grantee shall also submit a Final Report 15 calendar days prior to the expiration date of the Agreement. The Final Report will provide a final narrative detailing and evaluating the accomplishments and impact of the project. The Final Report will include an evaluation of the energy savings directly attributable to the project, projections of estimated energy savings expected to accrue from the project and policy recommendations, which may be helpful in implementing other projects of a similar nature. Pursuant to

paragraph 4.C, 10% of the total Agreement amount identified in paragraph 4.A will be withheld until receipt and approval of the Final Report.

9. Each party agrees that it shall be solely responsible for the negligent or wrongful acts of its employees and agents. However, nothing contained herein shall constitute a waiver by either party of its sovereign immunity or the provisions of Section 768.28, Florida Statutes.

10. A. Commission staff will perform compliance monitoring during the term of the Agreement, in addition to the review of Monthly Progress Reports, but not less than once a year, to ensure Agreement compliance. Monitoring shall include, but not be limited to, periodic review of compliance with Agreement service delivery, as described in Attachment A, Grant Work Plan as documented in Attachment C, Monthly Progress Reports and also which includes a review of all Agreement requirements including the Attachments. The Commission reserves the right for any Commission staff to make scheduled or unscheduled, announced or unannounced compliance monitoring visits at any site where services are delivered pursuant to this Agreement.

B. For each on-site compliance monitoring visit, Commission staff will provide an oral exit interview and a written monitoring report to the Grantee.

C. If issues of non-compliance are identified in the monitoring report, a written Corrective Action Plan (CAP) may be required of the Grantee. If required, the CAP shall be submitted to the Commission's Grant Manager within ten calendar days of receipt of the monitoring report. If a CAP is required of the Grantee, failure to correct deficiencies after thirty calendar days from the date-of-receipt of a written monitoring report notating the deficiencies may result in a determination of breach of Agreement and termination of services. If a CAP is not required of the Grantee, the Commission may proceed under Section 11 and/or Section 14.

11. The Commission may terminate this Agreement at any time in the event of the failure of the Grantee to fulfill any of its obligations under this Agreement. Prior to termination, the Commission shall provide 30 calendar days written notice of its intent to terminate and shall provide the Grantee an opportunity to consult with the Commission regarding the reason(s) for termination. If this Agreement is terminated, the Commission shall only pay for those acts satisfactorily completed under this Agreement prior to the date of termination. The Commission shall not pay the Grantee for any work performed after such termination, except as described in Section 14.F.

12. The Commission may terminate this Agreement for convenience by providing the Grantee with 30 calendar days written notice. If this Agreement is terminated, the Commission shall only pay for those acts satisfactorily completed under this Agreement prior to the date of termination. The Commission shall not pay the Grantee for any work performed after such termination, except as described in Section 14.F.

13. This Agreement may be unilaterally terminated by the Commission for refusal by the Grantee to allow public access to all documents, papers, letters or other material made or received by the Grantee in conjunction with this Agreement, unless the records are exempt from Section 24(a), Article I of the Florida Constitution and Chapter 119, Florida Statutes. If this Agreement is terminated, the Commission shall only pay for those acts satisfactorily completed under this Agreement prior to the date of termination. The Commission shall not pay the Grantee for any work performed after such termination, except as described in Section 14.F.

14. If the Grantee materially fails to comply with the terms and conditions of this Agreement, including any Federal or State statutes, rules or regulations, applicable to this Agreement, the Commission may take one or more of the following actions, as appropriate for the circumstances.

A. Temporarily withhold cash payments pending correction of the deficiency by the Grantee.

B. Disallow (that is deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.

C. Wholly or partly suspend or terminate this Agreement.

D. Withhold further awards for the project or program.

E. Take other remedies that may be legally available.

F. Costs of the Grantee resulting from obligations incurred by the Grantee during a suspension or after termination of the Agreement are not allowable unless the Commission expressly authorizes them in the notice of suspension or termination.

G. The remedies identified above, do not preclude the Grantee from being subject to debarment and suspension under Presidential Executive Orders 12549 and 12689.

15. A. In accordance with Presidential Executive Order 12549, Debarment and Suspension (10 CFR Part 606, later moved to 2 CFR Part 901), the Grantee shall agree and certify that neither it, nor its principals, is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency; and, that the Grantee shall not knowingly enter into any lower tier contract, or other covered transaction, with a person who is similarly debarred or suspended from participating in this covered transaction, unless authorized in writing by USDOE to the Commission.

B. Upon execution of this Agreement by the Grantee, the Grantee shall complete, sign and return a copy of Attachment G, Certification Regarding Debarments, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Federally Funded Transactions.

C. As required by paragraphs A and B above, the Grantee shall include the language of this Section and Attachment G, Certification Regarding Debarments, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Federally Funded Transactions, in all subcontracts and sub-grants or lower tier agreements executed to support the Grantee's work under this Agreement.

16. The Grantee shall maintain books, records and documents directly pertinent to performance under this Agreement in accordance with generally accepted accounting principles. The Commission, the State of Florida, USDOE or their authorized representatives shall have access to such records for audit purposes during the term of this Agreement and for five years following Agreement completion. In the event any work is subcontracted, the Grantee shall similarly require each subcontractor to maintain and allow access to such records for audit purposes.

17. A. The Grantee shall retain and maintain all records referenced in Section 16 and make such records available for an audit as may be requested. Such records shall include independent auditor working papers, books, documents and other evidence, including but not limited to, vouchers, bills, invoices, requests for payment and other supporting documentation, which, according to generally accepted accounting principles, procedures and practices, sufficiently and properly reflect all program costs expended in the performance of this Agreement.

B. The Grantee agrees to comply with the audit requirements of Section 215.97, Florida Statutes, and those found in Attachment D, Special Audit Requirements as applicable.

C. The Grantee shall include the audit and record keeping requirements described above and in Attachment D, Special Audit Requirements, in all subcontracts and assignments with sub-grantees of funds according to Section 215.97, Florida Statutes. For purposes of this Agreement, "sub-recipient" shall be defined in accordance with Section 215.97(2)(x), Florida Statutes.

D. The Grantee must provide copies of any audit referencing this Agreement, the audit transmittal letter, and any response to such audit to the Commission within 30 calendar days of its receipt. The Grantee should confer with its chief financial officer, audit director or contact the Commission for assistance with questions pertaining to the applicability of these requirements.

18. A. The Grantee may subcontract work under this Agreement upon the condition that each Attachment C, Monthly Progress Report, contains a current list of subcontractors, the amount of each subcontract and a short description of work to be performed by that subcontractor. The Grantee shall be solely responsible for all work performed and all expenses incurred in connection with the development and implementation of the services, programs and activities under this Agreement whether directly performed or by subcontract.

B. The Grantee shall not enter into subcontracts in which the Commission or USDOE could be held liable to a subcontractor for any expenses or liabilities. The Grantee shall defend and hold the Commission and USDOE harmless of any liabilities, as applicable by Florida laws, incurred under any of the subcontracts entered into by the Grantee. The Grantee shall be liable for all work performed and all expenses incurred as a result of any subcontract.

C. The Grantee is encouraged to use small businesses, including minority, woman and service-disabled veteran-owned businesses as subcontractors or sub-vendors under this Agreement. The Grantee shall report to the Commission in each, Attachment C, Monthly Progress Report, its expenditures with minority, woman and service-disabled veteran-owned businesses. The directory of State of Florida certified minority, woman and service-disabled veteran-owned businesses can be accessed from the website of the Department of Management Services, Office of Supplier Diversity. The Attachment C, Monthly Progress Report, shall contain the names and addresses of the minority, woman and service-disabled veteran-owned businesses; the aggregate dollar figure disbursed that month for each business; the time period; type of goods or services and whether the business is minority, woman or service-disabled veteran-owned. If no expenditures were made to minority, woman and service-disabled veteran-owned businesses, the Grantee shall state "None" on that portion of the Attachment C, Monthly Progress Report.

19. The Grantee agrees to permanently refrain from using or mentioning its association with the Commission in advertisements, letterhead, business cards, etc. The Grantee's project with the Commission may be generally stated and described in the Grantee's professional resume. The Grantee may not give the impression in any event or manner, that the Commission endorses or recommends the Grantee.

20. A. The Grantee certifies that no Federal appropriated funds have been paid or will be paid, on or after December 22, 1989, by or on behalf of the Grantee, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress, in connection with the awarding, renewal, amending or modifying of any Federal contract, grant, or cooperative agreement. If any non-Federal funds are used for lobbying activities as described above, the Grantee shall submit Attachment I, Standard Form-LLL, Disclosure of Lobbying Activities, and shall file quarterly updates of any material changes. The Grantee shall require the language of this certification to be included in all subcontracts, and all subcontractors shall certify and disclose accordingly. [10 CFR Part 601]

B. In accordance with Section 216.347, Florida Statutes, the Grantee is hereby prohibited from using funds provided by this Agreement for the purpose of lobbying the Legislature, the judicial branch or a State agency.

C. Pursuant to the Lobbying Disclosure Act of 1995, any organization described in Section 501(c)4 of the Internal Revenue Code of 1986 shall not be eligible for subgrants under this Agreement, unless

such organization warrants that it does not, and will not, engage in lobbying activities prohibited by the Act as a special condition of the subgrant. This restriction does not apply to loans made pursuant to approved revolving loan programs or to contracts awarded using proper procurement procedures.

21. The Grantee shall comply with all applicable federal, state and local rules and regulations. The Grantee acknowledges that this requirement includes compliance with all applicable federal, state and local health and safety rules and regulations. The Grantee further agrees to include this provision in all subcontracts issued as a result of this Agreement.

22. The Grantee agrees to comply with, and include as appropriate in subcontracts, the applicable regulations listed in Attachment E, Federal Regulations, and the provisions contained in Attachment F, Federal Funding Grantee, Sub-grantee and Contractor Provisions.

23. The Commission's Grant Manager for this Agreement is identified below.

Commission Grant Manager: Mandy Norman	
Florida Energy and Climate Commission	
Executive Office of the Governor	
600 South Calhoun Street, Suite 251	
Tallahassee, FL 32399-0001	
Telephone No.:	850-487-3800
Fax No.:	850-922-9701
E-mail Address:	Mandy.norman@myflorida.com

24. The Grantee's Representative for this Agreement is identified below.

Lisa Tennyson	
Monroe County Board of County Commissioners	
Grants Administrator	
1100 Simonton Street	
Key West, FL 33040-3110	
Telephone No.:	305-292-4444
Fax No.:	305-292-4515
E-mail Address:	Tennyson-list@monroecounty-fl.gov
Grantee D-U-N-S :	073876757
Grantee CCR Registration Expiration Date:	5/21/2011

25. To the extent required by law, the Grantee will be self-insured against, or will secure and maintain during the life of this Agreement, Workers' Compensation Insurance for all of its employees connected with the work of this project. The Grantee shall require the subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Grantee. Such self-insurance program or insurance coverage shall comply fully with the Florida Workers' Compensation law. The Grantee shall provide, and cause each subcontractor to provide, adequate insurance satisfactory to the Commission, for the protection of its employees not otherwise protected if any class of employees engaged in hazardous work under this Agreement is not protected under Workers' Compensation statutes.

Documentation of all insurance coverage(s) required below, shall be submitted by the Grantee to the Commission. Upon expiration of documented proof of insurance coverage, the Grantee shall submit proof of continued insurance coverage to the Commission within 30 calendar days of insurance coverage expiration.

26. The Grantee, as an independent contractor and not an agent, representative, or employee of the Commission, agrees to carry adequate liability and other appropriate forms of insurance. The Commission shall have no liability except as specifically provided in this Agreement.

27. The Grantee covenants that it presently has no interest and shall not acquire any interest which would conflict in any manner or degree with the performance of services required.

28. The Grantee is authorized to purchase five current model vehicles, for use in performing the services described in Attachment A, Grant Work Plan. The Grantee must obtain written approval, in advance, of the vehicle type proposed for purchase and shall produce at least two written quotes for comparable vehicles prior to the vehicle purchase being authorized by the Commission.

Upon satisfactory completion of this Agreement, with Commission approval, the Grantee may retain ownership of the non-expendible personal property or equipment purchased under this Agreement. However, the Grantee shall complete and sign Attachment J, Property Reporting Form, and submit it to the Commission as an attachment to the Attachment B, Payment Request Summary Form, in which these costs are documented for reimbursement or match. The following terms shall apply:

A. The Grantee shall have use of the non-expendable personal property or equipment for the authorized purposes of the contractual arrangement as long as the required work is being performed.

B. The Grantee is responsible for the implementation of adequate maintenance procedures to keep the non-expendable personal property or equipment in good operating condition.

C. The Grantee is responsible for the implementation of manufacturer required maintenance procedures to keep the vehicles in good operating condition.

D. The Grantee shall secure and maintain comprehensive collision and general automobile liability coverage for the vehicles during the term of this Agreement. The Grantee is responsible for any applicable deductibles.

E. The Grantee is responsible for any loss, damage, or theft of, and any loss, damage, or injury caused by the use of, non-expendable personal property or equipment purchased with state funds and held in his possession for use in a contractual arrangement with the Commission.

F. The Grantee is responsible for the purchase of, and shall maintain a current State of Florida tag and registration for all vehicles purchased under the Agreement.

29. The employment of unauthorized aliens by any Grantee/vendor is considered a violation of Section 274A(e) of the Immigration and Nationality Act. If the Grantee/vendor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of this Agreement. The Grantee shall be responsible for including this provision in all subcontracts with private organizations issued as a result of this Agreement.

30. A. No person on the grounds of race, creed, color, national origin, age, sex or disability shall be excluded from participation in, be denied the proceeds or benefits of, or be otherwise subjected to discrimination in performance of this Agreement.

B. The Grantee agrees to comply with 10 CFR Part 1040 "Nondiscrimination in Federally Assisted Programs."

C. The Grantee affirms that it is aware of the provisions of Section 287.134(2)(a), Florida Statutes, and that at no time has the Grantee been placed on the Discriminatory Vendor List. The Grantee further agrees that it shall not violate such law and acknowledges and agrees that placement on the list during the term of this Agreement may result in the termination of this Agreement.

D. The Grantee affirms that it is aware of the provisions of Section 287.133(2)(a), Florida Statutes, and that at no time has the Grantee been convicted of a Public Entity Crime. The Grantee agrees that it shall not violate such law and further acknowledges and agrees that any conviction during the term of this Agreement may result in the termination of this Agreement. The Grantee shall insert a provision in accordance with this paragraph in all subcontracts for services in relation to this Agreement.

31. Land acquisition is not authorized under the terms of this Agreement.

32. A. If the Grantee brings to the performance of this Agreement pre-existing intellectual property, the Grantee shall retain all rights and entitlements to that pre-existing intellectual property.

B. All patent rights, copyrights, and data rights must be in accordance with 10 CFR Part 600 as referenced in Attachment H, Intellectual Property Provisions.

C. If, during the course of the Agreement, the Grantee modifies a pre-existing invention to the point where it is a new invention, patentable in its own right, or if any discovery or subject invention arises or is developed in the course of, or as a result of, work or services performed under this Agreement, or in any way connected herewith, the Grantee shall retain the entire right, title, and interest to each discovery or subject invention, subject to the provisions of this Section. With respect to any subject invention in which the Grantee retains title, the Commission shall have a royalty-free, nonexclusive, transferable, irrevocable, paid up license to practice or have practiced for, or on behalf of, the Commission or the State of Florida the subject invention and sublicense the same.

D. In the event that any books, manuals, films, software, databases, or other copyrightable material are produced, which are intended to be made available to the public, the Grantee shall notify the Commission. The Commission shall have a royalty-free, nonexclusive and irrevocable right to reproduce, publish, or otherwise use the work, and to authorize others to do the same. The Grantee hereby grants the Commission full authority and right to modify or create derivative works of, or allow others to modify or create derivative works on behalf of the Commission, any publications first produced under this Agreement. Any content submitted to the Commission which is asserted to be exempt under Florida's Public Records Act, Chapter 119, Florida Statutes, shall be clearly marked "business proprietary", "exempt," "confidential," or "trade secret" (as applicable), with the statutory basis for such claim of exemption, confidentiality, or trade secret specifically identified in writing. Failure to identify any such content shall constitute a waiver of any claimed exemption, confidentiality, or trade secret.

E. The terms and conditions specified in Section 32 shall also apply to any subcontracts made under this Agreement. The Grantee shall be responsible for informing the subcontractor of the provisions of this Section and obtaining disclosures.

33. The Grantee is encouraged to publish or otherwise make publicly available the results of the work conducted under this Agreement. USDOE requires an acknowledgement of Federal support. A disclaimer

must appear in the publication of any material, copyrighted or not, which was based on or developed under this Agreement, as follows:

> Acknowledgement: "This material is based upon work supported by the U.S. Department of Energy and the Florida Energy and Climate Commission under Award Number DE-EE0000241."
>
> Disclaimer: "This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof."

34. The Grantee is permitted to develop software or databases under the terms and conditions of this Agreement, including Section 32.

35. The Parties agree they will seek to resolve any disputes between them regarding their responsibilities as soon as possible and at the lowest level reasonable, in order to conserve the resources of the Parties. The Parties further agree to use their best efforts to assure speedy and non-confrontational resolution of any and all disputes between them.

36. This Agreement is executed and entered into in the State of Florida and shall be construed, performed and enforced in all respects in accordance with the laws and rules of the State of Florida. Any litigation arising under this Agreement shall be brought in the appropriate court in Leon, County, Florida, applying Florida Law.

37. This Agreement represents the entire agreement of the parties. Any alterations, variations, changes, modifications or waivers of provisions of this Agreement shall only be valid when they have been reduced to writing, duly signed by each of the parties and attached to the original of this Agreement, unless otherwise provided herein.

38. The following Attachments are incorporated into this Agreement:

Attachment	A	Grant Work Plan
Attachment	B	Payment Request Summary Form
Attachment	C	Monthly Progress Report
Attachment	D	Special Audit Requirements
Attachment	E	Federal Regulations
Attachment	F	Federal Funding Grantee, Sub-grantee and Contractor Provisions
Attachment	G	Debarment and Suspension Form
Attachment	H	Intellectual Property Provisions
Attachment	I	Disclosure of Lobbying Activities
Attachment	J	Property Reporting Form
Attachment	K	Annual Report

FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed, the day and year last written below.

MONROE COUNTY BOARD
OF COUNTY COMMISSIONERS

By:_____
Sylvia Murphy
County Mayor

Date:_____

STATE OF FLORIDA, EXECUTIVE OFFICE OF
THE GOVERNOR, Florida Energy and Climate Commission

By:_____
Alexander Mack
Program Administrator

Date:_____

ATTACHMENT A
GRANT WORK PLAN
FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARDS

A. PROJECT TITLE: Keys Energy Conservation Initiative

B. PROJECT LOCATION: Monroe County, Florida

C. PROJECT BACKGROUND:

Monroe County will implement a comprehensive energy savings project, in partnership with the City of Key West, City of Marathon and Islamorada, Village of Islands, which will include several cross-jurisdictional and individual community energy savings activities.

The Grantee has identified eight projects to execute a wide assortment of energy savings activities which will benefit 96% of the Keys population. The activities include installation of solar water heaters, energy efficiency outreach and education, retrofitting sports lighting, retrofitting outdoor lighting, development of an Energy Efficiency and Conservation Strategy (EECS), energy audits, purchase of hybrid vehicles and replacement of street lighting poles.

Affordable Residential Solar Water Heaters
The Grantee, in partnership with Habitat for Humanity (H4H), will install or replace conventional hot water heaters with solar hot water heaters in low to moderate income households. The Grantee will also issue rebates for solar water heaters. This component of the conservation initiative will be coordinated with NexGENergy and Monroe County's Weatherization program.

Energy Efficiency Educational Video Communication and Outreach
The Grantee will facilitate the production of a 15-minute video and radio segment for National Public Radio (NPR) to highlight the Keys Energy Conservation Initiative 2010. The educational and outreach materials will be available on local government websites and television channels. The materials will be disseminated by CD, DVD and email. Additionally, the Grantee will hold 12 educational workshops for commercial and residential energy efficiency measures. Outreach components of this project will increase the number of Green Living and Education (GLEE) Certified Green Business Partnerships by 100%.

Retrofit Local Park Ball Field Lighting
The Grantee will retrofit lighting in six public parks with new energy efficient light fixtures. The parks include the Clayton Sterling Sports Complex, Dewitt Roberts Softball Field, Rosa Hernandez Softball Field, George Mira Football Field, Nelson English Park and Pepe Hernandez Park. These parks are located in the City of Key West.

Greenhouse Gas Emissions Inventory, Energy Audits and Outdoor Lighting Retrofit
Phase 1: Greenhouse Gas (GHG) Emissions Inventory – The Grantee will select a consultant to conduct a greenhouse gas emissions inventory for the City of Marathon. A final report will document the results and recommended strategies for implementation.
Phase 2: Energy Audits – The Grantee will hire a consultant to conduct community residential and commercial energy audits and an energy audit for City facilities in the City of Marathon. The results of the studies will be made available to residents and the business community.
Phase 3: Outdoor Lighting Retrofit – The Grantee will conduct an outdoor lighting retrofit for Sombrero Beach Road street lights and Marathon Community park lights. The contractor will retrofit 250 outdoor lights.

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EECS Development
The Grantee will utilize technical assistance consulting services to assist a team of interdepartmental county staff members with the formulation of an energy efficiency, energy conservation and energy usage strategy. The strategy will identify the means to achieve goals, metrics for measuring progress, timelines for implementation, financing mechanisms and staff assignments. The EECS will ensure sustained benefits of the grant funds beyond the grant period.

County Facilities Energy Audit and Retrofit
The Grantee will implement energy efficiency measures, based upon audit findings, at four Monroe County facilities, located in Key West, with a total square footage of 197,823 and an annual energy cost of $534,019. An energy audit will allow the Grantee to develop base-line energy use and an in-depth report of quantifiable energy conservation recommendations to determine the most cost effective improvements and to ensure the best possible use of the retrofit funds. The building retrofits will emphasize efficiency and may include retrofit lighting, insulation, heating, ventilation and air-conditioning (HVAC) upgrades, training programs for operation and facility users and monitoring systems.

Hybrid Vehicle Purchase
The Grantee will reduce GHG emissions by upgrading the County fleet with five hybrid electric vehicles which represents 10% of the administrative fleet. The vehicles will replace five conventional gas-powered vehicles.

Replacement of Street Lighting Poles
The Grantee will replace interior street lighting, dog park lighting and security lighting in Founders Park and the Administrative & Public Safety Headquarters parking lot located within the park. This work will consist of stripping 90 existing poles, removing current heads, inspecting each post for damage, repairing damage, preparing poles for new solar heads to be installed, adjusting and strengthening mounts, adding mounting brackets and installation of solar heads. In addition, 10 new light poles will be installed at Plantation Hammock Preserve, Plantation Tropical Reserve, Hurricane Monument and Library Parks. The parks to receive retrofits through this component of the project are located in Islamorada, Village of Islands.

D. PROJECT OBJECTIVES:

- **Objective 1:** To reduce power consumption within the county by procuring and installing residential solar water heaters in a minimum of 20 low or moderate income households.
- **Objective 2:** To create an educational workshop for commercial and residential energy efficiency measures and a 15-minute video and radio segment to highlight the Keys Energy Conservation Initiative 2010.
- **Objective 3:** To reduce power consumption within the county by procuring and installing energy efficient outdoor sports lighting in six public parks.
- **Objective 4:** To reduce power consumption within the county by conducting a greenhouse gas emissions inventory, energy audits and 250 outdoor lighting retrofits for the City of Marathon.
- **Objective 5:** To reduce fossil fuel emissions in transportation, building, and other applicable public and private sectors by developing and implementing an Energy Efficiency and Conservation Strategy.
- **Objective 6:** To reduce power consumption within the county by implementing energy efficiency measures as recommended by an energy audit of four county facilities.
- **Objective 7:** To reduce GHG and energy consumption within the county by upgrading the county vehicle fleet with hybrid electric vehicles.
- **Objective 8:** To reduce the annual power consumption within the county by procuring and installing 100 solar powered light emitting diode (LED) street lighting poles.

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E. PROJECT DESCRIPTION: The Grantee has identified eight project(s) that will greatly reduce power consumption therefore reducing utility charges and equipment maintenance fees. The following tasks will be performed in order to meet the project objectives outlined above.

Task 1 - Affordable Residential Solar Water Heaters (Objective 1):

- **Task 1a:** Select a vendor following the procurement procedures outlined in 10 CFR 600, for solar water heater purchase and installation
- **Task 1b:** Coordinate with H4H to establish an eligible homeowner application
- **Task 1c:** Select a vendor, negotiate and execute contract
- **Task 1c:** Oversee installation of solar water heaters in 20 qualified affordable homes
- **Task 1d:** Coordinate with Keys Energy to provide solar water heater rebates of $450 each
- **Task 1e:** Submit a report to the Commission including photographs of the installed solar water heaters, utility bills documenting energy reduction, a list of applicants and invoices from both the manufacturer and the installer

Task 2 - Energy Efficiency Educational Video Communication and Outreach (Objective 2):

- **Task 2a**: Execute contract with Environmental Education Foundation
- **Task 2b:** Develop video content
- **Task 2c:** Produce video, upload to county website and provide to local governments for distribution
- **Task 2d:** Produce radio segment for Radio Green Earth show on NPR
- **Task 2e:** Coordinate educational outreach technical assistance workshops for businesses and residents
- **Task 2f:** Increase the number of GLEE Certified Green Business partnerships by 100%
- **Task 2g:** Submit a copy of all educational materials and video to the Commission documenting the energy efficiency conservation impacts of the project

Task 3 - Retrofit Local Park Ball Field Lighting (Objective 3):

- **Task 3a:** Select a vendor following the procurement procedures outlined in 10 CFR 600, to install ballpark lighting
- **Task 3b:** Oversee installation of ballpark lights in six public parks
- **Task 3c:** Submit a report to the Commission including photographs of the installed lighting, utility bills documenting energy reduction, and invoices from both the manufacturer and the installer

Task 4 - Greenhouse Gas Emissions Inventory, Energy Audits and Outdoor Lighting Retrofit (Objective 4):

- **Task 4a** Select a vendor following the procurement procedures outlined in 10 CFR 600, 1) a greenhouse gas emissions inventory, 2) a community energy audit and 3) city energy audits
- **Task 4b:** Select a vendor following the procurement procedures outlined in 10 CFR 600, to install outdoor lighting
- **Task 4c:** Define scope of work to identify audit needs
- **Task 4d:** Conduct site inspections
- **Task 4e:** Complete data gathering and analysis for completion of 600 audits
- **Task 4f:** Oversee installation of 250 outdoor lights
- **Task 4g:** An audit report will be created to establish baseline emissions inventory for a base year and for a forecast year to identify emissions reduction targets for the forecast year and identify recommended actions, policies and measures
- **Task 4h:** Submit the final audit report to the Commission and photographs of the installed lighting, utility bills documenting energy reduction, and invoices from both the manufacturer and the installer

Task 5 - EECS Development (Objective 5):

- **Task 5a:** The Grantee will develop a scope of work for the EECS
- **Task 5b:** Select a vendor following the procurement procedures outlined in 10 CFR 600, for a technical assistance consultant to assist with plan development and data
- **Task 5c:** Develop EECS for county facilities and operations including energy efficiency, energy conservation and energy usage goals
- **Task 5d:** Provide the Commission with an electronic copy of the EECS.

Task 6 – County Facilities Energy Audit and Retrofit (Objective 6):

- **Task 6a:** Select a vendor following the procurement procedures outlined in 10 CFR 600, for an engineering firm to conduct Grade Energy Audits for four county facilities located in Key West
- **Task 6b:** Create a scope of work and construction bid documents based on energy audit findings
- **Task 6c:** Implementation and installation of energy efficiency measures as approved by the Commission and recommended in the audit report
- **Task 6d:** Submit a report to the Commission including the audit report, photographs of the installed systems, utility bills documenting energy reduction, and invoices from both the manufacturer and the installer

Task 7 - Hybrid Vehicle Purchase (Objective 7):

- **Task 7a:** Prepare purchase order for five hybrid vehicles following the procurement procedures outlined in 10 CFR 600.
- **Task 7b:** Finalize purchase of vehicles
- **Task 7c:** Paint and decal vehicles to increase awareness of alternative fuel vehicles
- **Task 7d:** Conduct a training workshop for drivers and maintenance staff
- **Task 7e:** Submit a report to the Commission including photographs of the hybrid vehicles, records of savings and invoices

Task 8 - Replacement of Street Lighting Poles (Objective 8):

- **Task 8a:** Identify and designate locations for new light poles
- **Task 8b:** Select a vendor following the procurement procedures outlined in 10 CFR 600, for electricians to retrofit 90 existing poles
- **Task 8c:** Obtain quotes or advertise for the purchase of 100 solar powered light fixtures
- **Task 8d:** Identify existing underground utilities and mark sites for new poles
- **Task 8e:** Award contract and purchase order for 100 fixtures
- **Task 8f:** Installation of new light poles
- **Task 8g:** Submit a report to the Commission including photographs of the installed street lighting poles, utility bills documenting energy reduction, and invoices from both the manufacturer and the installer

F. PROJECT MILESTONES/DELIVERABLES/OUTPUTS:

The tables below identify the month of the project each task will start and be accomplished for all eight components of the Keys Energy Conservation Initiative.

1. Affordable Residential Solar Water Heaters

No.	Task/Activity Description	Deliverables/ Outputs	Start Month	Deadline Month
1	Select a vendor following the procurement procedures outlined in 10 CFR 600, for solar water heater purchase and installation	Submit RFP to Commission	1	2
2	Develop application for eligible homeowners	Submit application to Commission	2	2
3	Oversee installation of solar water heaters in 20 homes	Contract executed for installation and materials purchased. Copies of invoices sent to the Commission	3	16
4	Coordinate with the Weatherization program to assist homeowners with additional retrofits	Provide homeowners with recommendations	5	16
5	Coordinate rebates with Keys Energy	Use rebates to increase # solar heaters to be installed	10	16
6	Final Report	Submit a report including photographs of the installed water heaters, utility bills and invoices	18	18

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2. Energy Efficiency Educational Video Communication and Outreach

No.	Task/Activity Description	Deliverables/ Outputs	Start Month	Deadline Month
1	Execute contract with Environmental Education Foundation	Contract approved an signed by Board of County Commissioners	2	3
2	Develop content and produce energy educational video	Submit outline of content to Commission and place on County website	3	9
3	Produce radio segment	Radio segment broadcasted on NPR	10	12
4	Coordinate 12 technical assistance workshops for business and residents	Training workshops and public educations sessions complete, a list of attendees and evaluations forms provided to the Commission	10	16
5	Final Report	Submit a report including educational materials created with funds	18	18

3. Retrofit Local Park Ball Field Lighting

No.	Task/Activity Description	Deliverables/ Outputs	Start Month	Deadline Month
1	Solicit RFP for ballpark lighting	Contractor selected for installation of lighting	1	6
2	Oversee installation of ballpark lights	Lighting installed in six public parks	6	11
3	Final Report	Submit a report including photographs of the light retrofit, utility bills and invoices	11	13

4. Greenhouse Gas Emissions Inventory, Energy Audits and Outdoor Lighting Retrofit

No.	Task/Activity Description	Deliverables/ Outputs	Start Month	Deadline Month
1	Select a vendor following the procurement procedures outlined in 10 CFR 600, 1) a greenhouse gas emissions inventory, 2) a community energy audit and 3) city energy audits	Submit RFP to Commission	1	4
2	Select a vendor following the procurement procedures outlined in 10 CFR 600, for outdoor lighting installation	Submit RFP to Commission	2	4
3	Sign contract with consultants	Consultants selected to conduct GHG inventory, community energy audit and city energy audit	4	5
4	Define scope of work and identify audit needs	Submit scope of work to Commission	5	8
5	Site inspections, measurements and data analysis	Consultant will draft final report for City approval	8	14
6	Oversee installation of outdoor lighting	250 outdoor lights installed	10	14
7	Final Report	Final audit reports submitted to Commission	15	16

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5. EECS Development

No.	Task/Activity Description	Deliverables/ Outputs	Start Month	Deadline Month
1	Develop scope of work for EECS	Scope of work complete	1	3
2	Select a vendor following the procurement procedures outlined in 10 CFR 600, for a technical assistance consultant to assist with plan development and data	Consultant assisted with plan development and data gathering	3	6
3	Develop EECS for county facilities and operations including energy efficiency, energy conservation and energy usage goals	EECS adopted by Board of County Commissioners	6	13
4	Final Report	Final EECS submitted to Commission	14	14

6. County Facilities Energy Audit and Retrofit

No.	Task/Activity Description	Deliverables/ Outputs	Start Month	Deadline Month
1	Select a vendor following the procurement procedures outlined in 10 CFR 600, for an engineering firm to conduct Grade Energy Audits for four county facilities located in Key West	Agreement signed and approve by Board of County Commissioners	1	2
2	Conduct energy audit	Detailed investment grade audit submitted to County	2	2
3	Define scope of work for retrofits as recommended in energy audit	Submit scope of work to Commission	3	6
4	Execute contract for facility retrofits	Board of County Commissioners approval and execution	6	9
5	Complete installation of energy efficiency retrofits	Installation documentation complete	9	18
6	Complete measurement and verification	Energy saving calculations documented	17	18
7	Final Report	Submit a final report to include evidence of energy savings as a result of the energy audit	18	18

7. Hybrid Vehicle Purchase

No.	Task/Activity Description	Deliverables/ Outputs	Start Month	Deadline Month
1	Prepare purchase order for five hybrid vehicles following the procurement procedures outlined in 10 CFR 600.	Vehicles ordered	1	2
2	Finalize purchase of vehicles and arrival	Vehicles arrive	2	6
3	Paint and decal vehicles	Vehicles painted and decaled to increase awareness of alternative fuel vehicles	6	7
4	Conduct a training workshop for drivers and maintenance staff	Workshops and training completed	8	11
5	Final Report	Submit a report to the Commission including photographs of the hybrid	12	12

		vehicles, records of savings and invoices		

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GRANT WORK PLAN

8. Replacement of Street Lighting Poles

No.	Task/Activity Description	Deliverables/ Outputs	Start Month	Deadline Month
1	Select a vendor following the procurement procedures outlined in 10 CFR 600, for electricians to retrofit 90 existing poles	Electrician selected	1	3
2	Obtain quotes for the purchase of solar powered light fixtures	Solar light fixtures purchased	3	4
3	Identify existing underground utilities and mark sites for new poles	Sites prepared for installation	3	8
4	Installation of new light poles	Light poles installed	4	8
5	Final Report	Submit a report to the Commission including photographs of the installed street lighting poles, utility bills and invoices	9	9

ATTACHMENT A
GRANT WORK PLAN

G. PROJECT BUDGET:

The budget below summarizes the project by Funding Category. All dollar amounts are rounded to the nearest whole dollar value.

Funding Category	Grant Funds	Cost Share: Matching Funds and Other In-Kind Contributions	
		Funding	Source of Funds
1. Salaries	$109,614.00	$270,831.52	Monroe County, Habitat for Humanity, UF/GITF, City of Key West GR, City of Marathon GR, UF, Islamorada GR
2. Fringe Benefits	$32,884.00	$76,096.27	Monroe County, UF, City of Key West GR, Islamorada GR
3. Travel (if authorized)	$0.00	$7,549.00	Monroe County
4. Supplies/Other Expenses	$8,125.00	$83,663.00	Monroe County, Habitat for Humanity, Green Living and Energy Education Inc, City of Key West GR, Islamorada GR
5. Equipment	$ 111,875.00	$0.00	Keys Energy Services, Federal Tax Credit
6. Contractual Services	$2,424,790.00	$164,757.00	Monroe County, NexGENergy, Environmental Education Foundation, KEYS Energy, City of Marathon GR, Cameron-Cole LLC
7. Indirect (if authorized)	$0.00	$0.00	N/A
Total Project Budget	**$2,687,288.00**	**$602,896.79**	
Total Project Cost	**$3,290,184.79**	= Grants Funds + Cost Share	
Cost Share Percentage	**18.3%**	= Cost Share / Total Project Cost	

H. TOTAL BUDGET BY TASK:

The project budget below summarizes the project by Project Task. Project Tasks correspond to the "Project Description" section. All dollar amounts are rounded to the nearest whole dollar value.

Project Task		Grant Funds	Cost Share: Matching Funds and Other In-Kind Contributions	
			Matching Funds	Source
1	Complete Residential Solar Water Heater	$130,000.00	$47,281.00	Monroe County, Habitat for Humanity
2	Complete Energy Education and Outreach	$30,000.00	$105,661.00	UF/GITF, Monroe County, Green Living and Energy Education, Inc, Environmental Education Foundation
3	Complete Ball Park Light Retrofit	$744,790.00	$113,985.42	City of Key West, KEY Energy
4	Complete GHG Inventory, Audit and Lighting	$400,000.00	$110,972.89	City of Marathon
5	Complete EECS	$20,000.00	$96,364.48	UF, Monroe County, Cameron-Cole LLC
6	Complete County Facilities Audit and Retrofit	$700,000.00	$69,400.03	Monroe County
7	Complete Purchase of Hybrid Vehicles	$120,000.00	$4,78100	Monroe County
8	Complete Solar Park Lighting	$400,000.00	$48,243.00	Islamorada
9	Ongoing Project Admin and Reporting	$142,498.00	$7,591.00	Monroe County
	Totals:	**$2,687,288.00**	**$602,896.79**	
	Total Project Cost:	**$3,290,784.79**	= Grant Funds + Cost Share	

ATTACHMENT A
GRANT WORK PLAN

I. BUDGET DETAIL:

Using the definitions provided below, the detailed, line-item budget clarifies the Budget Summary shown in Section G. Budget Category Sub-Totals have been rounded to the nearest whole dollar value. Up to 10% of grant funds may be used for administrative costs, excluding the cost of meeting reporting requirements of the program. Administrative costs are defined as: allowable, reasonable, and allocable Direct and Indirect costs related to overall management of the awarded grant (including travel). For each budget line-item, the appropriate column identifies if the cost is: 1) Grant or Match, 2) a Direct cost used to calculate Indirect Costs (if approved) and 3) whether the cost is Administrative in nature. A description of what is required for each budget category is as follows:

1. *Salaries* - Identify the persons to be compensated for work on this project by name (if known), position, and title. Show the hourly cost and total hours to be charged for each person or position. Divide annual salaries by 2080 hours and nine month academic salaries by 1560 hours, to find the hourly rate.

2. *Fringe Benefits* - Multiply the rate by the total salaries to which fringe benefits apply. If the rate is variable, explain and show calculations.

3. *Travel* - List trips by their purpose and/or destination. Indicate the number of days for each trip. The Commission will only reimburse for travel at the appropriate State of Florida rate (Section 112.061, Florida Statutes), using the forms referenced in Attachment B, Payment Request Summary Form. Be prepared to provide the Commission with details on costs utilized to calculate the "Amount Budgeted" for each trip.

4. *Supplies & Other Expenses* - List expendable supplies by category description, unit costs and quantity. List other expenses not included in any of the above categories. Examples would be printing, copying, postage, communications, etc. Non-expendable equipment valued at less than $1,000 may be listed also. Include only expenses directly related to the project, not expenses of a general nature. For Match only, list costs related to donated real property such as land (not to exceed the fair market value of the property).

5. *Equipment* - List non-expendable personal property/equipment valued at $1,000 or more by description, unit cost, and quantity. Computers and data-processing equipment should be described in detail.

6. *Contractual Services* - Subcontractors should provide the same information required by this budget table, with the following exceptions: (a) when professional services are provided at a pre-existing approved rate or fee shown on the budget; or (b) the subcontract is to be obtained competitively. For either (a) or (b), show an estimated maximum amount.

7. *Indirect Costs/Rate* – Indirect Costs are not authorized.

8. *Total Budget Category* – Show the total of all line-items within a Budget Category.

9. *Total Budget* - Show the total of all categories.

ATTACHMENT A
GRANT WORK PLAN

1. Salaries

	Salaries (Name/Position)	Hourly Cost ($)	*	Hours/wk. or % FTE	=	Total Gross Salary ($)	Grant = G or Match = M	Direct costs used to calculate Indirect Cost? Y/N	Admin. Cost? Y/N
1	HFH Administrative Support Services	$19.95		3.5hrs/wk	=	$4,650.00	M	N	N
	HFH Contract and Site Coordination	$37.98	*	2.7hrs/wk	=	$10,800.00	M	N	N
2/5	Project Management for Solar Water Heater Component	$22.00	*	153	=	$3,370.00	M	N	N
	Douglas Gregory	$43.80	*	12hrs/wk	=	$54,662.00	M	N	N
	Alicia Betancourt	$23.12	*	11hrs/wk	=	$26,449.00	M	N	N
3	Mark Finigan	$53.85	*	312	=	$16,801.20	M	N	N
	Jay Gewin	$29.72	*	312	=	$9,272.64	M	N	N
	Rod Delostrinos	$32.69	*	312	=	$10,199.28	M	N	N
4	Land Steward, City of Marathon	$24.04	*	350	=	$8,414.00	M	N	N
	Community Services Director	$39.18	*	275	=	$10,774.50	M	N	N
	Building Department, Marathon	$18.75	*	150	=	$2,812.50	M	N	N
	Code Department, Marathon	$21.15	*	150	=	$3,172.50	M	N	N
	Public Works Department, Marathon	$24.04	*	150	=	$3,606.00	M	N	N
	Fire Rescue Department, Marathon	$25.00	*	150	=	$3,750.00	M	N	N
	Marina Department, Marathon	$19.23	*	150	=	$2,884.50	M	N	N
	Utilities Department, Marathon	$33.65	*	150	=	$5,047.50	M	N	N
	Finance Department, Marathon	$19.23	*	150	=	$2,884.50	M	N	N
6	Bob Stone, Project Management	$34.61	*	35% for 2 yrs	=	$50,392.16	M	N	N
7	Roy Sanchez, Fleet Manager	$44.39	*	5%	=	$4,616.56	M	N	N
8	John Sutter, Dir Parks/Rec & PW	$48.00	*	180	=	$8,640.00	M	N	N
	Cheryl Atkins, Procurement/Grants	$27.00	*	360	=	$9,720.00	M	N	N
	Lesli Wojtecki, Maintenance Mgr	$27.47	*	480	=	$13,185.60	M	N	N
	Mary Swaney, Ex Assist to VM	$26.26	*	180	=	$4,726.80	M	N	N
Admin	Grant Administrator	$36.00	*	15% for 2 yrs	=	$22,464.00	G	N	Y
	County Extension Director	$42.00	*	15% for 2yrs	=	$26,208.00	G	N	Y
	County Extension Educator	$23.00	*	15% for 2 yrs	=	$14,352.00	G	N	Y
	Senior Budget Analyst (2)	$22.00	*	30% for 2 yrs	=	$27,456.00	G	N	Y
	Chief Accountant	$26.00	*	10% for 2 yrs	=	$10,816.00	G	N	Y
	Accountant	$20.00	*	10% for 2 yrs	=	$8,320.00	G	N	Y
	Sub-Totals for Salaries Category					**$380,445.52**			

ATTACHMENT A
GRANT WORK PLAN

2. Fringe Benefits

	Name of Employee	Amount Gross Salary ($)	Approved % per Work Plan or enter "N/A" & provide break-out	Benefit # 1 Fica/Med 7.65% & Cost	Benefit # 2 Health/ Workers Comp 20% & Cost	Benefit # 3 Retirement 2.35% & Cost	Total Fringe Benefits ($)	Grant = G or Match = M	Direct costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
1	Project Management	$3,370.00	N/A	$258	$674	$79	$1,011	M	N	N
2/5	Douglas Gregory	$54,662.00	27.8%	$	$	$	$15,196.04	M	N	N
	Alicia Betancourt	$26,449.00	27.8%	N/A	N/A	N/A	$7,352.82	M	N	N
3	Mark Finigan	$16,801.20	31%	N/A	N/A	N/A	$5,208.37	M	N	N
	Jay Gewin	$9,272.64	31%	N/A	N/A	N/A	$2,874.52	M	N	N
	Rod Delostrinos	$10,199.28	31%	N/A	N/A	N/A	$3,161.78	M	N	N
4	Land Steward	$8,414.00	31%	N/A	N/A	N/A	$2,608.34	M	N	N
	Community Srvcs Director	$10,774.50	31%	N/A	N/A	N/A	$3,340.10	M	N	N
	Building Department	$2,812.50	31%	N/A	N/A	N/A	$871.88	M	N	N
	Code Department	$3,172.50	31%	N/A	N/A	N/A	$983.48	M	N	N
	Public Works Department	$3,606.00	31%	N/A	N/A	N/A	$1,117.86	M	N	N
	Fire Rescue Department	$3,750.00	31%	N/A	N/A	N/A	$1,162.50	M	N	N
	Marina Department	$2,884.50	31%	N/A	N/A	N/A	$894.20	M	N	N
	Utilities Department	$5,047.50	31%	N/A	N/A	N/A	$1,564.73	M	N	N
	Finance Department	$2,884.50	31%	N/A	N/A	N/A	$894.20	M	N	N
6	Bob Stone, Project Management	$50,392.00	N/A	$3,855	$ 10,078	$ 1,184	$ 15,117.00	M	N	N
7	Roy Sanchez, Fleet Manager	$ 4,617.00	N/A	$353	$ 1,002	$ 138	$1,493.00	M	N	N
8	John Sutter, Dir Parks/Rec & PW	$8,640.00	31%	N/A	N/A	N/A	$2,678.40	M	N	N
	Cheryl Atkins, Procurement/Grants	$9,720.00	31%	N/A	N/A	N/A	$3,013.20	M	N	N
	Lesli Wojtecki, Maintenance Mgr	$13,185.60	31%	N/A	N/A	N/A	$4,087.54	M	N	N
	Mary Swaney, Exec Assist to VM	$ 4,726.80	31%	N/A	N/A	N/A	$1,465.31	M	N	N
P E	Grant Administrator	$22,464.00	N/A	$1,719	$ 4,493	$ 528	$6,740.00	G	N	Y

	County Extension Director	$26,206.00	N/A	$2,005	$ 5,241	$ 616	$7,862.00	G	N	Y
	County Extension Educator	$14,352.00	N/A	$1,098	$ 2,870	$ 337	$4,305.00	G	N	Y
	Senior Budget Analyst (2)	$27,456.00	N/A	$2,100	$ 5,491	$ 645	$8,236.00	G	N	Y
	Chief Accountant	$10,816.00	N/A	$827	$ 2,163	$ 254	$3,244.00	G	N	Y
	Accountant	$8,320.00	N/A	$637	$ 1,664	$ 196	$2,497.00	G	N	Y
						Sub-Total of Fringe Benefits Category	**$108,980.27**			

3. Travel * Cannot exceed cost limitations required by Section 112.061, Florida Statutes

	Name of Employee	Destination	Period of Trip (# of days)	Purpose of Trip	Amount Budgeted	Grant = G or Match = M	Direct costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
2	Douglas Gregory	Key West, Marathon and Islamorada	2x per month for 6 months	Travel to centrally located meetings of all project partners and stakeholders for development of video content and production	$516.00	M	N	N
	Alicia Betancourt	Key West, Marathon and Islamorada	2x per month for 6 months	Travel to centrally located meetings of all project partners and stakeholders for development of video content and production	$516.00	M	N	N
6	Bob Stone, Project Management	Key West	100 trips (98miles and lunch x 100 trips)	On-site to monitor energy audits and retrofit/construction	$ 5,461.00	M	N	N
Admin	Grant Admin	Key West to Marathon	1x month (24 days, total)	Coordination meetings with partners	$ 528.00	M	N	Y
	Ext Serv Dir	Key West to Marathon	1x month (24 days, total)	Meetings with Green Task Force for project activities	$ 528.00	M	N	Y
				Sub-Total of Travel Category	**$7,549**			

ATTACHMENT A
GRANT WORK PLAN

4. Supplies - Other Expenses

	Description	Unit Cost ($)	*	Quantity	=	Total Cost ($)	Grant = G or Match = M	Direct costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
1	Rebates for Solar Water Heaters	$450.00	*	20	=	$9,000.00	M	N	N
	Utility Rebate from Keys Energy	$450.00		20		$9,000.00			N
	Advertising Materials to Publicize Program	$450.00	*	1	=	$450.00	M	N	N
2	Hosting Energy Efficiency Educational workshops – Room Rentals, Advertising, Record Keeping, Presentations	$250.00	*	4	=	$1,000.00	M	N	N
	Advertising - Green Business Educational Outreach and Partnership Development	$20,000.00	*	2	=	$40,000.00	M	N	N
	Marketing and Record Keeping - Residential 12 Step Outreach	$4,000.00	*	2	=	$8,000.00	M	N	N
	Coordinating/hosting 2 annual community-wide Green Living Awards events	$2,000.00	*	2	=	$4,000.00	M	N	N
3	Copying, Postage and Phone/Fax for ballpark retrofit	$370.00	*	1	=	$370.00	M	N	N
	Advertisement for RFP of ballpark retrofit	$500.00	*	1	=	$500.00	M	N	N
5	Office supplies, paper, postage, phone and internet for EECS development	$800.00	*	1	=	$800.00	M	N	N
6	Expenses related to 2 vendor selection processes (RFP announcements, advertising, etc.)	$1,500.00	*	1	=	$1,500.00	M	N	N
	Office supplies (paper, copies, postage, phone, etc.)	$1,350.00	*	1	=	$1,350.00	M	N	N
7	Tags	$93.60	*	5	=	$468.00	M	N	N
	Painting/Decal to Advertise Initiative	$1,625.00	*	5	=	$8,125.00	G	N	N
8	Copying	$0.15	*	300	=	$45.00	M	N	N
	Postage	$20.00	*	4	=	$80.00	M	N	N
	Bid advertisement	$150.00	*	4	=	$600.00	M	N	N
Admin	Office supplies, paper, postage, telephone, etc.	$6,500.00	*	1	=	$6,500.00	M	N	Y
	Sub-Total of Supplies - Other Expenses Category					**$ 91,788**			

ATTACHMENT A
GRANT WORK PLAN

5. Equipment

	Description	Unit Cost ($)	*	Quantity	=	Total Cost ($)	Grant = G or Match = M	Direct costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
7	Hybrid Vehicles	$ 22,375.00	*	5	=	111,875.00	G	N	N
			*		=				
				Sub-Total of Equipment Category		$ 111,875.00			

6. Contractual Services

	Name of Vendor	Description	Fee/Rate ($)	*	Quantity	=	Total Cost ($)	Grant = G or Match = M	Direct costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
1	TBD	Solar Water Heater Equipment and Installation	$6,500.00	*	20	=	$130,000.00	G	N	N
	NexGENergy	Retrofit Technical Assistance for Residents and Businesses	$18,000.00	*	1	=	$18,000.00	M	N	N
2	Environmental Education Foundation/Radio Green Earth	Video and Radio Segment Production	$30,000.00	*	1	=	$30,000.00	G	N	N
	Green Initiatives Task Force	Development of Educational Video	$3,841.00	*	1	=	$3,841.00	M	N	N
	Environmental Education Foundation/Radio Green Earth	Content Development Assistance and Coordination	$30,000.00	*	1	=	$30,000.00	M	N	N
3	KEYS Energy	Installation of Light Fixtures	$ $45936.00	*	1	=	$45936.00	M	N	N
	TBD	Rewiring Poles for Light Fixtures	$30,000.00	*	1	=	$30,000.00	G	N	N
	TBD	Electrical Engineering and Design	$17,000.00	*	1	=	$17,000.00	G	N	N
	TBD	Removal & Disposal	$50,000.00	*	1	=	$50,000.00	G	N	N
	TBD	Green Generation Luminaries or Compatible Light Fixtures	$3,016.00	*	190	=	$573,040.00	G	N	N

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GRANT WORK PLAN

	TBD	New Light Poles	$2,990.00	*	25	=	$74,750.00	G	N	N
4	Consultant – GHG Emissions Inventory	Conduct GHG Emissions Inventory	$10,000.00	*	1	=	$10,000.00	G	N	N
	Consultant – City Energy Audit	Conduct City Energy Audit	$20,000.00	*	1	=	$20,000.00	G	N	N
	Consultant – Community Energy Audit	Conduct Community Energy Audits	$200.00	*	600	=	$120,000.00	G	N	N
	Lighting Retrofit Contractor	Conduct retrofit of outdoor lighting in the City of Marathon	$1,200.00	*	250	=	$300,000.00	G ($250,000) + M ($50,000)	N	N
5	Cameron-Cole, LLC	Technical Consulting Services to develop EECS	$155/hour	*	220	=	$34,100.00	G(20,000) + M (14,100)	N	N
5	Green Initiatives Task Force	Development of EECS	$2,880.00	*	1	=	$2,880.00	M	N	N
6	Engineering Firm	Investment Grade Energy Audits	$17,500.00	*	4	=	70,000.00	G	N	N
	Construction Firm	Retrofit Construction (to be determined by findings of energy audit)	$157,500.00	*	4	=	630,000.00	G	N	N
8	TBD	Install Solar Fixtures	40,000.00	*	1	=	40,000.00	G	N	N
	TBD	Install 10 New Poles	15,000.00	*	1	=	15,000.00	G	N	N
	TBD	Removal & Disposal	30,000.00	*	1	=	30,000.00	G	N	N
	TBD	Light Pole Heads	$3,000.00	*	100	=	300,000.00	G	N	N
	TBD	Light Poles (New)	$1,500.00	*	10	=	15,000.00	G	N	N
Sub-Total of Contractual Services Category							**$2,589,547**			

ATTACHMENT A
GRANT WORK PLAN

7. Indirect Cost (if approved)

Budget Category included in Base of Indirect Cost Calculations	Total Direct Costs for Budget Category	*	Approved Indirect Cost Rate (%) from Grant Work Plan	=	Total Indirect Cost for Budget Category ($)	=	Total Indirect Costs for Grant	+	Total Indirect Costs for Match
N/A	$	*		=	$	=	$	+	$
Sub-Total of Indirect Costs Category					$ N/A	=	$	+	$

8. Total Project Budget

Budget Category	Total Costs for Budget Category	=	Total Grant Costs	+	Total Match Costs
1. Salaries	$380,445.52	=	$109,614.00	+	$270,831.52
2. Fringe Benefits	$108,980.27	=	$32,884.00	+	$76,096.27
3. Travel (if authorized)	$7,549.00	=	$0.00	+	$7,549
4. Supplies/Other Expenses	$91788.00	=	$8,125.00	+	$83,663.00
5. Equipment	$ 111,875.00	=	$111,875.00	+	$0.00
6. Contractual Services	$2,589,547.00	=	$2,424,790.00	+	$164,757.00
Total Project Budget	**$3,290,184.79**	=	**$2,687,288.00**	+	**$602,896.79**

J. MEASURES OF SUCCESS: In the Final Report, the Grantee shall address how the project objectives were accomplished.

FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010

ATTACHMENT B
PAYMENT REQUEST SUMMARY FORM

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARDS

Grantee: _____
Mailing Address: _____
_____
Grant Agreement No.: _____
Date Of Request: _____

Amount Requested:$ _____

Grantee's Representative:
_____
Reimbursement Request No.: _____

Reimbursement Period: _____ **to** _____

Percent Matching Required: _____

PROJECT EXPENDITURES SUMMARY SECTION

CATEGORY OF EXPENDITURE	AMOUNT OF THIS REQUEST	TOTAL CUMULATIVE PAYMENTS	MATCHING FUNDS	TOTAL CUMULATIVE MATCHING FUNDS
1. Salaries	$	$	$	$
2. Fringe Benefits	$	$	$	$
3. Travel (if authorized)	$	$	$	$
4. Supplies/Other Expenses	$	$	$	$
5. Equipment	$	$	$	$
6. Contractual Services	$	$	$	$
7. Indirect Costs (if authorized)	$	$	$	$
TOTAL AMOUNT EXPENDED	$	$	$	$
Less Retainage* (10% of TOTAL AMOUNT EXPENDED)	$	$		
TOTAL AMOUNT TO BE REIMBURSED	$	$		
AGREEMENT AMOUNT	$		$	
Less TOTAL AMOUNT EXPENDED:	$		$	
TOTAL AVAILABLE BALANCE	$		$	

** The cumulative Retainage amount shall be reimbursed on the Final Reimbursement Request, upon approval of the Final Report by the Commission's Grant Manager.*

GRANTEE CERTIFICATION

The undersigned certifies that the amount being requested for reimbursement above is for items that were charged to and utilized only for the above cited grant activities.

Grantee's Representative's Signature	Grantee's Fiscal Agent
Print Name	Print Name
Telephone Number	Telephone Number

GRANT REIMBURSEMENT DETAIL

GRANT FUNDING

1. Salaries

Employee Name	Paycheck #	Gross Paycheck Amount ($)	Hourly Rate ($/hrs)	Hours Worked	Type of Work Performed and Date of Services	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Sub-Total of Salaries:		$ -						

2. Fringe Benefits

Name of Employee	Amount of Gross Salary ($)	Approved Rate (%) of Fringe Benefits per Work Plan or enter "N/A" & provide break out	Benefit # 1 & Cost	Benefit # 2 & Cost	Benefit # 3 & Cost	Amount requested ($)	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
	$		$	$	$	$			
	$								
Sub-Total of Fringe Benefits:									

3. Travel

Name of Employee Traveling	Destination	Dates of Trip	Amount Paid ($)	Copies of all receipts attached? (Y/N)	Purpose of Trip	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Sub-Total of Travel:			$					

4. Supplies-Other Expenses

Name of Vendor from which goods were purchased	Vendor's Invoice #	Amount Paid ($)	Grantee Check #	Grantee Check Date	Description of Goods Purchased and Dates Received	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Sub-Total of Supplies-Other Expenses :		$ -						

GRANT REIMBURSEMENT DOCUMENTATION DETAIL (continued)

5. Equipment

Name of Vendor from which goods were purchased	Vendor's Invoice #	Amount Paid ($)	Grantee Check #	Grantee Check Date	Description of Goods Purchased and Dates Received	Property Form Attached? (Y/N)	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Sub-Total of Expenses:		$ -							

6. Contractual Services

Name of Vendor Performing Contractual Services	Vendor's Invoice #	Amount Paid ($)	Grantee Check #	Grantee Check Date	Description of Contractual Services and Dates Received	Listed on Progress Report? (Y/N)	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Sub-Total of Contractual:		$ -							

7. Indirect Costs, if allowable

Direct Costs Sub-Total to calculate Indirect Costs on this Invoice	Approved Indirect Cost Rate (%)	Amount documented ($)
Sub-Total of Indirect Costs:		$ -

Total Grant Reimbursement Summary

Note: Information provided on the Grant Reimbursement Documentation Detail must correspond with the approved Attachment A, Grant Work Plan, Attachment B - Project Expenditures Summary Section and supporting documentation.

Total Grant Funds Requested :	$

1. Salaries

Employee Name	Paycheck #	Gross Paycheck Amount ($)	Hourly Rate ($/hrs)	Hours Worked	Type of Work Performed and Date of Services	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Sub-Total of Salaries:		$ -						

2. Fringe Benefits

Name of Employee	Amount of Gross Salary ($)	Approved Rate (%) of Fringe Benefits per Work Plan or enter "N/A" & provide break out	Benefit # 1 & Cost	Benefit # 2 & Cost	Benefit # 3 & Cost	Amount documented ($)	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
	$		$	$	$	$			
	$								
Sub-Total of Fringe Benefits:									

3. Travel

Name of Employee Traveling	Destination	Dates of Trip	Amount Paid ($)	Copies of all receipts attached? (Y/N)	Purpose of Trip	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Sub-Total of Travel:			$					

4. Supplies-Other Expenses

Name of Vendor from which goods were purchased	Vendor's Invoice #	Amount Paid ($)	Grantee Check #	Grantee Check Date	Description of Goods Purchased and Date Received	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Sub-Total of Supplies-Other Expenses :		$ -						

MATCH DOCUMENTATION DETAIL (continued)

5. Equipment

Name of Vendor from which goods were purchased	Vendor's Invoice #	Amount Paid ($)	Grantee Check #	Grantee Check Date	Description of Goods Purchased and Date Received	Property Form Attached? (Y/N)	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Sub-Total of Expenses:		$ -							

6. Contractual Services

Name of Vendor Performing Contractual Services	Vendor's Invoice #	Amount Paid ($)	Grantee Check #	Grantee Check Date	Description of Contractual Services and Date Received	Listed on Progress Report? (Y/N)	Grant = G or Match = M	Direct Costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Sub-Total of Contractual:		$ -							

7. Indirect Costs, if allowable

Direct Costs Sub-Total to calculate Indirect Costs on this Invoice	Approved Indirect Cost Rate (%)	Amount documented ($)
Sub-Total of Indirect Costs:		$ -

Total Match Documentation Summary

Note: Information provided on the Match Documentation Detail must correspond with the approved Attachment A, Grant Work Plan, Attachment B - Project Expenditures Summary Section and supporting documentation.

Total Match documented :	$

FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010
INSTRUCTIONS FOR COMPLETING
PAYMENT REQUEST SUMMARY FORM

GRANTEE: Enter the name of the Grantee's agency, as reflected on your Grant Agreement.
MAILING ADDRESS: Enter the reimbursement mailing address.
GRANT AGREEMENT NO.: This is the six-digit number on your Grant Agreement.
DATE OF REQUEST: This is the date the Grantee is submitting the request for reimbursement.
AMOUNT REQUESTED: This is the amount on the "*TOTAL AMOUNT TO BE REIMBURSED*" line for the "*AMOUNT OF THIS REQUEST*" column.
GRANTEE'S REPRESENTATIVE: This is the person identified as Grantee's Representative in the Grant Agreement.
REIMBURSEMENT REQUEST NO.: This is the number of the reimbursement request, not the month number. The first reimbursement request submitted shall be number 1 and subsequent reimbursement requests shall be numbered in ascending numerical order.
REIMBURSEMENT PERIOD: This is the beginning date (dd/mm/yyyy) and ending date (dd/mm/yyyy) of the reimbursement period.
PERCENT MATCHING REQUIRED: Enter the Match requirement here, as reflected on the approved Attachment A, Grant Work Plan.

PROJECT EXPENDITURES SUMMARY SECTION

"AMOUNT OF THIS REQUEST" COLUMN: Enter the amount paid during the reimbursement period. Provide accurate costs and do not round figures to the nearest whole dollar value. All costs included in the reimbursement request must agree with the approved Project Budget in the current Attachment A, Grant Work Plan of your Grant Agreement. Do not request reimbursement for costs that do not have an associated, approved, funded budget category or approved, funded budget line-item in the current Project Budget. Do not claim items that are not specifically identified in the current Budget Detail as reflected in Section I of the current Attachment A, Grant Work Plan.

- Enter the column total on the "*TOTAL AMOUNT EXPENDED*" line. The figures reflected for each approved budget category must correspond with the budget category amount reflected on the associated Grant Reimbursement Detail Form.
- For the "Less Retainage" line, calculate 10% of the "*TOTAL AMOUNT EXPENDED*" for this reimbursement request; this figure must be shown in brackets (e.g. <$X,XXX.XX>) to reflect that the amount will be deducted from the "*TOTAL AMOUNT EXPENDED*".
- For the "*TOTAL AMOUNT TO BE REIMBURSED*" line, deduct the "Less Retainage" amount from the "*TOTAL AMOUNT EXPENDED*".
- For the "*AGREEMENT AMOUNT*", enter the total amount of the Grant Agreement. For the "Less TOTAL AMOUNT EXPENDED" line, enter the total amount expended as reflected on this reimbursement request **and** all previous reimbursement requests.
- For the "*TOTAL AVAILABLE BALANCE" line*, deduct the "*Less TOTAL AMOUNT EXPENDED*" amount from the "*AGREEMENT AMOUNT*".
- For only the Final Reimbursement Request, the Grantee may request reimbursement of all previously deducted Retainage on the condition that the Final Report for the project has been submitted and approved by the Commission's Grant Manager. To request reimbursement of Retainage, reflect the cumulative amount of Retainage as a positive figure (no brackets) in the "*Less Retainage*" line and add it to the "*TOTAL AMOUNT EXPENDED*" to reflect the final "*TOTAL AMOUNT TO BE REIMBURSED*" amount.

"TOTAL CUMULATIVE PAYMENTS" COLUMN: Enter the cumulative amounts previously submitted for reimbursement to date for each approved, funded budget category. Provide accurate costs and do not round figures to the nearest whole dollar value.

- On the "Less Retainage" line, enter the total cumulative amount of Retainage deducted from all reimbursement requests.
- On the "*TOTAL AMOUNT TO BE REIMBURSED*" line, deduct the cumulative "Less Retainage" amount from the cumulative "*TOTAL AMOUNT EXPENDED*".
- The Final Reimbursement Request must show the total of all reimbursements; first through the final reimbursement (this amount cannot exceed the approved, funded budget amount for each budget category). Enter the column total on the "*TOTALS*" line.

"MATCHING FUNDS" COLUMN: Enter the amount documented as Match for the reimbursement period. Provide accurate costs and do not round figures to the nearest whole dollar value. This needs to be shown under specific budget categories according to the currently approved Attachment A, Grant Work Plan.

- Enter the total for all budget categories on the "*TOTAL AMOUNT EXPENDED*" line for this column.
- Enter the total Match budget amount on the "*AGREEMENT AMOUNT*" line for this column. This amount must correspond with the minimum Match amount specified in Section 4.A of the Grant Agreement and as reflected on the currently approved Attachment A, Grant Work Plan.
- Enter the total cumulative amount of this and any previous Match documented on the "*LESS TOTAL AMOUNT EXPENDED*" line for this column.
- Deduct the "*LESS TOTAL AMOUNT EXPENDED*" from the "*AGREEMENT AMOUNT*" for the amount to enter on the "*TOTAL AVAILABLE BALANCE*" line.

"TOTAL CUMULATIVE MATCHING FUNDS" COLUMN: Enter the cumulative amount documented to date for Match by budget category. Enter the total of all budget categories on the line titled "*TOTALAMOUNT EXPENDED.*" The Final Reimbursement Request must reflect the total of all documented Match, beginning with the first Match documentation through the final Match documentation, etc.

The proportion of cumulative Matching funds as of the final Match documentation must equate to the Cost Share Percentage as reflected on the current, approved Attachment A, Grant Work Plan of the Grant Agreement. If insufficient "*TOTAL CUMULATIVE MATCHING FUNDS*" are submitted, the Final Reimbursement Request of grant funds shall be reduced to ensure that the Cost Share Percentage

GRANTEE CERTIFICATION: The Payment Request Summary Form must be signed by both the Grantee's Representative as identified in the Grant Agreement and the Grantee's Fiscal Agent to be approved for reimbursement.

NOTE: If requesting reimbursement for travel, you must include copies of all travel receipts and a copy of the Commission's properly completed travel reimbursement form (in the format approved by the Department of Financial Services, Chief Financial Officer) that has been signed by both the traveler and the traveler's supervisor.

FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010
INSTRUCTIONS FOR COMPLETING
GRANT REIMBURSEMENT DETAIL and
MATCH DOCUMENTATION DETAIL

Provide a detailed, line-item description using the worksheet provided for each Budget Category of funds Grantee is requesting for reimbursement or documentation of Match. Costs listed on the Grant Reimbursement Detail must reflect information on supporting documentation, must correspond with the approved Project Budget, the Payment Request Summary Form – Project Expenditures Summary Section and accompanying supporting documentation. The description of each line-item must include the month and year that the item was received; this month and year must fall within the Reimbursement Period. Any line-item with a corresponding month and year prior to the Reimbursement Period must be accompanied by a statement that this cost was not included in a prior Reimbursement Request. For each budget line-item, identify if the cost is: 1) Grant or Match, 2) a Direct cost used to calculate Indirect Costs (if approved), and 3) whether the cost is Administrative in nature. Provide accurate costs and do not round the amounts to the nearest whole dollar value.

Supporting documentation for each amount for which reimbursement is being requested must: 1) list the item that has been paid for, 2) be submitted in the order in which items are shown on the Grant Reimbursement Detail and the Match Documentation Detail and 3) be either highlighted or circled. Check numbers may be provided in lieu of copies of the actual checks. If an item was purchased with a credit card, reflect "paid by credit card" on Grant Reimbursement Detail or the Match Documentation Detail, in lieu of a check number and provide vendor receipt reflecting that the item was paid by credit card (this can be hand written) along with a copy of related credit card statement (credit card number and other confidential information may be blacked out). Each piece of documentation must clearly reflect the dates of service. Only expenditures for budget categories and budget line-items in the approved Project Budget will be reimbursed or documented as Match. Listed below are the types of documentation and examples of minimum requirements.

(1) **Salaries:** A payroll register or similar documentation should be maintained. The payroll register should show gross salary charges, fringe benefits, other deductions and net pay. If an individual for whom reimbursement is being claimed is paid by the hour, a document reflecting the hours worked times the rate of pay will be acceptable.

(2) **Fringe Benefits:** Fringe Benefits should be supported by invoices showing the amount paid on behalf of the employee, e.g., insurance premiums paid. If the Grant Agreement specifically states that fringe benefits will be based on a specified percentage rather than the actual cost of fringe benefits, then the calculation for the fringe benefits amount must be shown.

Exception: Governmental entities are not required to provide check numbers or copies of checks for fringe benefits.

(3) **Travel:** Reimbursement for travel must be in accordance with Section 112.061, Florida Statutes, including submission of the claim on the approved state travel form that has been signed and dated by the traveler and the traveler's supervisor and copies of all travel receipts must also be attached. For additional information on documentation of travel costs, contact the assigned Commission Grant Manager.

(4) **Supplies - Other Expenses:** Reimbursement will be made based on paid invoices/receipts.

(5) **Equipment:** Reimbursement will be made based on paid invoices/receipts. Attachment J, Property Reporting Form, must be properly completed, signed and attached to the Attachment B, Payment Request Summary Form for each item of equipment requested for reimbursement or match documentation.

(6) **Contractual Services:** Reimbursement will be made based on paid invoices/receipts. Subcontractors must be listed on Attachment C, Monthly Progress Report, for the corresponding reimbursement period.

(7) **Indirect Costs:** If the Grant Agreement allows recovery of Indirect Costs, the calculation of these costs must be based upon direct costs reflected in the corresponding reimbursement period, utilizing the Indirect Cost rate in the approved Project Budget.

FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010
ATTACHMENT C
MONTHLY PROGRESS REPORT

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARD

Grant Agreement No.:	ARS010		
Grantee Name:			
Grantee Address:			
Grantee's Representative:		**Telephone No.:**	
Monthly Reporting Period:			
Project Number and Title:			

A. Provide a summary of project accomplishments to date. (Include a comparison of actual accomplishments to the objectives established for the period. If goals were not met, provide reasons why.)

B. Provide an update on the number of jobs created or retained, quantify the reduction of greenhouse gasses and the energy saved in kWh or BTU.

C. Provide an update on the estimated time for completion of the project and an explanation for any anticipated delays.

D. Provide any additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

E. Identify below, and attach copies of, any relevant work products being submitted for the project for this reporting period (e.g., report data sets, links to on-line photographs, etc.)

F. Provide a project Grant Budget update, comparing the Grant Project Budget to actual costs to date.

Grant Budget Category	Total Grant Project Budget	Grant Expenditures Prior to this Reporting Period	Grant Expenditures this Reporting Period	Grant Project Funding Balance
1. Salaries				
2. Fringe Benefits				
3. Travel (if authorized)				
4. Supplies/Other Expenses				
5. Equipment				
6, Contractual Services				
7. Indirect Costs (if authorized)				
8. Total of all Grant Budget Categories				

G. Provide a project Match Budget update, comparing the Match Project Budget to actual costs to date.				
Match Budget Category	**Total Match Project Budget**	**Match Expenditures Prior to this Reporting Period**	**Match Expenditures this Reporting Period**	**Match Project Funding Balance**
1. Salaries				
2. Fringe Benefits				
3. Travel (if authorized)				
4. Supplies/Other Expenses				
5. Equipment				
6, Contractual Services				
7. Indirect Costs (if authorized)				
8. Total of all match Budget Categories				

H. **REPORTING**

Activities:

[GRANT MANAGER NOTE: All of the tables below may not be required for this Agreement. Please choose the appropriate metric(s) for the funded activity and include only the appropriate tables for each Agreement on a project to project basis.]

	Building Retrofits
Number of Buildings Retrofitted	
Sq. Ft. Retrofitted	

	Building Energy Audits
Number of Audits Performed	
Floor Space Audited	
Auditor's Projection of Energy Saved	

	Loans, Grants and Incentives
Number of Loans Given	
Monetary value of Loans Given	
Number of Grants Given	
Monetary value of Grants Given	

	Renewable Energy Market Development
Number of Solar Energy Systems Installed	
Total Capacity of Solar Energy Systems	
Number of Wind Energy Systems Installed	
Total Capacity of Wind Energy Systems	
Number of other Renewable Energy Systems Installed	
Total Capacity of other Renewable Energy Systems	

	Transportation
Number of Alternative Fuel Vehicles Purchased	
Number of Vehicle Conversions to Alternative Energy	
Number of New Alternative Fueling Stations	
Number of Carpools and Vanpools Formed	
Number of Energy Efficient Traffic Signals Installed	
Number of Street Lane Miles for which Synchronized Traffic Signals were Installed	

	Workshops, Training and Education
Number of Workshops, Training and Education Sessions Held	
Number of People Attending Workshops, Training and Education Sessions	

	Jobs Created
Number of Direct Jobs Created	
Number of Indirect Jobs Created	
Actual Worker Head Count	
Number of FTE Job Equivalents	

Energy Savings	
Reduction in Natural Gas Consumption (mmcf)	
Reduction in Electricity Consumption (MWh)	
Reduction in Electricity Demand (MW)	
Reduction in Natural Gas Consumption (mmcf)	
Reduction in Fuel Oil Consumption (gallons)	
Reduction in Propane Consumption (gallons)	
Reduction in Gasoline and Diesel Consumption (gallons)	
Amount of wind-powered electric generating capacity installed	
Amount of electricity generated from wind systems (MWh)	

Renewable Energy Capacity and Generation	
Amount of photovoltaic generating capacity installed (MW)	
Amount of electricity generated from photovoltaic systems (MWh)	
Amount of electric generating capacity from other renewable sources installed (MW)	
Amount of electricity generated from other renewable sources (MWh)	

Emission Reductions	
Tons Carbon Emission Reduction (CO_2 Equivalent)	
Tons of Sulfur Dioxide Emission Reduction (CO_2 Equivalent)	
Tons of Nitrogen Oxide Emission Reduction (CO_2 Equivalent)	
Tons of Carbon Monoxide Emission Reduction (CO_2 Equivalent)	

I. SUBCONTRACTOR LIST

The Grantee may subcontract work under this Grant Agreement without the prior approval of the Grant Manager, upon the condition that each Monthly Progress Report must contain a current list of subcontractors, as required in Section 18.A of the Grant Agreement.

**If grantee does not have subcontractors, please state 'None' below*

Name of Subcontractor	Address	Current Total Amount of each Subcontract	Description of Work Performed

J. MINORITY/WOMAN/SERVICE-DISABLED VETERAN-OWNED BUSINESS LIST

The Grantee is encouraged to use small businesses, including minority, woman and service-disabled veteran-owned businesses as subcontractors under this Grant Agreement. As required in Section 18.C of the Grant Agreement, the Grantee is required to report information concerning their use of such businesses in each Monthly Progress Report.

**If grantee does not have any subcontracts with minority/woman/service-disabled veteran- owned businesses, please state 'None' below*

Name of Business	Address	Reporting Period (month)	Total Amount Paid to Business during this Reporting Period	Description of Goods/Services provided by Business	Type of Business (Minority, Woman, Service-disabled veteran-owned)

This report is submitted in accordance with the reporting requirements of Grant Agreement No. ARS010 and accurately reflects the activities and costs associated with the subject project.

Signature of Grantee's Representative

Date

FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010

ATTACHMENT D
SPECIAL AUDIT REQUIREMENTS

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARDS

The administration of resources awarded by the Florida Energy and Climate Commission (hereinafter referred to as the "Commission") to the recipient (hereinafter referred to as the "grantee" or "recipient"), may be subject to audits and/or monitoring by the Commission, as described in this attachment.

MONITORING

In addition to reviews of audits conducted in accordance with OMB Circular A-133 and Section 215.97, F.S., as revised (see "AUDITS" below), monitoring procedures may include, but not be limited to, on-site visits by Commission staff, limited scope audits as defined by OMB Circular A-133, as revised, and/or other procedures. By entering into this Agreement, the recipient agrees to comply and cooperate with any monitoring procedures/processes deemed appropriate by the Commission. In the event the Commission determines that a limited scope audit of the recipient is appropriate, the recipient agrees to comply with any additional instructions provided by the Commission to the recipient regarding such audit. The recipient further agrees to comply and cooperate with any inspections, reviews, investigations or audits deemed necessary by the Chief Financial Officer or Auditor General.

AUDITS

PART I: FEDERALLY FUNDED

This part is applicable if the recipient is a State or local government or a non-profit organization as defined in OMB Circular A-133, as revised.

1. In the event that the recipient expends $500,000 or more in Federal awards in its fiscal year, the recipient must have a single or program-specific audit conducted in accordance with the provisions of OMB Circular A-133, as revised. In determining the Federal awards expended in its fiscal year, the recipient shall consider all sources of Federal awards. The determination of amounts of Federal awards expended should be in accordance with the guidelines established by OMB Circular A-133, as revised. An audit of the recipient conducted by the Auditor General in accordance with the provisions of OMB Circular A-133, as revised, will meet the requirements of this part.

2. In connection with the audit requirements addressed in Part I, paragraph 1. the recipient shall fulfill the requirements relative to auditee responsibilities as provided in Subpart C of OMB Circular A-133, as revised.

3. If the recipient expends less than $500,000 in Federal awards in its fiscal year, an audit conducted in accordance with the provisions of OMB Circular A-133, as revised, is not required. In the event that the recipient expends less than $500,000 in Federal awards in its fiscal year and elects to have an audit conducted in accordance with the provisions of OMB Circular A-133, as revised, the cost of the audit must be paid from non-Federal resources (i.e., the cost of such an audit must be paid from recipient resources obtained from other than Federal entities).

4. The recipient may access information regarding the Catalog of Federal Domestic Assistance (CFDA) via the internet at http://12.46.245.173/cfda/cfda.html.

PART II: STATE FUNDED

This part is applicable if the recipient is a nonstate entity as defined by Section 215.97(2)(m), Florida Statutes.

1. In the event that the recipient expends a total amount of state financial assistance equal to or in excess of $500,000 in any fiscal year of such recipient, the recipient must have a State single or project-specific audit for such fiscal year in accordance with Section 215.97, Florida Statutes; applicable rules of the Department of Financial Services; and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General. In determining the state financial assistance expended in its fiscal year, the recipient shall consider all sources of state financial assistance, including state financial assistance received from the Commission, other state agencies and other nonstate entities. State financial assistance does not include Federal direct or pass-through awards and resources received by a nonstate entity for Federal program matching requirements.

2. In connection with the audit requirements addressed in paragraph 1, the recipient shall ensure that the audit complies with the requirements of Section 215.97, Florida Statutes. This includes submission of a financial reporting package as defined by Section 215.97(2), Florida Statutes, and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General.

3. If the recipient expends less than $500,000 in state financial assistance in its fiscal year, an audit conducted in accordance with the provisions of Section 215.97, Florida Statutes, is not required. In the event that the recipient expends less than $500,000 in state financial assistance in its fiscal year, and elects to have an audit conducted in accordance with the provisions of Section 215.97, Florida Statutes, the cost of the audit must be paid from the non-state entity's resources (i.e., the cost of such an audit must be paid from the recipient's resources obtained from other than State entities).

4. The recipient must include the record keeping requirements found herein in subcontractor agreements entered into for work required under terms of this Agreement. In the executed subcontract, the recipient shall provide each subcontractor of state financial assistance the information needed by the subcontractor to comply with the requirements of Section 215.97, Florida Statutes. Pursuant to Section 215.97, Florida Statutes, the recipient shall review and monitor subcontractor audit reports and perform other procedures as specified in the agreement with the subcontractor, which may include onsite visits. The recipient shall require subcontractors, as a condition of receiving state financial assistance, to permit the independent auditor of the recipient, the Commission, the Chief Financial Officer, the Chief Inspector General and the Auditor General access to the subcontractor's records and independent auditor's working papers as necessary to comply with the requirements of Section 215.97, Florida Statutes.

5. For information regarding the Florida Catalog of State Financial Assistance (CSFA), a recipient should access the Florida Single Audit Act website located at https://apps.fldfs.com/fsaa for assistance. In addition to the above websites, the following websites may be accessed for information: The Florid Legislature's Website at http://www.leg.state.fl.us/Welcome/index.cfm, the State of Florida's website at http://www.myflorida.com/, the Department of Financial Services' Website at http://www.fldfs.com/ and the Auditor General's Website at http://www.state.fl.us/audgen.

PART III: REPORT SUBMISSION

1. Copies of reporting packages for audits conducted in accordance with OMB Circular A-133, as revised, and required by Part I of this Attachment shall be submitted, when required by Section .320 (d), OMB Circular A-133, as revised, by or on behalf of the recipient directly to each of the following:

   A. The Florida Energy and Climate Commission at the following address:

   Audit Director or Grant Manager
   Florida Energy and Climate Commission
   Executive Office of the Governor
   600 South Calhoun Street, Suite 251
   Tallahassee, FL 32399-0001

B. The Federal Audit Clearinghouse designated in OMB Circular A-133, as revised (the number of copies required by Sections .320 (d)(1) and (2), OMB Circular A-133, as revised, should be submitted to the Federal Audit Clearinghouse), at the following address:

Federal Audit Clearinghouse
Bureau of the Census
1201 East 10th Street
Jeffersonville, IN 47132

C. Other Federal agencies and pass-through entities in accordance with Sections .320 (e) and (f), OMB Circular A-133, as revised.

2. Pursuant to Section .320(f), OMB Circular A-133, as revised, the recipient shall submit a copy of the reporting package described in Section .320(c), OMB Circular A-133, as revised, and any management letters issued by the auditor, to the Commission at the following address:

Audit Director or Grant Manager
Florida Energy and Climate Commission
Executive Office of the Governor
600 South Calhoun Street, Suite 251
Tallahassee, FL 32399-0001

3. Copies of financial reporting packages required by PART II of this Attachment shall be submitted by or on behalf of the recipient directly to each of the following:

A. The Florida Energy and Climate Commission at the following address:

Audit Director or Grant Manager
Florida Energy and Climate Commission
Executive Office of the Governor
600 South Calhoun Street, Suite 251
Tallahassee, FL 32399-0001

B. The Auditor General's Office at the following address:

State of Florida Auditor General
Room 401, Claude Pepper Building
111 West Madison Street
Tallahassee, Florida 32399-1450

RECORD RETENTION

The recipient shall retain sufficient records demonstrating its compliance with the terms of this Agreement for a period of five years from the date the audit report is issued and shall allow access to such records upon request by the Commission or its designee, Chief Financial Officer or Auditor General. The recipient shall ensure that audit working papers are made available to the Commission or its designee, Chief Financial Officer or Auditor General upon request for a period of three years from the date the audit report is issued, unless extended in writing by the Commission.

FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010
EXHIBIT – 1

FUNDS AWARDED TO THE RECIPIENT PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

Federal Resources Awarded to the Recipient Pursuant to this Agreement Consist of the Following:

Federal Program Number	Federal Agency	CFDA Number	CFDA Title	Funding Amount	State Appropriation Category
DE-EE0000241	US Department of Energy	81.041	State Energy Program	$2,687,288	140021-10

State Resources Awarded to the Recipient Pursuant to this Agreement Consist of the Following Matching Resources for Federal Programs:

Federal Program Number	Federal Agency	CFDA	CFDA Title	Funding Amount	State Appropriation Category

State Resources Awarded to the Recipient Pursuant to this Agreement Consist of the Following Resources Subject to Section 215.97, F.S.:

State Program Number	Funding Source	State Fiscal Year	CSFA Number	CSFA Title or Funding Source Description	Funding Amount	State Appropriation Category
				Total Award	$2,687,288	

For each program identified above, the recipient shall comply with the program requirements described in the Catalog of Federal Domestic Assistance (CFDA) [http://12.46.245.173/cfda/cfda.html] and/or the Florida Catalog of State Financial Assistance (CSFA) [https://apps.fldfs.com/fsaa/catalog.aspx]. The services/purposes for which the funds are to be used are included in the Contract scope of services/work. Any match required by the recipient is clearly indicated in the Contract.

ATTACHMENT E
FEDERAL REGULATIONS

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARDS

Formal regulations concerning administrative procedures for USDOE grants appear in Title 10 of the Code of Federal Regulations. Grant program administrative regulations appear in Part 600. Other USDOE regulations also impact grant programs. The following list contains regulations and Office of Management and Budget Circulars which may apply to the work performed under this Agreement.	
2 CFR 176	Award Terms for Assistance Agreements that include funds under the American Recovery and Reinvestment Act of 2009, Public Law 111-5
2 CFR 901	Nonprocurement Debarment and Suspension
10 CFR 600	Financial Assistance Rules
10 CFR 601	New Restrictions on Lobbying
10 CFR 607	Government wide requirements for drug-free work place (financial assistance)
10 CFR 1039	Uniform relocation assistance and real property acquisition for federal and federally assisted programs
10 CRF 1040	Nondiscrimination in Federally Assisted Programs or Activities
10 CFR 1041	Enforcement of Nondiscrimination on the basis of handicap in programs or activities conducted by USDOE
10 CFR 1042	Nondiscrimination on the basis of sex in education programs or activities receiving federal financial assistance
Other Federal Regulations	
45 CFR Subtitle A – Appendix E to Part 74	Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts with Hospitals
48 CFR 31	Contract Cost Principles and Procedures, or uniform cost accounting standards that comply with cost principles acceptable to the federal agency
Office of Management and Budget Circulars	
A-21	Cost Principles for Educational Institutions
A-87	Cost Principles for State, Local, and Indian Tribal Governments
A-102	Grants and Cooperative Agreements with State and Local Governments
A-110	Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations
A-122	Cost Principles for Non-Profit Organizations
A-133	Audit Requirements

ATTACHMENT F
FEDERAL FUNDING GRANTEE, SUBGRANTEE AND CONTRACTOR PROVISIONS

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARDS

All subgrants and contracts awarded by the Grantee, including small purchases, shall contain the following provisions as applicable:

1. **Equal Employment Opportunity** - All contracts shall contain a provision requiring compliance with E.O. 11246, "Equal Employment Opportunity," as amended by E.O. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and as supplemented by regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

2. **Copeland "Anti-Kickback" Act (18 U.S.C. 874 and 40 U.S.C. 276c)** - All contracts and subgrants in excess of $2,000 for construction or repair awarded by recipients and subrecipients shall include a provision for compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874), as supplemented by Department of Labor regulations (29 CFR part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he is otherwise entitled. The recipient shall report all suspected or reported violations to the Federal awarding agency.

3. **Davis-Bacon Act, as amended (40 U.S.C. 276a to a-7)** - When required by Federal program legislation, all construction contracts awarded by the recipients and subrecipients of more than $2,000 shall include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 276a to a-7) and as supplemented by Department of Labor regulations (29 CFR part 5, "Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction"). Under this Act, contractors shall be required to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. In addition, contractors shall be required to pay wages not less than once a week. The recipient shall place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation and the award of a contract shall be conditioned upon the acceptance of the wage determination. The recipient shall report all suspected or reported violations to the Federal awarding agency.

4. **Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333)** - Where applicable, all contracts awarded by recipients in excess of $2000 for construction contracts and in excess of $2,500 for other contracts that involve the employment of mechanics or laborers shall include a provision for compliance with Sections 102 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333), as supplemented by Department of Labor regulations (29 CFR part 5). Under Section 102 of the Act, each contractor shall be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than 1 ½ times the basic rate of pay for all hours worked in excess of 40 hours in the work week. Section 107 of the Act is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

5. **Rights to Inventions Made Under a Contract or Agreement** - Contracts or agreements for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 10 CFR part 600.325, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

6. **Clean Air Act (42 U.S.C. 7401 et seq.), and the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), as amended** - Contracts and subgrants of amounts in excess of $100,000 shall contain a provision that requires the recipient to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq.). Violations shall be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

7. **Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)** - Contractors who apply or bid for an award of $100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

8. **Debarment and Suspension (E.O.s 12549 and 12689)** - No contract shall be made to parties listed on the General Services Administration's List of Parties Excluded from Federal Procurement or Nonprocurement Programs in accordance with E.O.s 12549 and 12689, "Debarment and Suspension." This list contains the names of parties debarred, suspended, or otherwise excluded by agencies, and contractors declared ineligible under statutory or regulatory authority other than E.O. 12549. Contractors with awards that exceed the small purchase threshold shall provide the required certification regarding its exclusion status and that of its principal employees.

9. **Section 508 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1368) and Section 1424(e) of the Safe Drinking Water Act, (42 U.S.C. 300h-3(e))** - Contracts and subgrants of amounts in excess of $100,000 shall contain a provision that requires the recipient to agree to comply with all applicable standards, orders or regulations issued pursuant to Section 508 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1368) and Section 1424(e) of the Safe Drinking Water Act, (42 U.S.C. 300h-3(e)). Violations shall be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

10. **Compliance with all Federal statutes relating to nondiscrimination.** These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of sex; (b) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 795), which prohibits discrimination on the basis of handicaps; (c) the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101-6107), which prohibits discrimination on the basis of age; (d) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (e) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (f) Sections 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (g) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (h) any other nondiscrimination provisions in the specific statute(s) made; and, (i) the requirements of any other nondiscrimination statute(s) which may apply.

11. **Compliance with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646)** which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

12. **Compliance with the provision of the Hatch Act (5 U.S.C. 1501 – 1508 and 7324 – 7328)** which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

13. **Comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234)** which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

14. **Compliance with environmental standards which may be prescribed to the following:** (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EP 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplain in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

15. **Compliance with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.)** related to protecting components or potential components of the national wild and scenic rivers system.

16. **Compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.)**

17. **Compliance with P.L. 93-348** regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

18. **Compliance with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. 2131 et seq.)** pertaining to the care, handling, and treatment of warm bloodied animals held for research, teaching, or other activities supported by this Agreement.

19. **Compliance with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4801 et seq.)** which prohibits the use of lead based paint in construction or rehabilitation of residence structures.

20. **Compliance with the mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in accordance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).**

21. **Assist the Commission in complying with the State Energy Conservation Program as described in the Code of Federal Regulations, Title 10, Parts 420 and 450 and guidance issued by the U.S. Department of Energy and subsequent guidance issued by the U.S. Department of Energy; the Financial Assistance Rules described in Title 10, Part 600, as well as those regulations concerning the use of oil overcharge recovery funds.**

22. **The Commission reserves the right to transfer equipment acquired under this grant as provided in Title 10, Part 600.117. The Recipient can obtain a release of this right upon application containing certain commitments.**

23. **Compliance with the Buy American Act (41 U.S.C. 10a-10c)** By accepting funds under this Agreement, the Grantee agrees to comply with sections 2 through 4 of the Act of March 3, 1933, popularly known as the "Buy American Act." The Grantee should review the provisions of the Act to ensure that expenditures made under this Agreement are in accordance with it. It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this Agreement should be American-made.

24. **Preservation of open and competition and government neutrality towards contractors' labor relations on federally funded construction projects**

a. Unless in conflict with State or local laws, you must ensure that bid specifications, project agreement, or other controlling documents in construction contracts awarded pursuant to this agreement, or pursuant to a subaward to this agreement, do not:

1. Require or prohibit bidders, offerors, contractors, or subcontractors to enter into or adhere to agreements with one or more labor organizations, on the same or other related construction project(s); or

2. Otherwise discriminate against bidders, offerors, contractors, or subcontractors for becoming or refusing to become or remain signatories or otherwise to adhere to agreements with one or more labor organizations, on the same or other related construction project(s).

b. The term "construction contract" as used in this provision means any contract for the construction, rehabilitation, alteration, conversion, extension, or repair of buildings, highways, or other improvements to real property.

c. Nothing in this provision prohibits bidders, offerors, contractors, or subcontractors from voluntarily entering into agreements with labor organizations.

25. **Compliance with the provision included in Title XV and Title XVI of Public Law 111-5, the American Recovery and Reinvestment Act of 2009.**

26. **Segregation of Costs** – Recipients must segregate the obligations and expenditures related to funding under the Recovery Act. Financial and accounting systems should be revised as necessary to segregate, track, and maintain these funds apart and separate from other revenue streams. No part of the funds from the Recovery Act shall be commingled with any other funds or used for a purpose other than that of making payments for costs allowable for Recovery Act projects.

27. **False Claims Act** – Recipient and sub-recipients shall promptly refer to the DOE or other appropriate Inspector General any credible evidence that a principle, employee, agent, contractor, sub-grantee, subcontractor, or other person has submitted a false claim under the False Claims Act or has committed a criminal or civil violation of laws pertaining to fraud, conflict of interest, bribery, gratuity or similar misconduct involving those funds.

ATTACHMENT G
CERTIFICATION REGARDING DEBARMENTS, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION-LOWER TIER FEDERALLY FUNDED TRANSACTIONS

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARDS

1. The undersigned hereby certifies that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. The undersigned also certifies that it and its principals:

   (a) Have not within a three-year period preceding this certification been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

   (b) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 2.(a) of this Certification; and

   (c) Have not within a three-year period preceding this certification had one or more public transactions (Federal, State or local) terminated for cause or default.

3. Where the undersigned is unable to certify to any of the statements in this certification, an explanation shall be attached to this certification.

Dated this _____ day of _____, 20_____.

By_____
Authorized Signature/Recipient

_____
Typed Name/Title

_____
Recipient's Firm Name

_____
Street Address

_____
Building, Suite Number

_____
City/State/Zip Code

_____
Area Code/Telephone Number

INSTRUCTIONS FOR CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION-LOWER TIER FEDERALLY FUNDED TRANSACTIONS

1. By signing and submitting this form, the certifying party is providing the certification set out below.

2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the certifying party knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, Florida Energy and Climate Commission (Commission) or agencies with which this transaction originated may pursue available remedies, including suspension and/or debarment.

3. The certifying party shall provide immediate written notice to the person to whom this contract is submitted if at any time the certifying party learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

4. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this contract is submitted for assistance in obtaining a copy of those regulations.

5. The certifying party agrees by submitting this contract that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier contract, or other covered transaction with a person who is proposed for debarment under 48 CFR 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the Commission or agency with which this transaction originated.

6. The certifying party further agrees by executing this contract that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all contracts or lower tier covered transactions and in all solicitations for lower tier covered transactions.

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not is proposed for debarment under 48 CFR 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List (Telephone No. (202) 501-4740 or (202) 501-4873.)

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the Commission or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

ATTACHMENT H

Intellectual Property Provisions (NRD-1003)
Nonresearch and Development

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARDS

Nonprofit organizations are subject to the intellectual property requirements at 10 CFR 600.136(a), (c) and (d). All other organizations are subject to the intellectual property requirements at 10 CFR 600.136(a) and (c).

600.136 Intangible property.

(a) Recipients may copyright any work that is subject to copyright and was developed, or for which ownership was purchased, under an award. USDOE reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish or otherwise use the work for Federal purposes, and to authorize others to do so.

(c) USDOE has the right to:

(1) Obtain, reproduce, publish or otherwise use the data first produced under an award; and

(2) Authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.

(d)(1) In addition, in response to a Freedom of Information act (FOIA) request for research data relating to published research findings produced under an award that were used by the Federal Government in developing an agency action that has the force and effect of law, the USDOE shall request, and the Recipient shall provide, within a reasonable time, the research data so that they can be made available to the public through the procedures established under the FOIA. If the USDOE obtains the research data solely in response to a FOIA request, the agency may charge the requester a reasonable fee equaling the full incremental cost of obtaining the research data. This fee should reflect the costs incurred by the agency, the recipient, and applicable subrecipients. This fee is in addition to any fees the agency may assess under the FOIA (5 U.S.C. 552(a)(4)(A)).

FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010

ATTACHMENT I
DISCLOSURE OF LOBBYING ACTIVITIES

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARDS

Approved by OMB
0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure.)

1. Type of Federal Action: ☐ a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	**2. Status of Federal Action:** ☐ a. bid/offer/application b. initial award c. post-award	**3. Report Type:** ☐ a. initial filing b. material change **For Material Change Only:** year_____ quarter_____ date of last report_____
4. Name and Address of Reporting Entity: ☐ Prime ☐ Subawardee Tier _____, *if known:* **Congressional District,** *if known:*	**5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:** **Congressional District,** *if known:*	
6. Federal Department/Agency:	**7. Federal Program Name/Description:** CFDA Number, *if applicable:* _____	
8. Federal Action Number, *if known:*	**9. Award Amount,** *if known:* **$**	
10. a. Name and Address of Lobbying Entity *(if individual, last name, first name, MI):*	**b. Individuals Performing Services** *(including address if different from No. 10a)* *(last name, first name, MI):*	
(attach Continuation Sheet(s) SF-LLLA, if necessary)		
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.	**Signature:** _____ **Print Name:** _____ **Title:** _____ **Telephone No.:** _____ **Date:** _____	
Federal Use Only:	Authorized for Local Reproduction Standard Form – LLL (Rev 7 - 97)	

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. **Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.**

2. **Identify the status of the covered Federal action.**

3. **Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by the reporting entity for this covered Federal action.**

4. **Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.**

5. **If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.**

6. **Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.**

7. **Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.**

8. **Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."**

9. **For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.**

10. **(a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.**

    (b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).

11. **The certifying official shall sign and date the form, print his/her name, title and telephone number.**

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

FLORIDA ENERGY AND CLIMATE COMMISSION
GRANT AGREEMENT NO. ARS010

ATTACHMENT J
PROPERTY REPORTING FORM
(For Property With Grantee/Recipient Assigned Property Control Numbers)

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARDS

GRANTEE: List non-expendable equipment/personal property* costing $1,000 or more purchased under the above Agreement. Also list all upgrades* under this Agreement, costing $1,000 or more, of property previously purchased under a Commission Grant Agreement (identify the property upgraded and the applicable Commission Agreement on a separate sheet). Complete the serial no./ cost, location/address and property control number columns of this form. The Grantee shall establish a unique identifier for tracking all personal property/equipment purchased under this Agreement and shall report the inventory of said property, on an annual basis, to the Commission's Grant Manager, by Grant Agreement number, no later than January 31st for each year this Agreement is in effect.

DESCRIPTION	SERIAL NO./COST**	LOCATION/ADDRESS	GRANTEE/RECIPIENT ASSIGNED PROPERTY CONTROL NUMBER

*Not including software. **Attach copy of invoice, bill of sale, or other documentation to support purchase.

Grantee/Recipient:	Grantee's/Recipient's Representative:	Date:

BELOW FOR COMMISSION USE ONLY

GRANT MANAGER: **MAINTAIN THIS DOCUMENT WITH A COPY OF THE INVOICES SUPPORTING THE COST OF EACH ITEM IDENTIFIED ABOVE IN YOUR AGREEMENT FILE. IF THE AGREEMENT IS A COST REIMBURSEMENT AGREEMENT, MAKE SURE TO SEND INVOICES SUPPORTING THE COST OF THE ITEMS TO FINANCE AND ACCOUNTING FOR THE PROCESSING OF THE GRANTEE'S/RECIPIENT'S INVOICE FOR PAYMENT.**

Grant Manager Signature: _____ Date: _____

ATTACHMENT K
ANNUAL REPORT

STATE OF FLORIDA
GRANT ASSISTANCE
PURSUANT TO
AMERICAN RECOVERY AND REINVESTMENT ACT
UNITED STATES DEPARTMENT OF ENERGY AWARD

Grant Agreement No.:	ARS010		
Grantee Name:			
Grantee Address:			
Grantee's Representative:		**Telephone No.:**	
Annual Reporting Period:			
Project Number and Title:			

A. Provide a summary of project accomplishments to date. (Include a comparison of actual accomplishments to the objectives established for the period. If goals were not met, provide reasons why.)

B. Provide an update on the number of jobs created or retained, quantify the reduction of greenhouse gasses and the energy saved in kWh or BTU.

C. Provide an update on the estimated time for completion of the project and an explanation for any anticipated delays.

D. Provide any additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

E. Identify below, and attach copies of, any relevant work products being submitted for the project for this reporting period (e.g., report data sets, links to on-line photographs, etc.)

F. Provide a project Grant Budget update, comparing the Grant Project Budget to actual costs to date.

Grant Budget Category	Total Grant Project Budget	Grant Expenditures Prior to this Reporting Period	Grant Expenditures this Reporting Period	Grant Project Funding Balance
1. Salaries				
2. Fringe Benefits				
3. Travel (if authorized)				
4. Supplies/Other Expenses				
5. Equipment				
6, Contractual Services				
7. Indirect Costs (if authorized)				
8. Total of all Grant Budget Categories				

G. Provide a project Match Budget update, comparing the Match Project Budget to actual costs to date.				
Match Budget Category	**Total Match Project Budget**	**Match Expenditures Prior to this Reporting Period**	**Match Expenditures this Reporting Period**	**Match Project Funding Balance**
1. Salaries				
2. Fringe Benefits				
3. Travel (if authorized)				
4. Supplies/Other Expenses				
5. Equipment				
6, Contractual Services				
7. Indirect Costs (if authorized)				
8. Total of all match Budget Categories				

H. **REPORTING**

Activities:

[GRANT MANAGER NOTE: All of the tables below may not be required for this Agreement. Please choose the appropriate metric(s) for the funded activity and include only the appropriate tables for each Agreement on a project to project basis.]

	Building Retrofits
Number of Buildings Retrofitted	
Sq. Ft. Retrofitted	

	Building Energy Audits
Number of Audits Performed	
Floor Space Audited	
Auditor's Projection of Energy Saved	

	Loans, Grants and Incentives
Number of Loans Given	
Monetary value of Loans Given	
Number of Grants Given	
Monetary value of Grants Given	

	Renewable Energy Market Development
Number of Solar Energy Systems Installed	
Total Capacity of Solar Energy Systems	
Number of Wind Energy Systems Installed	
Total Capacity of Wind Energy Systems	
Number of other Renewable Energy Systems Installed	
Total Capacity of other Renewable Energy Systems	

	Transportation
Number of Alternative Fuel Vehicles Purchased	
Number of Vehicle Conversions to Alternative Energy	
Number of New Alternative Fueling Stations	
Number of Carpools and Vanpools Formed	
Number of Energy Efficient Traffic Signals Installed	
Number of Street Lane Miles for which Synchronized Traffic Signals were Installed	

	Workshops, Training and Education
Number of Workshops, Training and Education Sessions Held	
Number of People Attending Workshops, Training and Education Sessions	

	Jobs Created
Number of Direct Jobs Created	
Number of Indirect Jobs Created	
Actual Worker Head Count	
Number of FTE Job Equivalents	

	Energy Savings
Reduction in Natural Gas Consumption (mmcf)	
Reduction in Electricity Consumption (MWh)	
Reduction in Electricity Demand (MW)	
Reduction in Natural Gas Consumption (mmcf)	
Reduction in Fuel Oil Consumption (gallons)	
Reduction in Propane Consumption (gallons)	
Reduction in Gasoline and Diesel Consumption (gallons)	
Amount of wind-powered electric generating capacity installed	
Amount of electricity generated from wind systems (MWh)	

	Renewable Energy Capacity and Generation
Amount of photovoltaic generating capacity installed (MW)	
Amount of electricity generated from photovoltaic systems (MWh)	
Amount of electric generating capacity from other renewable sources installed (MW)	
Amount of electricity generated from other renewable sources (MWh)	

	Emission Reductions
Tons Carbon Emission Reduction (CO_2 Equivalent)	
Tons of Sulfur Dioxide Emission Reduction (CO_2 Equivalent)	
Tons of Nitrogen Oxide Emission Reduction (CO_2 Equivalent)	
Tons of Carbon Monoxide Emission Reduction (CO_2 Equivalent)	

I.

SUBCONTRACTOR LIST

The Grantee may subcontract work under this Grant Agreement without the prior approval of the Grant Manager, upon the condition that each Monthly Progress Report must contain a current list of subcontractors, as required in Section 18.A of the Grant Agreement.

**If grantee does not have subcontractors, please state 'None' below*

Name of Subcontractor	Address	Current Total Amount of each Subcontract	Description of Work Performed

J. MINORITY/WOMAN/SERVICE-DISABLED VETERAN-OWNED BUSINESS LIST

The Grantee is encouraged to use small businesses, including minority, woman and service-disabled veteran-owned businesses as subcontractors under this Grant Agreement. As required in Section 18.C of the Grant Agreement, the Grantee is required to report information concerning their use of such businesses in each Monthly Progress Report.

**If grantee does not have any subcontracts with minority/woman/service-disabled veteran- owned businesses, please state 'None' below*

Name of Business	Address	Reporting Period (month)	Total Amount Paid to Business during this Reporting Period	Description of Goods/Services provided by Business	Type of Business (Minority, Woman, Service-disabled veteran-owned)

This report is submitted in accordance with the reporting requirements of Grant Agreement No. ARS010 and accurately reflects the activities and costs associated with the subject project.

Signature of Grantee's Representative _____ Date _____

RESOLUTION NO. 09-268

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, ADOPTING THE CITY OF KEY WEST CLIMATE ACTION PLAN DATED OCTOBER 1, 2009; DIRECTING THE CITY MANAGER TO INITIATE THE RECOMMENDED IMPLEMENTATION PLAN; DIRECTING THE CITY MANAGER TO APPLY FOR ALL APPLICABLE POTENTIAL GRANT MONEY, INCLUDING EPA, DOE AND STATE OF FLORIDA TO FUND THE PLAN; PROVIDING FOR AN EFFECTIVE DATE

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That the Climate Action Plan dated October 1st, 2009 and attached hereto is approved and adopted.

Section 2: That the City Manager is directed to implement the Plan.

Section 3: That the City Manager is further directed to investigate and apply for all potential applicable grant funding sources, including EPA, DOE and the State of Florida in furtherance of the Plan.

Section 4: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the

Signature of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 20 day of October, 2009.

Authenticated by the presiding officer and Clerk of the Commission on October 21, 2009.

Filed with the Clerk October 21, 2009.

CRAIG CATES, MAYOR

ATTEST:

CHERYL SMITH, CITY CLERK

GENERAL SERVICES DEPARTMENT MEMORANDUM

EXECUTIVE SUMMARY

TO: **Jim Scholl, City Manager**

FROM: **Annalise Mannix, P.E. Manager Environmental Programs**

VIA: **David Fernandez, Assistant City Manager**
Gary Bowman, General Services Director

DATE: **September 21, 2009**

RE: **Resolution Adopting the City of Key West Climate Action Plan; Directing City Manager to initiate the recommended Implementation Plan; approval of grant applications.**

ACTION STATEMENT: A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, ADOPTING THE CITY OF KEY WEST CLIMATE ACTION PLAN DATED OCTOBER 1, 2009; DIRECTING CITY MANAGER TO INITIATE THE RECOMMENDED IMPLEMENTATION PLAN; DIRECTING CITY MANAGER TO APPLY FOR ALL APPLICABLE STIMULUS EPA, DOE, AND STATE OF FLORIDA GRANT FUNDS POSSIBLE TO FUND THE PLAN.

STRATIGIC PLAN INITIATIVE
The City's Strategic Plan has 7 categories "that encompassed all of the priorities and concerns of our citizens": Community Enhancement; Economic Development; Environmental Management; Infrastructure; Mobility; Organizational Excellence; and Social Services. The completion and implementation of our Climate Action Plan ties closely to the Strategic Goals in each area, specifically:

We seek solutions to assure we maintain our neighborhoods for residential living so as to reflect our diverse population, community character, and protect and enhance our residential quality of life.

We seek to maintain quality service levels and a strong financial position by proactively working to better balance the residential and tourism components of the City's tax base, increase the value of the City services, and diversify the City's revenue base.

We seek to establish and maintain public infrastructure in a cost-effective manner to serve the needs of our citizens and visitors and protect our local environment.

We seek to provide a transportation and land use system for all people with an efficient and pleasurable choice for arriving at their destinations while protecting the historic and residential character and ambiance of Key West.

We seek the preservation, maintenance, and when possible enhancement of the physical environment of Key West and its nearshore waters.

We seek to become an ongoing, role model organization to transform the City into a highly performing municipal corporation that quickly and efficiently responds to the needs of its citizens.

We will strive to effectively support those social service organizations in our community that help local individuals and families seeking assistance to enable them become self-sufficient or successfully manage their day-to-day lives.

BACKGROUND:
Key West is one of the most vulnerable cities to the possible effects of climate change. Scientists suggest that escalating greenhouse gas emissions threaten to increase the Earth's temperature and raise sea levels. The City of Key West City Commission, observing high tides already at street level, has committed to take action here at home and to encourage the rest of the world to do so too.

Committing the city to action upon his election, Mayor Morgan McPherson signed the Mayors Climate Protection Agreement and on August 7, 2007 the City Commission passed resolution 07-160 committing to use the 5-milestone process to reduce carbon emissions. August 5, 2008, the Key West City Commission passed Resolution 08-067 setting the goal of reducing community greenhouse gas emissions by 15% of the 2005 levels by year 2015, directing staff to reduce municipal greenhouse gas emissions by 15% and directing staff to create a community climate action plan.

The City Manager directed Environmental Program staff create a report that was achievable and acceptable to the citizens and businesses of the city. Environmental Programs formed a working group of members to ensure the goals of the City Manager and City Commission was met. Since that time the Climate Action Team has been working almost every other week to create a Climate Action Plan that is achievable and would have community support. The team, made up of about 2 dozen members, created small focus groups to assist in addressing each initiative area to obtain expert opinion and gage community support. They also sought input from standing committees, like the Community Traffic Safety Team, to "piggyback" the long standing knowledge and recommendations of those groups.

The Environmental Programs Manager presents this report to the City Manager for approval and the City Manager presents this staff recommended plan to the City Commission for adoption.

The Climate Action Plan was considered by the City of Key West City Commission Sustainability Advisory Board which unanimously approved recommending adoption of the plan to the City Commission.

PURPOSE & JUSTIFICATION:
The purpose of the Climate Action Plan (CAP) is to reduce Greenhouse Gas Emissions by 15% by 2015 using 2005 as a base year. The reduction in emission correlates, almost directly, to a reduction in electric and fuel use and subsequent costs. The plan details how to reduce emissions in the community and in municipal government operations. It identifies projects, their

efforts, some costs, and benefits. The plan will reduce or offset equivalent carbon dioxide emissions from 400,000 tons to 340,000 tons by 2015. The five major action areas are:

- Energy Supply -Reduce 9831 tons per year of CO2e emissions;
- Solid and Sewage Waste – Reduce 7,055 tons per year of CO2e emissions;
- Transportation – Reduce 12,681 tons per year of CO2e emissions;
- Building Efficiencies – Reduce 30,258 tons per year of CO2e emissions; and
- Sustainability/Sequestration – Absorb 175 tons of CO2 per year.

The plan recommends staffing to implement the plan, a marketing program, some capital projects, and much alliance building to engage and inform the community about climate change and ways to reduce greenhouse gas emissions. Challenges to residents and businesses to measure, monitor and take steps to reduce their individual electric and fuel use are made so the plan may be realized. This Plan is expected to be implemented through 2015, while actions are monitored, measured and improved annually.

Adaptation to climate change is vital to the economic health of Key West and the quality of life of our citizens.

It is important that this plan be adopted, if acceptable, shortly. All federal stimulus DOE funds and many of the EPA funds require the city have an "Energy Efficiency and Conservation Strategy" (EECS) that is part of all grant applications. The use of the CAP is document is recommended as the blue print for the EECS. New funding opportunities are being advertised weekly and the Florida competitive 1.2 million dollar grants will be announced soon.

The City of Key West City Commission has been asked to be a part of the Regional Climate Change Summit in Fort Lauderdale on October 23. The summit will provide the platform for the 4 southeastern Florida counties to develop a partnership to address Climate Change in a regional approach. As 4 of the most affected counties in the country as sea level rises, it is in the City's interest to partner as a region to reduce costs, lobby for appropriate funding and encourage other communities to reduce dependence on non-renewable energy. Adoption of this CAP will cement our resolve to climate change issues locally and regionally and indicate a leadership position in this area.

Of additional import, is the security of our country. As Americans, the security of our county is a high priority. As the largest user of fossil fuels in the world we must ensure we have an energy plan and policy that can provide for stable fuel for the long term. "We" starts with every American town, the City of Key West included. Waiting to see if sea levels rise too far or if land and food shortage drive mass migration, may place America and Key West in defensive maneuvers. The time to start good energy and adaptation policy is now. Retired Army Gen. Gordon R. Sullivan, once said, "We never have 100 percent certainty. We never have it. If you wait until you have 100 percent certainty, something bad is going to happen...".

OPTIONS:

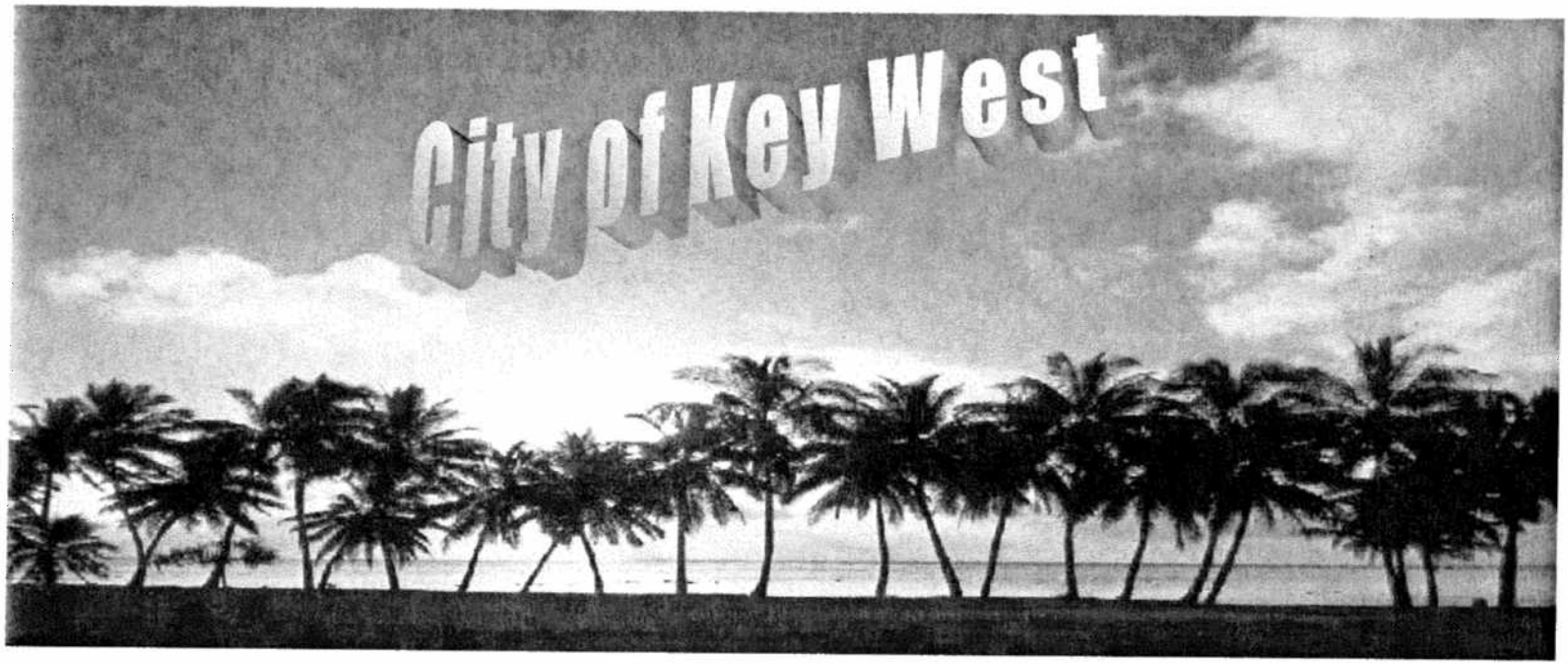
Approve the resolution, adopting the plan, directing finalization of an implementation plan and recommending staff seek grant funding.

Reject the plan and recommend modification to it.

Modify the plan and approve the resolution.

FINANCIAL IMPACT:
Mitigating Greenhouse Gas emissions will be costly over the long haul. The effects of unmitigated climate change will be much more costly to the residents and businesses of Key West. Due to the stimulus package there are numerous funding sources for quality projects that the City can apply for. The initial year in the plan, 2010, is expected to cost the city $144,000 (existing salaries and funded projects). Future years will be better defined through the implementation plan and our ability to fund recommended projects through grants. Alliances and partnerships for initiatives will be aggressively sought. The remaining year's budgets increase dramatically due to the installation of large renewable power sources and the installation of LED lighting that will save the city money over time, the largest with a ROI of 8 years if no grant funding is obtained. There will be no need to make a budget modification this year. The draft budget is explained through discussion of initiatives throughout the plan and is estimated in Appendix 5.

RECOMMENDATION:
Approve this resolution.



Climate Action Plan

October 1st, 2009

Executive Summary

Key West is one of the most vulnerable cities to the effects of climate change. Scientists suggest that escalating greenhouse gas emissions threaten to increase the Earth's temperature and raise sea levels. The City of Key West City Commission, observing high tides already at street level, has committed to take action here at home and to encourage the rest of the world to do so too.

It is widely accepted across the globe that carbon dioxide (CO2) and other greenhouse gases will have a progressively grave effect on the Earth's climate increasing the risk to municipal governments from extreme weather events, changing rainfall patterns, and even the migration of infectious diseases. Research shows that the combustion of fossil fuels releases greenhouse gases (GHG), namely carbon dioxide, and that organic waste releases methane gas, another more destructive GHG, into the atmosphere causing global surface temperatures to increase with related rising sea levels. The impacts on the city vary from reducing habitat for native species to less economic growth.

Local governments share a common duty to improve the quality of life of their citizens. Policies implemented by city governments affect the economic, environmental, and social conditions within the city so it is imperative that those policies are effective and suited to the particular city. Committing the city to action upon his election, Mayor Morgan McPherson signed the Mayors Climate Protection Agreement and on August 7, 2007 the City Commission passed resolution 07-160 committing to use the 5-milestone process to reduce carbon emissions. August 5, 2008, the Key West City Commission passed Resolution 08-067 setting the goal of reducing community greenhouse gas emissions by 15% of the 2005 levels by year 2015, directing staff to reduce municipal emission by 15% and directing staff to create a community climate action plan. This step toward a sustainable future is a leadership role amongst local governments which will surely help bring action here and encouragement to other communities which possibly may be less immediately affected by climate change. Key West, having an average elevation of about 2 feet above recent high tides, will be significantly impacted if GHG emissions are not reduced.

As a result of the Commission's Resolution, Environmental Programs Division was directed to work with the community to develop an action plan to serve as a roadmap to Key West's emissions goal. Community members were recruited to work diligently to develop a plan that is achievable through business, resident, and government agency action. The plan identifies projects, their efforts, costs, and benefits. The following plan will reduce or offset carbon emissions from 400,000 to 340,000 tons. The five major action areas are:

- Energy Supply -Reduce 9831 tons per year of CO2e emissions;
- Solid and Sewage Waste – Reduce 7,055 tons per year of CO2e emissions;
- Transportation – Reduce 12,681 tons per year of CO2e emissions;
- Building Efficiencies – Reduce 30,258 tons per year of CO2e emissions; and
- Sustainability/Sequestration – Absorb 175 tons of CO2 per year.

This Plan is expected to be implemented through 2015, while actions are monitored, measured and improved annually. The mid-term goals from 2015 through 2025 and long term goals through 2050 are expected to be developed by future action teams.

We would like to thank the many dedicated community and city government volunteers for their assistance in preparing this plan or providing much needed input. It will take the entire community to meet our goals and the dedication of the individuals who continuously provide input and support to community boards and committees will help ensure the goals are realistic and achievable. We have attempted to acknowledge everyone here but may have erroneously omitted a contributor, and apologize to any who were.

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1.0
INTRODUCTION

1.1
The Science of Climate Change

It is a well-researched fact that the combustion of fossil fuels releases greenhouse gases, namely carbon dioxide (CO2), into the atmosphere. In a series of lengthy reports, the Intergovernmental Panel on Climate Change (IPCC) found that atmospheric CO2 levels are increasing at an unprecedented and alarming rate due to human consumption of fossil fuels. As a result, the mean global surface temperature has risen during the last century. This increased temperature contributes to rising sea levels, more intense weather events, habitat disruption that could lead to species extinction, and other possible serious effects. It is unknown how successful humans, plants and animals will be at adapting to these relatively rapid changes. While how much the climate is warming, what effects can be predicted, and to what degree humans are responsible are avidly debated and research questioned, the vast majority of scientists agree that it is time to take strong precautionary measures to stabilize greenhouse gas emissions and slow global warming.

A carbon sink is a natural or manmade reservoir that accumulated and stores some carbon chemical compound for an indefinite period. The main carbon sinks are photosynthesis of algae and plants and absorption of CO2 by the oceans. Photosynthesis is a process that converts carbon dioxide into organic compounds using the energy from sunlight. Photosynthesis uses carbon dioxide and water releases oxygen as a waste product. Some carbon is stored in soils. The carbon in the oceans dissolve and in doing so creates a variety of compounds. IT is surmised that ocean acidification is occurring due to volume of CO2 being absorbed into the water.

In addition to carbon emissions themselves, additional greenhouse gasses remain in the atmosphere due to accelerated deforestation worldwide. The reduction of forests reduced photosynthesis which in turn reduces the volume of CO2 removed. This is especially true of salt water marshes, including mangrove habitat. Marshes are the best carbon sink of all natural sequestering options. Soil in Northern climates store large amounts of carbon. As these climates are seeing less frost, the carbon sink is decreasing.

1.2
Natural Warming

Energy from the sun radiates into the Earth's atmosphere and is absorbed into the Earth's surface, much of it radiates back into space, especially at night; this heating creates weather and climate. Some of this energy is trapped by naturally occurring greenhouse gases such as carbon dioxide and methane. GHGs are a necessary to keep the earths temperature relatively steady. As the concentration of GHGs continues to increase in the atmosphere, the Earth's temperature is

quickly rising above levels expected in such a short time frame. U.S. National Oceanic and Atmospheric Administration records indicate the Earth's average surface temperature has increased by about 1.2 to 1.4° Fahrenheit in the past 100 years. Eleven of the twelve years from 1995-2006 rank among the twelve warmest years in the instrumental record of global surface temperature (since 1850), with the warmest year being 2005. IPCC Fourth Assessment Report "Climate Change 2007: The Synthesis Report"

1.3
Earth's Climate is Affected by Human Activity

The Bush White House asked the National Academy of Sciences (NAS) to assess the scientific conclusions regarding climate change and projections of future change. The NAS report, *Understanding and Responding to Climate Change (2008)*, stated, "Climate changes observed over the last several decades are likely mostly due to human activities....and additional evidence collected over the past several years has increased confidence in this conclusion."

Some GHGs in the atmosphere is a natural part of the Earth's climate system and is beneficial to our environment. However, extensive combustion of fossil fuel and reduction of the world's forests over the past few hundred years has caused higher greenhouse gas concentrations in the Earth's atmosphere. GHG concentration has increased 70% since 1970. Twenty-four percent of this increase occurred between 1990 and 2004. Vehicular and electric power plant fossil fuel consumption along with deforestation resulted in 7.1 billion metric tons of CO2 emissions yearly.

Although there is great uncertainty on the exact increase in temperature and sea level rise and the timing of it, even among the scientist of the IPCC, climate models do predict and the scientists agree, there will be an increase in the Earth's surface temperature from 2.5 to 10.4° F by 2100 if emissions are not mitigated. The IPCC scientists are certain that human activities are changing the composition of the atmosphere and that in turn will cause other effects. The scientists agree one effect will be sea level rise.

Local and state governments can have a large impact on climate action. The President's Secretary of Energy, Steven Chu, lauded California "California has kept its emissions constant since 1970 while the rest of the US has increased their emissions by 40%."

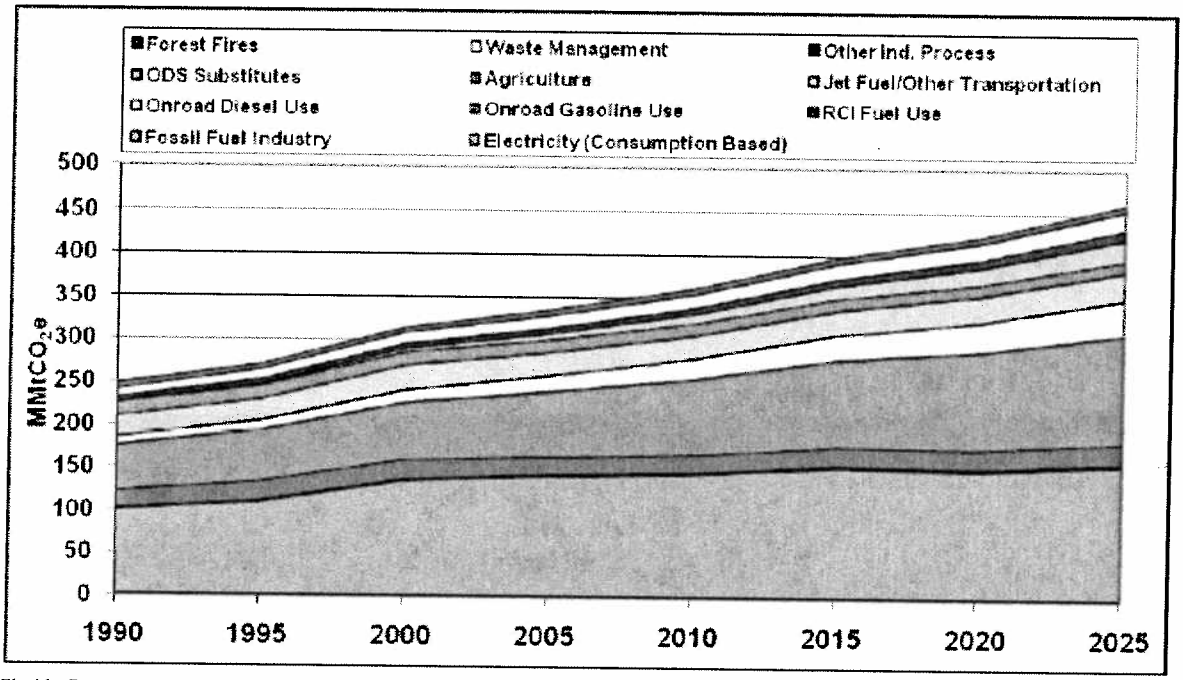
2.0
Florida's Emissions of Greenhouse Gases

In 2007 Florida Governor Charlie Christ created the Governor's Action Team on Energy and Climate Change to develop a series of recommendations for addressing climate change in Florida. A summary of the findings relating to climate change and the potential impacts on Florida is provided below. The team found that "There are numerous benefits, both environmental and economic, which accrue both to the State of Florida and the private sector, due to pursuing energy efficiency and investing in alternative energy technologies; with planning

these may be able override the negative impacts of climate change."* *Florida Governor's Action Team on Energy and Climate Change Final Report

In order to complete Florida's Energy and Climate Change Action Plan the FDEP and the Center for Climate Strategies prepared a state inventory and projections of GHG emissions. The plan stated "While climate science is complex and evolving, the scientific community has reached a strong consensus that warming is largely the result of carbon dioxide and other GHG emissions from human activities." Florida's emissions since 1990 are expected to almost double by 2025. Florida GHG emissions for transportation and electric emissions account for 81% of the states emissions.

The table below is an excerpt from the state plan.



*Florida Governor's Action Team on Energy and Climate Change Final Report

Figure 1 Actual and Projected Greenhouse Gas Emissions in Florida by Sector, 1990-2025

It is clear from the reports of the IPCC and the Governors Action Team on Energy and Climate Change that all Floridians should take action to reduce GHG emissions in an effort to minimize the subsequent climatic effects.

The State Action Team reported the impacts on Florida will include among other changes:

- Air temperature rise of 2.5 to 10.4 degrees Fahrenheit
- Sea level rise between 4 and 35 inches which could inundate wetlands and low lands
- Precipitation changes
- Tropical cyclone changes

- Decreased freshwater resources
- Increased sea water temperatures affecting fisheries can corals
- Increased ocean acidification affecting shellfish

Left unmitigated, Floridians will contribute to the very dangerous rise in sea level. By most nations acting immediately to reduce emissions the world may be able to avoid or minimize the negative effect of GHGs. Floridians can be encouraged into climate action through a cap and trade system, taxing energy or emissions, and other market–based solutions. Florida's Action Team recommended a regulatory, market-based cap-and-trade emissions limiting program that will be able to urge public and private sector to invest in new technology, and better construction which will stimulate economic development.

Florida's Governor's Action Team on Energy and Climate Change October 15, 2008 Phase 2 report contains over 50 policy recommendations and recommends the legislature "work to encourage the development of alternative energies to achieve the goals of:

- Mitigating the potential impacts to Florida from climate change;
- Further stimulating economic development in the state associated with the existing and emerging alternative energy industries; and
- Achieving energy security by reducing dependence on foreign fuels."

3.0
Key West Greenhouse Gas Emissions

ICLEI Local Governments for Sustainability, founded in 1990 is an international agency of over 1105 agencies. ICLEI USA, was launched in the United States in 1995 and has grown to more than 500 US cities and counties providing leadership on climate protection and sustainability development. It was formed of local governments to assist local governments in developing sustainable and practical solutions to global environmental problems. The ICLEI Cities for Climate Protection (CCP) Campaign focuses on global warming and climate change. CCP is a performance-oriented campaign that offers a framework for local governments to reduce greenhouse gas emissions and improve livability within their municipalities. The CCP Campaign achieves these results by linking climate mitigation with actions that improve local air quality, reduce local governments' operating costs, and address other existing municipal concerns.

The CCP Campaign involves a five-milestone process to achieve GHG emissions reductions:

- Milestone One: Conduct a baseline emissions inventory and forecast.
- Milestone Two: Set an emissions reduction target.
- Milestone Three: Develop a Local Action Plan for reducing emissions.
- Milestone Four: Implement policies and measures.
- Milestone Five: Monitor emissions reductions and verify results.

On August 7, 2007, the City of Key West adopted its resolution for climate protection and officially joined ICLEI's Cities for Climate Protection Campaign. This Climate Action Plan sees the City achieving milestone three of the process. A copy of the baseline inventory is

available in the appendix and on the City website under the Clean and Green portal which can be found at: www.keywestcity.com/department/board.asp?fDD=21-312

The inventory is based on accepted international protocols and keeps with a similar approach other cities with climate change objectives have used. It is not meant to be precise GHG accounting, but it does provide a high level examination of the City's GHG emissions. Utilizing the results of the Inventory enables the City to develop policies and programs that will create the greatest emissions savings.

The Key West emissions inventory was completed in 2008. The inventory's baseline year is 2005; 2007 provides an interim measure. The report indicates that the City of Key West community produced 399,592 tons of carbon dioxide emissions, equating to 16.7 tons of GHG emissions per capita for the city. A forecast of predicted emissions unmitigated by 2015 is 416,826 tons CO2e.

The top energy user in the city is the US Navy emitting about 45,000 tons of CO2e. The remaining top ten emitters are the Monroe County Detention Facility, the City of Key West, the hospital and college, as well as 4 hotels and one grocery store.

To put the use of energy in a very basic level US Dept of Energy Secretary Steven Chu, a Nobel Prize winner for physics, described America's energy use in units of caloric energy this way; "every person in the United States uses energy as if they had 100 personal servants at their beck and call" to clean, transport, and cook daily.

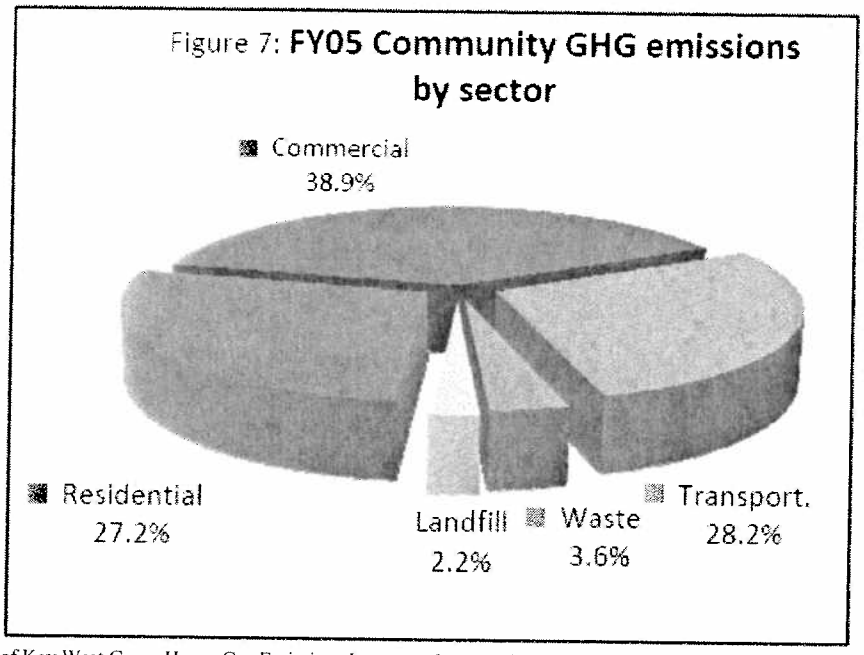
Keys Energy Services, Key West's electric provider obtains its electricity though the Florida Municipal Power Agency (FMPA). The FMPA purchases its energy from a variety of sources. Seventy percent of the power is derived from natural gas. Smaller percentages are coal and oil, with a slight purchase of nuclear, and shortly, solar will be added. Natural gas produces much less GHG than coal or oil.

The following table summarizes GHG emissions:

GHG Emissions by Sector – Key West 2005

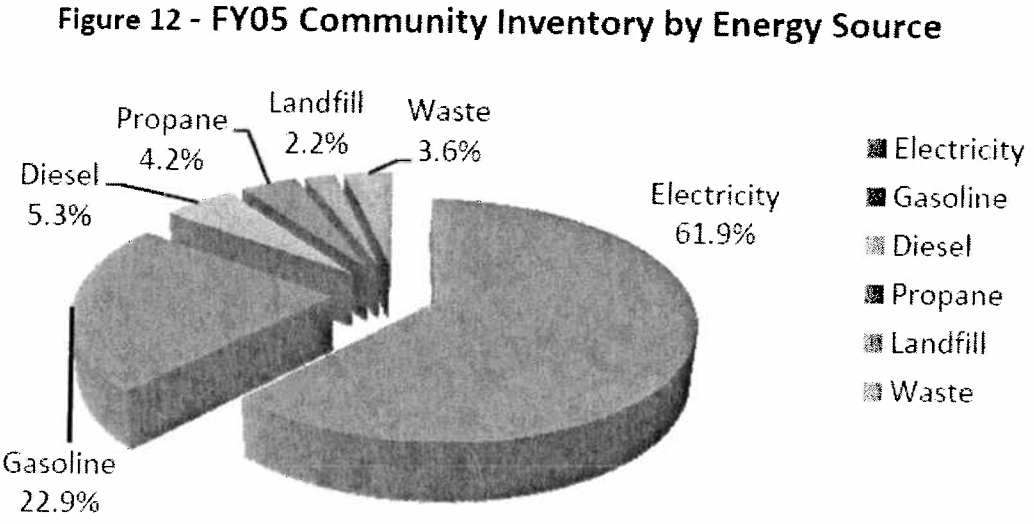
Sector	Percent	TONS CO2e
Residential	27.2%	108,689 tons
Commercial	38.8%	155,322 tons
Transportation	28.2%	112,492 tons
Waste	3.6%	14,260 tons
Landfill	2.2%	8,800 tons

Table 1 - GHG Emissions by Sector – Key West 2005



Excerpted from City of Key West Green House Gas Emissions Inventory January, 2008

Figure 2 – FY05 Community GHG Emissions by Sector



Excerpted from City of Key West Green House Gas Emissions Inventory January, 2008

Figure 3 – FY05 Community Inventory by Energy Source

4.0
KEY WEST CLIMATE ACTION PLAN

This plan aims to identify potential projects of relevance to Key West and explore some possible financial and environmental impacts of proposed initiative. The overarching vision of the plan is to develop a sustainable energy future for Key West. It includes baseline data and emissions reduction strategies for all sectors – commercial, residential, public/federal, transportation, and solid waste. It also addresses city operations, water conservation and urban forestry.

The City's primary role will be to act as a facilitator, educator, and to promote market transformation for energy efficiency and renewable energy products and services. The plan outlines five primary strategies for reducing emissions: increase energy efficiency of buildings; reduce waste related emissions, reduce transportation related emissions, improve energy transmission/increase renewable energy options, and increase carbon sequestration. Each section outlines overarching strategies and potential actions the City and community are encouraged to take to reduce emissions. The plan concludes with an implementation plan that outlines specific actions to be implemented from 2009 through 2015 (with recommendations for funding, maintenance, and improvement) and quantifies the projected impacts, including estimated GHG reductions, private sector savings and the net cost per ton of carbon dioxide equivalents (CO2e) reduced.

The annual total budget for the City of Key West Government required to achieve this reduction ranges from $144,000 this year in mostly existing staff salaries to 1.7 millions in 2013 to fund alternative energy products. The plan assumes that funds for marketing, outreach, energy management and subsidies for critical services, such as energy audits, will comprise the majority of the operations budget. Capital expenses are required, however all have very positive returns on investment and grant opportunities are available. Significant funding for renewable energy purchases may be required in 2015 to cover an emissions reduction shortfall, thereby increasing the amount of funds needed in 2015 as compared to the average annual budgets for years 2010 to 2014.

Achieving the Key West goal requires not only a substantial financial commitment, but also the dedication of staff resources and political will. While the City recognizes that Key West's actions are far too small to impact global greenhouse gas emission trends and the progression of global warming, Key West *is* one of the most affected cities in the country.

The creation of this Local Climate Action Plan outlines the policies and measures recommended to enable Key West to achieve its 15% by 2015 reduction on baseline 2005 levels. This plan will need to be fully developed into an implementation plan to include a timeline, a description of financing mechanisms, and an assignment of responsibility to City departments and staff as well as other government agencies, business groups and community organizations. Cost estimates depend on what options are chosen to bring the community to the emissions reduction goal. Different options require different levels of investment. For example, implementing a wide array of energy efficiency measures would require significant amounts of capital, but also produces a return on investment, creates jobs, and institutes long-term improvements in the environment.

However, energy efficiency alone is unlikely to reach the goal. The City could also choose regulatory approaches that cost relatively little to implement and achieve full market penetration. While no regulatory strategies are being proposed for immediate implementation, the Climate Action Team has recommended that the options presented in the plan be considered in the future. It is likely that a combination of these options will be needed. This plan, as well as the implementation plan recommendations, attempts to assist staff in developing the appropriate mix of strategies and investments.

4.1
Criteria and Recommendations

In analyzing the wide variety of options available to reduce greenhouse gases, the Climate Action Team, made up of members of the public, utilities, commerce, tourism and local government agencies, applied the following criteria to their process of review and deliberation:
Viability – Is the proposed action financially, technologically, and politically viable?
Cost-effectiveness – Applying full cost accounting principles, as the distributions of costs and benefits equitable and reasonable?
Implementability – Is there a readiness to implement and are the potential barriers to implementation low?
Achievement of goals – Does the proposed action contribute to short and long-term reduction goals? Is there a cumulative impact over time?
Engagement – How can the impact potential of the proposed action be balanced with the potential for public engagement and education?

This plan draws two broad visions of the future; the first is for our business community and the second for our residential community. Each vision is made up of various components from the specific five target priority areas the CAT recommends to reach the 2015 Goal and also highlights areas to be targeted through educational efforts to assist residents and businesses to make relatively simple and affordable changes with long-term cost savings and reduced carbon emissions.

5.0
The Vision

The vision of the Climate Action Plan (CAP) is to guide Key West towards a sustainable future that dramatically reduces greenhouse gas emissions from current levels, while meeting the needs of present and future generations. Strategies presented in the CAP include increased energy efficiency, waste diversion, alternative transportation, building efficiencies, and sustainability/carbon sequestration. A report completed for the Sierra Club titled "Sustainable Cities: Best Practices for Renewable Energy and Energy Efficiency" by Ken Regelson, October, 2005 identifies the following key elements cities are using to become more sustainable:

- Leadership
- A Plan
- Efficiency Rebate -Programs
- Renewable Programs

- Funding
- Green Building
- Communications
- Multifamily Building Programs
- Training
- Income Qualified Programs
- Inspections, Audits, and Measurements
- Green Roofs

A summary of key findings drawn from four cities across the United States emphasized:
Leadership – most often the original impetus came from a mayor or commissioner.
A Plan – All had a master plan or roadmap to follow.
Funding – Funding for energy efficiency (EE) and renewable energy (RE) came from electric power rates, grants, state programs, and integration into normal city budgets. Investments lead to reduced energy costs.
Communications – Excellent websites include details on programs, customized fact sheets (e.g., on green building practices), reports, and case studies. All had award programs or on-line show cases for excellence in green building.
Training – Rather than emphasize EE and RE as topics themselves, resident and business training often focused on the human concerns of saving money, or sealing leaks for comfort, or on indoor air quality and health.
Inspections, Audits and Measurement – Free or low cost energy audits and inspections are provided. Measurements and analysis help insure that RE and EE investments are cost-effective and popular with residents. Commissioning of buildings verifies that RE and EE equipment is installed and operated properly.
Efficiency Rebate Programs – There were often targeted to specific reductions in peak electricity use, with efficiency rebates set as a fraction of the projected cost of building the next power plant.
Renewable Programs – Include both green energy purchasing programs and rebates for resident sited solar.
Green Building – Lead by example. Start with city-owned buildings to develop local expertise. Green building was then encouraged generally with assistance, rebates, grants, award programs, and some regulation.
Multi-Family Building Programs – Focused on the needs of renters and apartment owners.
Income Qualified Programs – Recognize that low income residents most need the comfort and money savings from EE, but can least afford it, so additional incentives for EE are provided.
Green Roofs – Chicago and Portland have green roof programs for the benefits of energy savings, urban heat island reduction, rainwater retention, air quality improvement, and beautification.

While the City recognizes that Key West's actions are far too small to impact global greenhouse gas emission trends, it also recognizes that the cost of inaction could be very high and that inaction represents a missed opportunity for saving money (costs of delay) and improving the economic environmental and social sustainability of the community. A sustainable energy future means the following changes for Key West:

- More efficient and healthier buildings that reduce community energy costs;
- Keys shuttles conveniently linking different neighborhoods and business districts;
- Wide availability of sustainable products, including green building materials, high efficiency building equipment and cars, alternative fuels, organic food, community composts, and more;
- Renewable energy and distributed generation systems to hedge against energy price volatility and electricity system vulnerabilities;
- Innovative, social programs ensuring that lower-income residents benefit from the shifts and changes brought about by the CAP;
- A vibrant economy and skilled workforce based on the demand for and provision of sustainable products and services; and
- An even stronger sense of community pride in Key West's efforts to protect the environment from the impacts of global warming.

6.0
Program Recommendations

The following recommendations, if fully implemented, will demonstrate Key West's commitment to addressing the problem of global warming by reducing greenhouse gas emissions by 15% by 2015 using 2005 baseline data. The current city-wide emissions are about 400,000 tons CO2e annually. Therefore the 15% reduction goal is a reduction of 60,000 tons of CO2e.

6.1
Energy – Key West will reduce annual greenhouse emissions by 10,731 tons by using renewable energy, conservation, and more efficient power.

1. Replace standard street lights with Solar LED lighting - 986 tons
2. Replace old fashioned lights with LED lighting - 540
3. Install LED lighting and solar generation system at City (Park n Ride Garage) -130 tons
4. Install alternative energy systems:
    a. Wind energy generator at Waste Water Treatment Plant (WWTP) and land fill - 500 tons;
    b. KES/FMPA/NOAA solar project, (37kw)
    c. KES/FMPA/NOAA wind project (6kW capacity)
5. City Commission to Partner with Utility Board of the City of Key West to develop a series of goals, timelines and benchmarks to reduce emissions by 6,814 tons CO2e through:
    a. enhanced program of purchasing electric power generated by low co2 emission fuels and non-combustible energy
    b. Energy demand or tiered/inverted rate incentive program to encourage conservation and fund improved energy audits or utility "green energy improvements".
    c. Encourage Keys Energy Services to continue to consider "smart grid" and "smart meter" systems.
    d. Encourage continued improvement of transmission and distribution systems to reduce line losses.

e. Partner in rebate and marketing program to promote conservation as cost effective "climate action".

6. Consider the advantage of taxing electric utility and propane use to encourage conservation; dedicate funding for a revolving loan fund for weatherizing and renewable energy projects. Tax at a level that simple conservation at the desired level will not increase current/expected rates. (note, increased cost during this economic climate may not be feasible by 2015)- (900 tons).

7. The City of Key West will monthly publish in a local newspaper the current and previous 24 month electric consumption by the City of Key West government in order for the citizens to judge the progress towards reducing consumption.

8. The Utility Board shall monthly publish in a local newspaper the current and previous 24 months the total and per customer electric consumption by all residences and businesses in order to for the citizens to evaluate progress towards the goal of reducing consumption.

6.2

Sewage and Solid Waste and Water Supply – Key West will reduce waste and water supply greenhouse gas emissions by 7,055 tons through water conservation, system conservation, alternative waste disposal and modified waste contracts

1. Establish multiple commercial recycling and waste vendors to increase competition and improve services. Ensure contracts have performance measures and quarterly and annual performance reviews.

2. Implement a pay as you throw trash initiative to incentivize composting, recycling, reducing and re-using.

3. Create a "solids" composting system for the waste water treatment plant and a composting system and mulch program for organic solid waste.

4. Implement an energy efficiency program, or ESCO for the waster water treatment system.

5. Partner with the FKAA to implement a reclaimed water system reducing the need for pumping fresh water from the mainland.

6. Partner with the FKAA to create a coordinated water conservation program.

"We have saved 40% of our waste costs by reducing, reusing, composting and recycling; that is an annual savings of $8,640" - Cindy DeRocher, General Manager, The Gardens Hotel.

6.3

Transportation - Key West will reduce green house gas emissions by 12,681 tons by reducing vehicle miles traveled, conservation and increasing alternative transportation use.

1. Implement the full Bicycle/Pedestrian Plan as approved by the City Commission, along with recommendations listed in the actions section of this plan including curb cuts, safe sidewalks, increase bicycle parking and bike racks at every lower keys shuttle bus stop.

2. Establish sub-committee as an authority to oversea private and public sector assistance in promoting and enabling people to use alternatives to the car; carry out surveys of bus users and non-users and whether commercial interests could assist in promoting public transport such as "free pass to shop" at grocery outlets, employee incentives (the US Navy provides public transit passes to military and civilian employees),and pay not to park programs.

3. Promote "green" and "Smart Fleets" through incentives, driver training, creation of alternative fuel stations. Lead by example through greening of the city bus and vehicle fleet; commission a benefit analysis of using propane for local busses.

4. Promote car pooling, car pool website and electric car stations at all city parking lots; ensure public transit system has bus route timing that encourage commuting to work and back home.

5. Improve bus ridership through minor improvements including a simple to read map and schedule to be posted and maintained at every bus stop, shade, ADA access and weather protection at stops, a marketing campaign and improved bus pass and fare sales.

6. Require special events receiving permits from the City Commission to include a plan to promote transit, pedestrians, bicycles and shared rides. Such a plan would include alternative modes of travel in event publicity, providing additional bicycle parking, provide satellite locations for people to park and ride transit and adding temporary transit service to meet additional demand.

6.4

Buildings - Key West will increase energy efficiency of commercial, residential and government buildings to reduce 30,258 tons of green house gasses.

1. Hire a professional energy manager to work for city to develop energy efficiencies in all city-owned buildings, then assist the remaining top 10 electric users in energy efficiency measures, then work with commercial and residential users. Develop partnerships with all large electric users including Naval Air Station Key West.

2. Create an outreach program to reach every resident and business manager and educate them in using simple clear actions that will save money and reduce greenhouse gas emissions.

3. Implement green office audit for all City owned buildings with milestones, goals, and timelines – develop recognition system for staff. Share audit program with other public agencies.

4. City to create incentives if a permittee or developer uses alternative power, like increased density, reduced parking requirements, fast permitting, etc.

5. Implement ordinance to encourage building energy efficiency improvements in leased spaces, and request that all large building owners consider commissioning studies or an energy savings performance contracting program.

6. Create an alliance of city staff, contractors, planners, architects, engineers, the Monroe County Extension Service, FKCC and educators to encourage energy efficient building and renovations and institute contractor/designer/owner training programs.

7. Require all affordable housing to be green building certified by a recognized certification process (i.e. LEED) which will reduce monthly energy costs of tenants or owners on a continuing basis.

> "In the two years since we opened our Personal Training Center, our efforts to go green have helped us save approximately $9,000 per year. Most projects gave us a positive cash flow within 90 days and the long term projects will pay off for more than 20 years. Our business is a classic example of how small companies can use green ideas to improve their customer experience, save money and the environment all at the same time."
>
> Dan Reynen - WeBeFit.com

6.5

Sustainability/Sequestration – Key West will reduce1000 tons of greenhouse gasses through better land use planning, and increase the sequestration of 175 tons of carbon dioxide

1. Create a non-profit organization for the planting and maintenance of 10,000 trees, mangroves and other landscaping in Key West. This will provide for a reduction of the city's "heat island" effect an increase in shade on homes and businesses which reduces cooling bills, and an increase the walk-ability of the city.

2. Establish a certified "Carbon Offset" fund program for home and business owners, event organizers and visitors that accepts donated funds for the tree planting, operated by a non-profit agency and marketed by the City and agency.

3. Promote special events such as "carbon neutral" and "earth friendly" by incentivizing them through the City permitting process. Carbon neutral events may reduce their carbon footprint and then donate to a certified carbon offset fund, like the proposed tree planting fund, to create a neutral event.

4. Use "Smart Growth" principals for all developments and re-developments in Key West. Actively encourage the extensive use of green building techniques in all renovations and new construction.

5. Impart island pride and the ability to take action in every citizen, worker and visitor in Key West through continued marketing, education and outreach to all; apply the principles of total quality leadership to promote continuous commitment to improving the local environment and quality of life. The city and all its associates should serve as role models through deed and words.

"At MCC, we strive to be a completely 'polystyrene-free' venue. In this way, we not only live out the principles of being 'green' but we ask those who use our space to do the same out of respect for our philosophy and the principles we hold dear. This measured approach simultaneously educates and encourages our sister-organizations (and all the individuals therein) to adopt these and other changes that may seem small, but ultimately impact the entire community in very substantial ways."
- Joe Mc Murray, Pastor

6. The City of Key West Planning and Building Departments will promote and suggest energy conservation measures when reviewing new developments and redeveloped properties such as shading buildings with native vegetation, adopting building shapes and orientation to reduce heat gain, shading parking lots with native vegetation around buildings, using white roofs to reduce heat gain, and providing more insulation than the minimum to requirement.

7. The City of Key West will revise the Architectural Guidelines in the Historic District to accommodate white roofs, wind power, solar electric panels and solar water heaters.

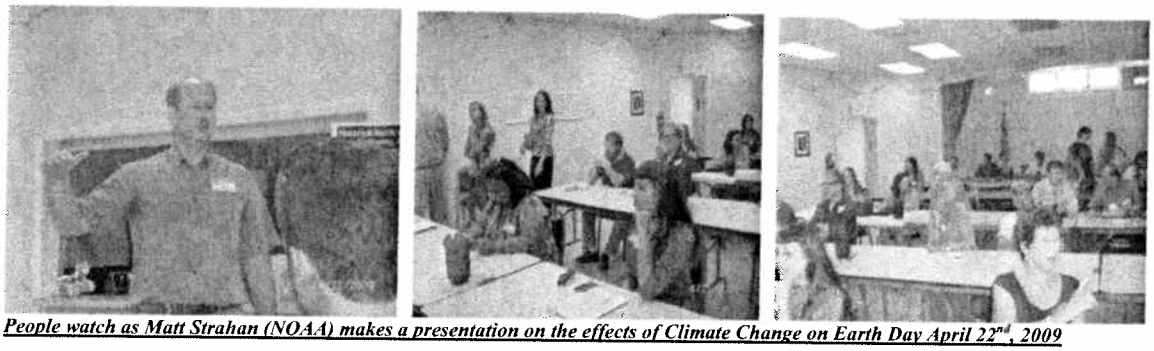
7.0
Operational Recommendations

The CAT is eager to see the City take a lead in implementing the above recommendations and would suggest tasking a full time "green coordinator" or "sustainability manager" to oversee and report on progress towards achievement of goals and initiatives. This would both avoid duplication of effort as well increase effective planning and evaluation of each element of the plan. The coordinator would work closely with residents, commerce, public and not-for-profit agencies to extend educational awareness initiatives and act as a "one-stop shop" contact point for all enquiries.

7.1

Key Educational Points/Responsibilities for Green Coordinator

An overarching educational plan is recommended as a way of obtaining economy of scale discounts on marketing and advertising costs. It is vital to enter partnerships with other community and government agencies to adopt a holistic approach to greenhouse gas reduction. Organizations that will be key to the success of the plan will include the Florida Keys Aqueduct Authority, Keys Energy Services, Naval Air Station Key West, Florida Keys Community College, City Tree Commission, Botanical Gardens Society, Garden Club, grocery stores, Hotel Motel Association, Inn Keepers Association, Monroe County, Chamber of Commerce, Key West Housing Authority, Monroe County School District, Florida Department of Transportation Technical Advisory Committee, and taxi companies.



People watch as Matt Strahan (NOAA) makes a presentation on the effects of Climate Change on Earth Day April 22nd, 2009

The four southeastern counties of Florida will be meeting in October, 2009 for the first Regional Climate Leadership Summit. The goal of the meeting will be to enter into a Southeast Florida Regional Climate Change Compact for the purpose of recognizing the need for immediate, collaborative and visionary action to mitigate for and adapt to the consequences of climate change. The Coordinator should meet with staff of these agencies aggregate resources, share successes, training expenses, create purchasing alliances for services and goods. Alliances with Monroe County and Keys municipalities in marketing and outreach can be built to reduce each agency's cost of many similar projects or programs. The TDC has budgeted for substantial funding for marketing the keys as a green destination to capture the socially conscious consumer. Alignment of CAP goals and tourism goals should be considered a priority.

The Green Coordinator will be required to maximize collaborative efforts to bring all initiatives to success under the umbrella program of carbon emission reduction:

- Seek alliance and partnership opportunities;
- Hire a marketing firm to work on project and develop objectives and performance measures:
- Finalize alliances and partnerships and objectives of each partner;
- Supervise marketing program and report on performance;
- Develop educational programs, objectives and performance measures;
- Supervise advertising program and measure performance;
- Recommend grant programs;
- Provide an annual report of the performance of the program and provide monthly updates to the City Commission.

The educational and outreach portion of this plan is the most important component. It includes outreach to partners, the development of alliances in the community and educational contact with all members of the community. The Coordinator will be responsible to ensure it is fully implemented. The recommended outreach program is detailed in the Education and Outreach Strategy section of the plan as well as in the Initiatives Section.

7.2
Education and Outreach Strategy

Each program area in the Climate Action Plan (CAP) has an educational component. The most important aspect of each CAP program is the educational component. Little societal change will occur if a substantial outreach and educational program is not initiated. This plan is intended to be as comprehensive as possible, including multiple areas impacting marketing communications, for the purpose of meeting the goals set by the City Commission. The program includes marketing assessment an outreach strategy and design concept media strategy that itemizes the best combination of outreach strategies to engage the community. The plan will pull together all the elements of the Climate Action Plan to clarify and make consistent the messages being expressed by the City to staff, citizens, decision-makers, customers and other key audiences.

The City of Key West should strive to be known as a community with solutions for climate change. Our position as a major tourist destination provides the community with the opportunity to become a marketing ground for innovation. The community should therefore approach innovators and offer locations to highlight new products to the visitors from around the world.

As the community continues to make progress, tourist marketing efforts should highlight that Key West is the Community with Solutions. This concept should be promoted through such marketing efforts as those by the Tourist Development Council, the Key West Chamber of Commerce, private businesses and the Florida Keys National Marine Sanctuary.

7.21

Marketing and Advertising

In order to be successful in reducing carbon emissions citizens have to make changes to lifestyle. It is difficult to modify ones lifestyle for ones personal benefit, none-the-less when people are asked to conserve desirable resources or spend money to make improvements. In order to educate people about climate change, and remove barriers to change a significant effort must be made in what is normally termed marketing and advertising. This plan is intended to be as comprehensive as possible, including multiple areas impacting marketing communications, for the purpose of meeting the goals set by the City Commission.

Marketing is the process of determining who the audience is, determining what the barriers to change are, and what motivates them to take action and not take action. This is not as simple as it seems since most people are not alike. Focus groups and surveys are typically used to assess the motivation in localized areas. The marketing assessment should uncover:

- Perceived barriers
- Perceived benefits
- Why is it in the best interest of the target audience to take action?
- How can the barriers be lowered and the benefits increased?
- What incentives can be offered to the target audience to take action?
- What is the target audience doing instead of the preferred action? And,
- What are the benefits they feel that they would be giving up?

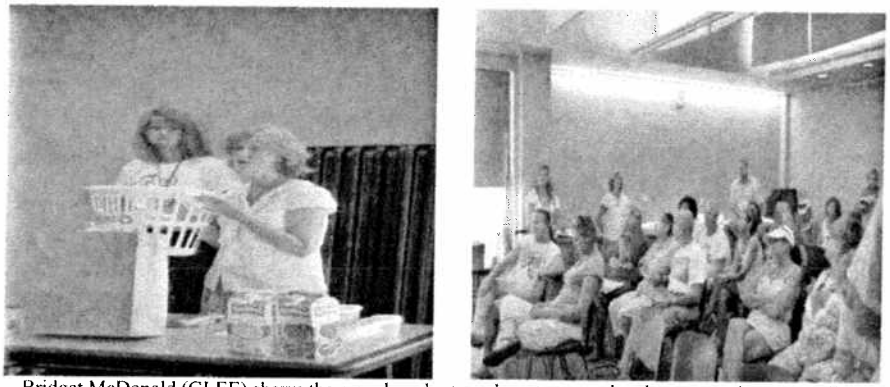
An education plan, or more specifically a communications plan, must be developed that creates an outreach strategy and design concept. The plan will determine target audiences; determine which barriers need to be lowered; which target areas need incentives; and what the best way to reach each target audience. The plan will include a media strategy that itemizes the best combination of outreach strategies to engage the community. It will also recommend which other groups in the city should be involved as partners to ensure a successful plan. The plan will pull together all the elements of the Climate Action Plan to clarify and make consistent the messages being expressed by the City to staff, citizens, decision-makers, customers and other key audiences.

A Brand Promise is the guaranteed deliverable that a brand or product provides to a consumer that matters to the consumer and differentiates the brand or product from its competitors. (For example: FedEx = peace of mind; Southwest Airlines = low fares) GLEE Green Business Certification = social conscience. Generally these are the characteristics by which products are identified and differentiated. Product attributes usually comprise features, functions, benefits, and uses. Our total program, we will call "Green Program" for ease of use in this the chapter, will be analyzed to find a thread of benefits, functions, etc. that connects all aspects of the program. We will include in all communications our attributes and inspirational attributes that will deliver the green program promise.

Of critical importance in our marketing communications is the positioning of the "product". This is the way consumers, users, buyers and others view competitive brands or types of products *relative to other brands or products*. Keeping all our citizens focused on the Key West plan as opposed to the many other green programs that are available will better performance and measurement for the CAP. The positioning of the Green Program will be determined. In order to fully live the new Green Program, it is important that we present voice and personality that is consistent with our attributes. This is how an organization expresses itself to give it character and personality, specifically, voice and personality can include:

- Words and language used
- Attitude and tone conveyed
- Ambiance and sound created

It's an important emotional connection for both employees and "customers" to hang on to, differentiating the Green Program from other climate programs or city services, which may cause confusion and subsequent inaction. It is also important that the program's voice and personality be repeated consistently through all communications. With repetition, it creates credibility and trust. It also sets a mood and expectation for the "Green" experience.



Bridget McDonald (GLEE) shows the recycle volunteers how to properly educate people on recycling

A value proposition is directed at customers/users/citizens and is that which sets green living apart, from the status quo. It incorporates the unique, real and credible benefits our plan provides. It should also be sharply defined. The Green Program probably has a number of value propositions, each addressed to a specific target audience. The communications plan will create our value proposition. Once a brand position is agreed upon, key marketing themes and tag lines will be created and deliverables for the program will be agreed upon.

An internal and external launch plan will be developed. It is important to have all of the City's staff on board with the green message. We will want to create passion among employees to act in a Green manner and challenge others to do so. We will ensure consistency of messages both in the media and from staff. Elements of the internal plan include:

- Communication and understanding;
- Top down support and modeling;
- Peer-to-peer support and modeling; and
- Reward system.

The external launch plan will include an awareness study to provide a baseline to measure achievement of awareness goals. Then a publicity/public relations plan will be developed, a kick-off event held to implement the new outreach strategy and then monitoring and evaluation of the strategy will occur. It is best to evaluate the process along the way to guide and shape the program. In order to be able to best evaluate the success of the program, it is important to set indicators and baselines during the planning stage so that new data can be compared to the baseline data.

The external launch plan will include the following education and outreach strategies:

- Designing websites, distributing electronic newsletters, email messages;
- Creating brochures, print ads, flyers, and postcards for direct mailings, writing newspaper articles;
- Holding/partnering/obtaining space in workshops, festivals or fairs; and
- Designing curriculum or lesson plans for grades K-12.

Components of the publicity/PR plan are divided into the following five areas:

- On-going media relations/publishing efforts;
- Presence/participation in key events;
- Charitable outreach;
- Leveraging partnerships; and
- Administration.

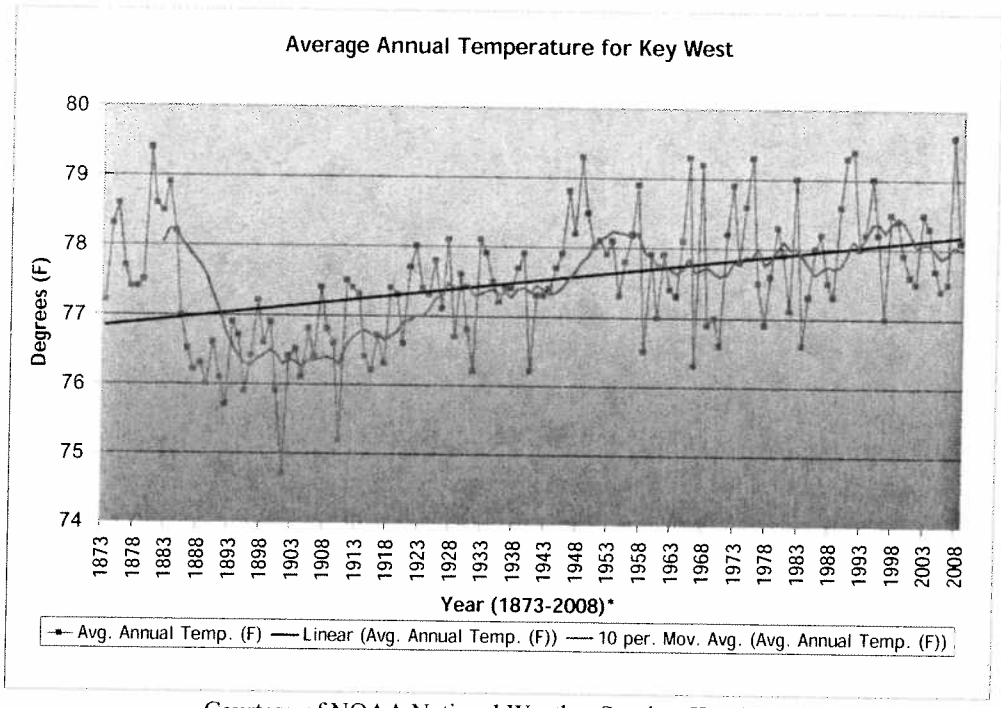
7.2.3
Program Costs

It is expected that a $30,000-$40,000 per year initial marketing and education budget is sufficient for the comprehensive program, which includes all aspects of the Climate Action Plan. The budget can be found from a variety of sources. The CAP includes water conservation efforts to reduce sewage plant emissions and alternative waste programs for solid waste and conservation of freshwater use overland and into storm drains to meet FDEP MS4 rules. The Solid Waste Utility fund may fund any waste related advertisements as well as a portion of the total program creation; the Sewer and Stormwater funds may do the same as well. The General Fund may be tapped and Stimulus grants sought for the program. Partnerships with Keys Energy, the FKAA, Monroe County, and other agencies may also assist in funding the program. Annual maintenance of the program will require funding for new commercials and air/media time/placements. An alliance with the TDC may help fund the program

The web based education program is expected to be in the range of $10,000 - $15,000 annually. This will develop an interactive one stop shop for all program elements; providing exceptionally easy instruction in greening homes, businesses, and other information required for us to meet our goals.

8.0
ADAPTATION

Climate Action is not just about mitigating current carbon use, but also about adapting to, or coping with, the consequences of climate change. Plans are needed for Key West to cope with the ever-rising water level and increasing temperature regardless if the rise remains at the rate it has been (8.76 inches in 100 years in Key West and 1.5 degrees Fahrenheit), or at the high end of the ICCP projection for the southeastern United States of 23 inches in water level and 4-6 degrees Fahrenheit increase in temperature. This almost 9-inch rise is the cause of frequent flooding on Front and Duval Streets which were designed 100 years ago when this rise was not anticipated. The photo to the right is the zero block of Duval Street at an extreme high tide in September, 2009. Imagine what will happen if high tide becomes another 9 inches higher; that will put high tide over the sidewalks and into the stores and restaurants. We must adapt now to be ready for this inevitable event.



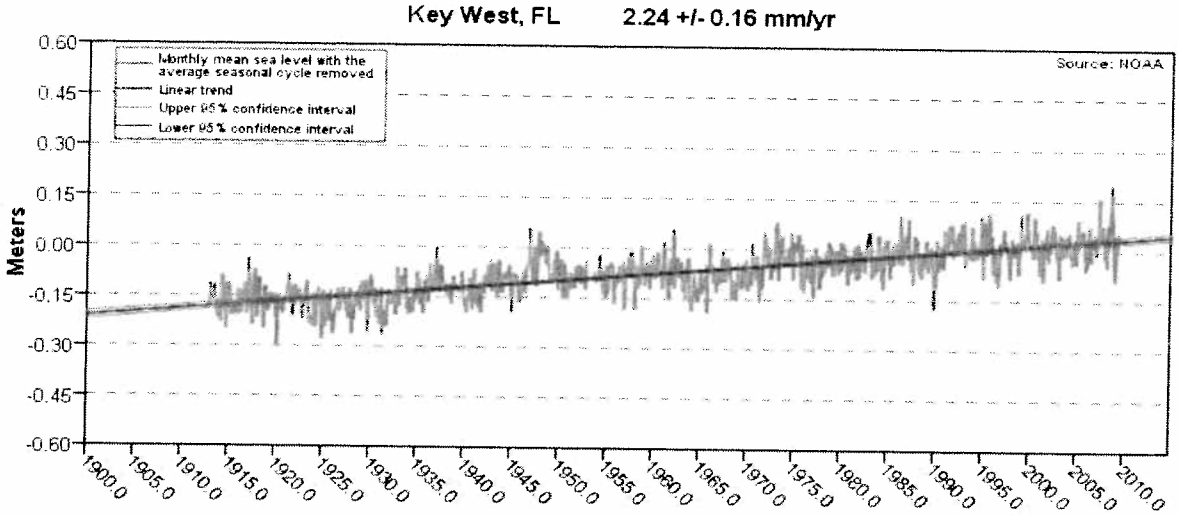
Courtesy of NOAA National Weather Service, Key West

Figure 4 – Average Annual Temperature for Key West 1873-2008

Humans have in the past had global emergencies that were successfully mitigated through infrastructure investments, technological advancements, and behavior change. For example, in the case of Ozone layer depletion; not only did behavior change (reduction in the use of aerosol spray), but the implementation of new refrigeration chemicals reduced the scope of the problem from imminent danger to a manageable life style change (i.e. the use of more sunscreen and spending less time in the sun.) Likewise, greenhouse gasses are causing changes that create a significantly warmer climate increasing risk of drought, flooding, fires, disease and sea level rise, so we must react through behavior change and new technologies.

Policy makers and emergency management staff have an opportunity to prepare today for the impacts of climate change. The topic has been discussed for over 30-years, the science of projecting impacts has been determined to be sound. Impacts are being observed and it is time to act on an adaptation strategy. We now know that some impacts are inevitable, probably at a minimum, a 9-inch rise in tide by 2100. We must help prepare the City of Key West and the citizens to adapt to climate change so we can manage the economic and ecological consequences. The actions we take will have significant impact for generations to come.

Mean Sea Level Trend
8724580 Key West, Florida



The mean sea level trend is 2.24 millimeters/year with a 95% confidence interval of +/- 0.16 mm/yr based on monthly mean sea level data from 1913 to 2006 which is equivalent to a change of 0.73 feet (8.76 inches) in 100years.

NOAA, National Weather Service Forecast Office Key West, FL September, 2009

Figure 5 – Mean Sea level Trend Key West Florida 1913-2006

8.1
Resiliency

Many of the essential services our government provides needs to be responsive to climate changes today. We must excel at adaptation and mitigation because Key West and our water supply is "ground zero" for sea level rise, ocean warming and ocean acidification with all their consequences. This provides Key West an opportunity to transform the island's buildings into more sustainable structures and grow its economy through sustainable economic development. Even if greenhouse gasses are reduced significantly, climate change is going to continue long after; it takes tens of thousands of years for some greenhouse gas molecules to be broken down. It is inevitable that climate change will bring about negative economic consequences. With planning we may be able to create alternative economic opportunities that may benefit our city today and in the future.

> Making America the greenest country is not a selfless act of charity...it is now a core national security and economic interest.
> -Thomas L. Freidman

Preparing for climate change should be recognized as is a key element of the City's mission and strategic plan priorities which specify protecting the city, its quality of life and environment. We will need to anticipate the coming

changes and become climate resilient. We will do so by gathering and analyzing information to inform policy and projects through creation of a resiliency plan. Collective planning in all areas will be less costly as we may be able to anticipate impacts and seek funding years in advance of climate impact. No one knows more about Key West than the people who live here, and their ability to lead state, federal and county governments in the right direction early enough will ensure less desirable changes are not imposed upon us.

8.2
Getting Ahead of the Curve

Some programs in Key West are already in advance planning for adaptation: Florida Keys Aqueduct Authority is preparing for salt water intrusion in its mainland water supply wells; the City has plans to elevate roads (i.e. Northside Drive); and building new storm water systems that will help to meet the new demands (i.e. pump stations). Together the FKAA and City are seeking ways to reduce the need for fresh water from the mainland through reclaimed water use. Most of these programs have been significantly funded or completely funded by outside agencies because of the forethought put into planning efforts. Appropriate planning and construction can strategically reduce future risks, increase future benefits and add value to investments all providing a higher quality of life today, before climate change makes the need critical.

The adaptation section of this climate action plan outlines the planning process that is recommended. Similar to the process of the Climate Action Team the adaptation plan needs the support of the community and other governmental organizations and non-governmental organizations (NGO's). All areas of planning need to be reexamined through the lens of climate change. The plan needs to address ecologically sensitive land planning, flood plain planning, utility planning, zoning and build-back planning and shoreline hardening. The planning process will include vulnerability assessments and risk assessments, so that a climate resilient community with preparedness goals and preparedness action can be established.

The United States Army Corps of Engineers, the United States government's main engineering design department, has upgraded its 1975 policy on incorporating sea level rise in construction design and planning to a July 1, 2009 policy Circular No. 1165-2-211 which requires "incorporating the direct and indirect physical effects of projected future sea-level change in managing, planning, engineering, designing, constructing, operating, and maintaining USACE projects and systems of projects. Recent climate research by the Intergovernmental Panel on Climate Change (IPCC) predicts continued or accelerated global warming for the 21st Century and possibly beyond, which will cause a continued or accelerated rise in global mean sea-level. Impacts to coastal and estuarine zones caused by sea-level change must be considered in all phases of Civil Works programs." The new policy requires consideration of three possible scenarios; for projects with a 50 year life being built in 2010 the scenarios are 1.2 feet, 1.5 feet, and 4.9 feet. Prior to this policy the USACE worked with a projected rise of 0.8-foot (9.6 inches)* for 2050. *Adaptive response Planning to Sea Level Rise in Florida and Implications for Comprehensive and Public Facilities Planning; Deyle, Bailey and Matheny, Dept of Urban and Regional Planning, FSU, Sept, 2007.

It is recommended that the City use ICLEI's guide "Preparing for Climate Change" or a similar model as a tool to move forward. The creation of a climate change preparedness team is recommended. The consequences of climate change are broad and encompass inter-

departmental activity and extend to other local, state and federal agencies. The preparedness team will need to include City departments and local, state and federal agencies. For instance, the South Florida Water Management District must seriously consider allowing stormwater pump stations to outfall into near-shore waters so our streets and homes may be protected. We need to influence decisions of the FDOT where they are lowering rather than raising North Roosevelt Blvd. The local and state departments of emergency management and FEMA will need to re-address evacuations and increases in storm surge. The FDEP will have to re-address "wetlands" evaluations; the County will have to consider the elevation of the airport runways; the US Fish and Wildlife Service will have to consider habitat changes; and the state Historic Preservation Board will want to consider how to maintain historic structures that may be negatively impacted. The photo above is high tide on Green Street where salt water sometimes enters the historic buildings on the block.

The photos inserted in this section are photographs of the September 24, 2009 Perigean Spring Tides. Although these are extreme tides, they occur many days of the year. According to the National Weather Service Meteorologist Jon Rizzo, the tides were 3.2 feet above MLLW in Key West, which is approximately 2.3 feet above mean sea level. This is a serious threat to traffic, walking, and biking since more accidents can happen under such conditions. Asphalt is damaged at greater rates as is underground utilities.

Figure 6, the map on the next page, assists the reader to comprehend and appreciate the depth of impacts in the city, even for the small sea level rise scenario of 9 inches by 2100. A nine-inch rise brings the daily mean high tide to 3.24 feet NGVD (areas unmarked in white) and extreme high tides, which happen almost monthly to 3.94 feet NGVD (marked in Orange). Note the number of streets and recreational facilities impacted. The photo to the right depicts what will become an every day event under the IPCC best case scenario.

In addition to sea level rise an increase in temperature will increase the need for air conditioning and energy use, affect seniors and those with lung disease and even sports practices for school children.

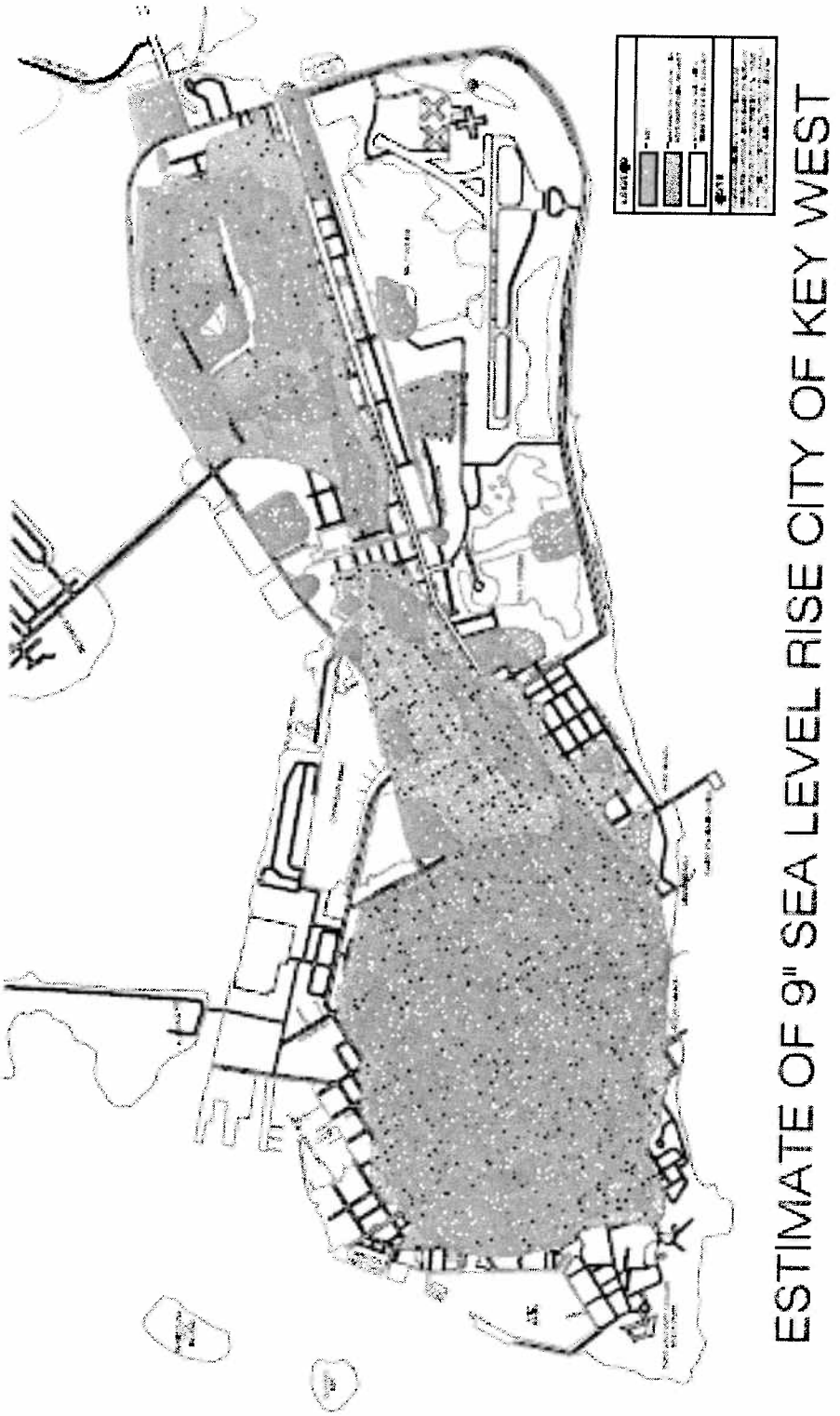


Figure 6
Note 1: See larger map in the Appendix 6
Note 2: Areas on the US Navy base, although white, were not surveyed and are not included in the rise estimate.

8.3
The Planning Process

Potential members of the climate change preparedness team will be talented and motivated people from Emergency Management, Community Services, Monroe County Health Department, Police Department, Port Department, Planning and Building Departments, General Services Department and some business/community leaders, non-profit organizations and federal agencies like NOAA's National Marine Sanctuary and the National Weather Service, and US Fish and Wildlife. NGO's like The Nature Conservancy and Botanical Gardens Society will also be required to create a well rounded plan. The members should be given substantial time to work on the program and be able to guide others across agency lines to ensure the plan is a success.

It is proposed that the team will initiate five major process steps:

1. Conduct a resiliency study;
2. Identify priority planning areas for action based on assessments of vulnerability and risk planning areas;
3. Set goals and develop a plan;
4. Implement the plan; and
5. Measure progress and update the plan.

The planning document will have to be updated from year to year depending on local and grant funding. A strong system will need to be in place to ensure that the program continues to meet goals, has robust community support, and can change as technology and conditions change.

Initially the group would identify major planning areas relevant to climate change and then complete a vulnerability assessment that will include a sensitivity analysis of the systems associated with the planning area identified. It will evaluate the adaptive capacity of the systems associated with the planning areas. A risk assessment of how vulnerable the systems in those planning areas are to the affects of climate change and a determination of our City's tolerance to the risk will be made.

Then the group would develop a vision and guiding principals for a climate resilient community. Goals would be set and prioritized action items developed including a cost to benefit analysis and recommended timeframe. The plan will list desired accomplishments, as well as which activities our government and every agency will undertake.

The implementation plan will need to provide authority and direction to city staff so that policy, planning and infrastructure changes can be implemented. The plan should be updated annually based on evaluation of goals and performance measures which will be qualitative and quantitative measures of resiliency.

8.4

Potential Areas of Concern

Virtually every aspect of government operations will be affected by adaptation requirements, from civil engineering road work, to citing of new facilities. Decisions to repair or reconstruct existing facilities, or improve stormwater, or sewer systems, or selection of planting materials will all have adaptation in the decision matrix.

Table 2 lists locations and infrastructure areas of concern to be addressed in sea level rise planning:

Location	Damage as result of Climate Change
McCoy Indigenous Park	inundation and tree deaths
Landfill	as sea levels rise more waste may become soluble in near-shore water
Seawalls	walls will need reconstruction
Beaches	will be reduced in size
Salt Ponds Habitat	will enlarge, salt water will cause destruction of less saltwater tolerant plants
Berg Park	Greater erosion of the beach and damage to the decking, continued loss of less salt tolerant trees
Kitsos Park	Greater erosion of the beach and damage to the decking, continued loss of less salt tolerant trees
Gravity sewer system	Increased salt water infiltration
Sewer Pump Stations	Inundation of some wet wells
Stormwater system	Reduced functioning of systems
Botanical Gardens	Destruction of less salt water/heat tolerant trees
Little Hamaca Park	Destruction of less salt water tolerant trees reduced park land mass
Hawk Missile Site	Reduced park land mass
Garrison Bight	Dock modifications
Key West Bight	Dock modifications
Staple Ave Bridge	Accelerated deterioration
M.C. Airport	More frequently flooded tarmac
City Pool	Additional flooding of building
Cemetery	Collapse of grave sites
Aquarium	Additional flooding of building
Clinton Square	Street inundation traffic
Access to College Road	Roadway inundation

Table 2 – Location and Possible Affects of Climate Change

Although mitigation projects worldwide may offset sea level rise at the high end of the IPCC modeling spectrum (23-35 inches in the Keys), planning efforts must consider the entire spectrum. The Table 3 below lists streets portions of which will be inundated at high tide if a 9-inch sea level rise is realized. This information, as well as the map in Figure 6 is useful to generally determine if additional consideration is required for upcoming infrastructure projects. For instance, installation of wells on streets below 3.94 feet may become conduits for salt water intrusion.

Roadways in Key West expected to have tidal water with a 9-inch tide rise

Donald Avenue	Dennis	Leon Street
Front Street	Venitia	Ashby Street
Duval Street	Blanch	George Street
Elizabeth Street	Patterson	Washington Street
Green Street	Fogarty	Eaton Street
James Street	Harris	Catherine Street
Front Street	Seidenburg	Amelia Street
Wall Street	Staples	Eisenhower Drive
Ann Street	Linda	Petronia Street
Simonton Street	Juanita	Jose Marti Dr.
Thompson Street	Flagler	Duncan Street
Telegraph Lane	Laird	United Street
Wolkowski Lane	Rose Patricia	1st
Fitzpatrick Street	Atlantic	2nd
Tifts Alley	Stephens	3rd
Atlantic Boulevard	Sirugo	4th
Exchange Street	White	5th
Caroline Street	Josephine	6th
Seminary Street	Bertha	7th
South Street	10th	8th
Riviera Drive	11th	20th

Table 3 – List of Streets Which will have Portions of Roadways Inundated by Salt Water

Clearly, any capital projects to be considered in the city must reflect consideration of temperature and sea level rise.

8.5
Adaption Success Planning

In Summary, over the years there have been dramatic changes on the island in the delivery of water, the delivery of sewer services, in our industry, and caused by hurricanes, fires, etc. All previous generation's ability to adapt to change made Key West successful. This generation now has the opportunity to step forward and plan to provide an acceptable home to those in the future. Climate Change in Key West is an opportunity to transform the island to a more sustainable community. Planning to adapt to that future now will help us realize a vibrant Key West in the future.

9.0
CAT Implementation Plan

The below proposed initiatives will assist in the completion of an implementation plan recommended to be complete by May, 2010. There are five program initiatives to be marketed, each with a number of goals. They include the Commercial Climate Challenge, Residential Climate Challenge, Incentivize Energy Conservation, Key West Transit Challenge, and Bicycle/Pedestrian Challenge. Each have recommended progress indicators.

9.1
Commercial Climate Challenge

This program will engage Key West's business community to reduce their greenhouse gas emissions. The City will act as a catalyst developing alliances and partnerships throughout the community, funding organizations, non-profit and other governmental agencies to assist local businesses in meeting their goals. Appendix 7 exhibits two showcase examples of local businesses engaging in high quality reduction measures. It is expected a variety of organization will provide education and materials and the City will provide an interactive web site collating all required information needed to easily select emissions reduction measures and report results. Some measures require city policy changes, action and purchases or infrastructure modifications. Initiative includes:

9.1.1: Expand employee commuter benefits. Commuter benefits with the largest potential impact on greenhouse gas emissions are transit subsidies, vanpools, and cash in lieu of parking. Other commuter benefits include tele-working, virtual working, bike lockers and showers, preferred car pool parking, compressed work schedules, shuttles, and rideshare matching. National studies show 0.5 mtCO2e saved for every employee covered by the EPA's "Best Workplace for Commuters" program;
9.1.2: Increase green fleets Expected Outcome: 200 Hybrid vehicles; 200 EV;
9.1.3: Implement green building improvements such as green roofs, landscaping, etc Expected Outcome: 100 White roofs, 200 trees for shade, 200 weatherization 5% reduction CO2e x 200;
9.1.4: Tie the agencies CEO salary to the energy savings;
9.1.5: Encourage large user agencies to use shared savings/performance contracting;
9.1.6: Every commercial building to perform self energy audit building commission audit;
9.1.7: Reduce paper consumption (less haul down, create, haul out less purchasing costs);
9.1.8: Work will all government agencies to implement green office audit for all public offices with milestones, goals, timelines, produce recognition system to staff (2% red x 600);
9.1.9: Partner for use of GLEE's Green Business Certification as part of challenge for continued annual improvement;
9.1.10: Require all Businesses that are leased to be energy star profile rated to encourage owners to improve leased buildings;
9.1.11: Offer workplace recycling, 4 mtCO2e saved per ton of waste recycled. Expected outcome: recycle 4,000 tons (-16 mtCO2e);

9.1.12: Pay as you throw trash (incentivize composting, recycle, reduce) offer electronic waste, lamp waste, battery waste;

9.1.13: Plastic beer mugs;
9.1.14: Provide a commercial revolving loan fund for weatherization;
9.1.15: Establish an energy museum to provide viewing of green businesses and building initiatives;
9.1.16: Provide green purchasing guide lines to businesses including energy star equipment;
9.1.17: Partner with USN to reduce electric use by 10%;
9.1.18: Encourage use of LED Christmas lights; and
9.1.19: Awards will be given to businesses that take the challenge and report energy savings.

Progress indicators: reduction in commercial energy use

- Number of bus passes
- Number of bike tax credits reported
- Increase in commercial recycling accounts
- Number of commercial alternative energy permits issues
- Number of white roofs reported

Expected Outcome: Reduce energy use by 15% in 600 businesses

9.2

Residential Climate Challenge

This program will engage Key West residents to reduce carbon emissions through a program of education in the areas of home energy use and transportation. Homeowners will be encouraged to use clean energy through installation of residential alternative energy systems or purchase of clean power from Keys Energy Services.

9.2.1: Create a model in home energy display system which will enable families to see home energy use and cost in real time on electric displays. Expected outcome: 7,000 residents will reduce home energy use by 10%;
9.2.2: Residents will be challenged to "turn it up a notch". Each degree one raises on A/C thermostat there A/C energy use goes down 3%;
9.2.3: Create a marketing program to reach every resident to promote green issues;
9.2.4: Create partnerships with Keys Energy Services to provide enhanced home energy audits and installation of limited weatherization items;
9.2.5: Partner with the Florida Keys Aqueduct Authority and South Florida Water Management District to reduce water use by 10% through education, grants, rain barrels and other measures;
9.2.6: Promote walking and bike riding to work and school;
9.2.7: Initiate a revolving loan fund weatherization projects;
9.2.8: Promote use of Key West Transit;
9.2.9: Promote white roof program;
9.2.10: Promote "ClimateCulture.com" to K-12 children;
9.2.11: Promote use of LED holiday lights;
9.2.12: Promote recycling and enforce the code; and
9.2.13: Awards will be given to residents who enter the challenge and show excellent progress.
9.2.14: Consider Ordinance requiring rental unit owners transfer leases with clean a/c filter and no leaking faucets and toilets

Progress Indicators:

- Increase in recycling rate
- Reduction in residential energy use
- Increase in bus ridership
- Increase in bike use
- Number of permitted solar and wind energy installations

Expected Outcome: 15% reduction in residential energy use in 7,000 homes; 5% reduction in 2000 homes.

9.3

Incentivize Energy Conservation

This program aims to create the conditions under which energy users will be able to use and purchase energy with greater choice and efficiency. It is proposed energy conservation measures will be sought out by energy users since it is cost effective or socially inviting. This will be accomplished through showcasing alternative energy systems and providing incentives to reduce energy use.

9.3.1 Monroe County School District will install 25KW wind power generator;
9.3.2 Keys Energy Services will partner with NOAA to install wind generators;
9.3.3 Install two 250kw wind energy generators;
9.3.4 Keys Energy Services will partner with NOAA to install solar project;
9.3.5 Implement a tiered rate for electricity consumption for homes and businesses that consume above average amounts of electricity. Develop means to avoid the inequitable impacts on low-income residents. Use additional fund balance to fund alternative energy projects;
Create a peak time energy system that reduces construction of new power plants and encourage energy savings;
City to create incentives if a developer uses solar, or wind energy;
Consider a utility tax for electric and propane which will provide a revolving loan fund and incentivize conservation;
Encourage the FKAA to enhance its rate structure to disincentivize water use,
Develop an alliance of building and education professionals to promote green building technologies and needed education; and
Create an energy museum to show visitors energy savings initiatives.

Progress Indicators:

- Decrease in energy consumption rate
- Number of wind turbine systems installed
- Number of alliances actively working
- Number of energy audits requested
- Additional funding realized and invested in alternative energy and conservation

Expected Outcome: 4,000 residents will seek energy audits, 400 permits for solar or wind installations will be issued.

9.4

Key West Transit Challenge

This project will enhance the usability of the City bus system and encourage the use of it over personal motor vehicles.

9.4.1 Establish a sub committee as an authority to oversee private sector and public sector help in promoting and enabling people to use an alternatives to the car;
9.4.2 Create a spectacular marketing program;
9.4.3 Provide sufficient bike rack at bus;
9.4.4 Bike storage/ service centers (sears town and old town garage);
9.4.5 Bike racks at all Keys Shuttle stops;
9.4.6 Install bike enclosure at KEYS shuttle stops as requested (install 4 as trial units);
9.4.7 Upgrade all bus stops;
9.4.8 Install schedules and maps at each bus stop;
9.4.9 Install rain/shade covers at each stop;
9.4.10 Ensure all stops are ADA accessible;
9.4.11 Bike storage/ service centers (sears town and old town garage);
9.4.12 Initiate free bus weeks in coordinated with reduced parking weeks or days in old-town;
9.4.13 Consider outsourcing a fixed down town route to a franchise train/trolley type vendor; and
9.4.14 Create bus training school field trips.

Progress Indicators:

- Number of bus riders

Expected Outcome: Increase ridership by an average of 100 commuters daily

9.5

Bicycle Pedestrian Challenge:

This project will promote walking and biking to reduce vehicle miles traveled by enhancing the walk-ability of the island, through programs and improved bike trails, routes and sidewalk infrastructure.

9.5.1 Provide sufficient bike racks at bus stop;
9.5.2 Increase bicycle parking around city;
9.5.3 Establish a sub committee as an authority to oversee private sector and public sector help in promoting and enabling people to use an alternatives to the car;
9.5.4 Install bike enclosure at KEYS shuttle stops;
9.5.5 Complete the bicycle pedestrian plan(authorized by Commission resolution);
9.5.6 By 2011, install handicap ramps at all existing sidewalks on the bicycle pedestrian plan, trim trees and bushes away from sidewalk so that pedestrians and young cyclers can use sidewalk;

9.5.7 Re-write the city ordinance to make it clear that the homeowner is responsible to maintain the trees in front of the property and to ensure that the trees do not protrude into the sidewalk;
9.5.8 Maintain all marking on path and bicycle lanes; improve as needed;
9.5.9 Provide a repair inventory for all sidewalks with cracks greater then 1/25 of an inch and maintain on annual basis;
9.5.10 TV shows and commercials encouraging people to ride bikes throughout town;
9.5.11 Bicycle link on website to show all the bicycle and pedestrian routes in town;
9.5.12 Quarterly walk/ bike to work day;
9.5.13 Have continuous safe routes to schools programs for all grade school children encouraging children to ride there bikes and walk to school;
9.5.14 Have schools provide extra credit or gifts to children who get their parents to walk/bike with them to school;
9.5.15 Ensure all bicycle racks are installed to meet the City Code and developments requirements for bicycle parking;
9.5.16 Remove stop signs where unwarranted, limit new stop sign placement to those that comply with the state warrant for traffic control, have licensed professionals determine the need for stop signs;
9.5.17 Driver education program wrt bicycling on the city television station and PSA,s;
9.5.18 Maintain all intersections with trees and objects clear between 30 inches and 10 feet in height;
9.5.19 Provide an annual update of sidewalk repair program;
9.5.20 In the LDR requirements for automobiles with the corresponding increase in bike/ moped requirements;
9.5.21 Creation of a new bike path/routes filling of gaps in the existing bike path/routes;
9.5.22 Improvements in current bike path/ routes. Curb cuts, directional signage, street marking, signals – the list is not all-inclusive;
9.5.23 Portable trailer for large bike racks for festivals and TDC to promote Key West as a bike friendly town;
9.5.24 Bike storage/ service centers (sears town and old town garage);
9.5.25 More or better ways to rack bikes;
9.5.26 Comprehensive traffic planning to improve bike traffic flow(connecting routes to popular destinations ensuring the shortest bike route possible); and
9.5.27 Removal of excess stop signs or marked crossing and replacing them with traffic calming devices.

Progress Indicators:

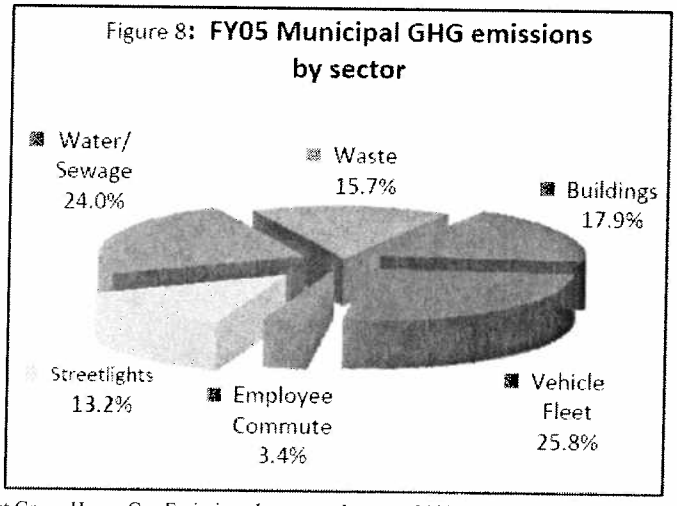
- Number of bikes on trails/routes
- Number of bikes in racks
- Value of savings on pay not to park programs

Expected Outcome: Increase the number of bikes commuting to work and school by 200

10.0
City Government Operations

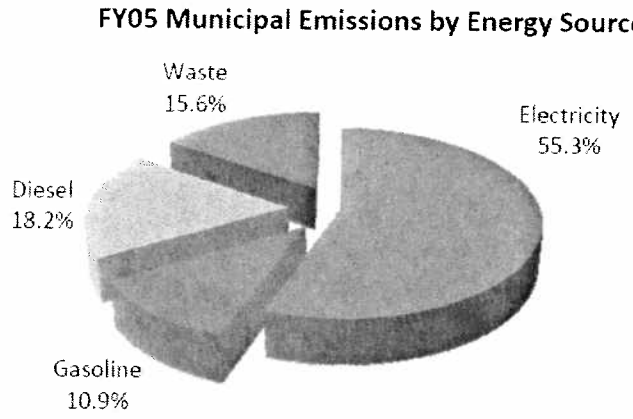
City government operations are 4.4% of the community GHG emissions totaling 17,596 tons, and the City is the third largest user of commercial energy. The cost of energy (fuel and electric) for the city operations in 2005 was $3.1 million (not including Waste Management waste hauling and most staff commuting). Meeting the goal of reducing emissions by 15% will have a significant affect on the operation costs for the general fund, utilities and other funds since conservation and investment in zero fuel renewable energy are the key objectives of this action plan. A 15% reduction in energy expenses would save the city $473,648. It is well documented that simple energy conservation programs can easily save 10% of older facilities' energy costs. The investment in a strict energy management program with direct reporting to the City Manager is the key element to achieving the City Commission's goal. The program is expected pay for itself in one year.

The Greenhouse Gas Emission Inventory charts below indicate the municipal GHG emission by sector and energy source. Figure 7 indicate that fleet operation is the City's primary GHG emitter by sector, however when looked at from the perspective of energy source electricity is largest sink.



Excerpted from City of Key West Green House Gas Emissions Inventory January, 2008

Figure 7 - FY05 Municipal GHG Emissions by Sector



Excerpted from City of Key West Green House Gas Emissions Inventory January, 2008

Figure 8 – FY05 Municipal Emissions by Energy Source

Table 4, below, lists the tons of energy of operation by use by sector, indicating the tons emitted and fund spent. The 15% goal that the City Commission mandated will enable a reduction of GHG emissions by 2,639 tons.

FY05 Government Emissions by Sector	***Equiv CO2 (tons)***	***Equiv CO2 (%)***	***Energy (MMBtu)***	***Cost ($)***
Buildings	*3,158*	*17.9*	*17,493*	*591,076*
Vehicle Fleet Total	*4,532*	*25.8*	*58732*	*605,387*
City vehicles	*2,482*	*14.1*	*28,864*	*605,387*
Waste hauling	*2,050*	*11.7*	*29,868*	-
Employee Commute	*602*	*3.4*	*7,070*	-
Streetlights	*2,331*	*13.2*	*12,914*	*461,925*
Water/Sewage	*4,217*	*24.4*	*23,363*	*752,219*
Waste	*2,756*	*15.7*		*717,062*
Total	*17,596*	*100*	*119,572*	*3,157,659*

Excerpted from City of Key West Green House Gas Emissions Inventory January, 2008

Table 4 - FY05 Municipal Government Emissions, Energy use and Cost

Reduction Initiatives

Reduce municipal operation emissions by 15% by 2015 through energy conservation and increased non fossil fuel energy use. Following are the specific recommendations:

10. 1. Transportation

10.1.1. Increase Ridership on Existing Routes through:

10.1.1.1. 76 degree busses
10.1.1.2. Clean bus stops (trash containers, cigarette butt dispenser, weekly clean by street sweeper with vacuum)
10.1.1.3. Shaded stops
10.1.1.4. Weather protection
10.1.1.5. Clear bus route map posted
10.1.1.6. Schedule posted
10.1.1.7. Clear notice on days bus does not run
10.1.1.8. Spanish schedules and maps
10.1.1.9. Creole schedules and maps
10.1.1.10. Bike racks at bus stops (especially at all keys shuttle routes);
10.1.1.11. Bike closets (lower keys shuttle routes);
10.1.1.12. All stops to be ADA accessible;

10.1.2 Advertising and Promotion:

10.1.2.1 Alliances with business to provide reduced fares (bulk discount) and pay not to park program;
10.1.2.2 Install a pay station for bus ticket purchases at the airport and ferry terminal;
10.1.2.3 Promote the US Navy bus fare rebate;
10.1.2.4 Have a free, well promoted bus week;
10.1.2.5 Have bus field trips with elementary schools;
10.1.2.6 Bike storage/facilities at lower keys departure points in Key West;

10.1.3 Employee Service Center - promote incentives city and businesses- pay not to park;
10.1.4 Partner with businesses to provide bike rentals @ lower keys shuttle stops;
10.1.5 Create alliance with businesses to give out discounted or free bus tickets to people;
10.1.6 Maintain a commuter route that stops downtown;
10.1.7 Create shuttle bus from Front Street to Truman Waterfront, Southernmost Point to Reynolds Street down United to Simonton and back to Front LPG on hybrid;
10.1.8 Establish a subcommittee as an authority to oversee private sector and public sector help in promoting and enabling people to use mass transit; and
10.1.9 Install a solar panel farm above the proposed tour bus parking facilities which will power electric plug in so busses will not idle.

10.2 Bicycle/ Pedestrian Transportation

10.2.1 Install showers at City Facilities to promote biking to work;
10.2.2 Pay not to park program;
10.2.3 Partner with bike shops to teach people how to fix bikes and rider safety;
10.2.4 Enhance grade school bike education;
10.2.5 Offer adult bike riding lessons;
10.2.6 Create more and interesting bike racks;
10.2.7 Use pay not to park profit for bike education program; and
10.2.8 Consider seriously promoting bike licensing through licensing department.

10.3 Other Transportation

10.3.1 Promote car pooling on carpooling website;
10.3.2 Partner with FDOT for van rideshare program;

10.3.3 Promote alternative vehicle fleets (hybrids & electric cars);
10.3.4 Phase out city fleet and phase in hybrid and electrical vehicles and bicycles;
10.3.5 Seek zip car firm to move into City of Key West;
10.3.6 Incentivize electric residential vehicles by free parking spots for electric cars on some spots around Duval Street;
10.3.7 Promote 1 car families;
10.3.8 Provide incentives for hybrid/ electric taxi's;
10.3.9 Install electric car charging stations @ all city garages and in streets with limited driveways;
10.3.10 Create and anti-idling program;
10.3.11 Track City fleet vehicle idling;
10.3.12 Consider Fire Department food shopping by use of watch Commander Vehicle; and
10.3.13 Provide pressure indictor caps for tires.

10.4. Waste Systems

10.4.1 Decrease waste hauled from the city through:
10.4.1.1 Increased home composting;
10.4.1.2 Create a community compost center;
10.4.1.3 Community recycling in the city limits;
10.4.1.4 Increase R4 education;
10.4.1.5 Improve waste management customer satisfaction by becoming more customer orientated;
10.4.1.6 Have a performance based waste management contract;
10.4.1.7 Increase number of commercial recycling contracts;
10.4.1.8 Decrease in number of recycling complaints;
10.4.1.9 Promote commercial recycling and group recycling on streets;
10.4.1.10 Create mandatory commercial recycling (currently as low as for $2.50/ month);
10.4.1.11 Provide for adequate recycling @ all city facilities;
10.4.1.12 Require recycling in all city leagues and sports agreements;
10.4.1.13 Commercial recycling rates lower than trash rates;
10.4.1.14 Provide E-Waste drop off in the city limits and promote it;

10.4.2 Reduce greenhouse gas emissions through:
10.4.2.1 Provide hazardous waste drop off 12 times per year;
10.4.2.2 New waste contract cannot stipulate minimum volume of waste or all waste available to vendor;
10.4.2.3 New waste contract should require use of a waste to energy facility;
10.4.2.4 New waste contract to accept CFC's and fluorescent bulbs curbside;
10.4.2.5 Promote waste reduction strategies; green business certifications, recycling, hazardous and E-Waste drop off, light bulb drop off;
10.4.2.5 Promote product stewardship though mandatory commercial take-back programs;
10.4.2.6. Require staff to consider packaging waste in purchases (forcing the supplier to use less packaging, purchase in bulk);
10.4.2.7 Purchase only Energy Star electric products and Epeat (www.epeat.net) electronics;
10.4.2.8 Analyze the flaming of methane gas from the landfill, if it reduces significant emissions install it; and

10.4.3 Add greenhouse gas emissions as waste product that falls under the Solid Waste Utility to fund emission reduction and sequestration.

10.4 Sustainability

10.4.1 Become Green City Certified;
10.4.2 Enhance bike theft prevention though licensing, searching for stolen bikes and prosecution;
10.4.3 Create solar protection ordinance so new larger buildings do not shade solar systems;
10.4.4 Require all city leases to have requirements that lessees are to be green business certified and portfolio manager certified and have recycling;
10.4.5 Consider an ordinance to require new construction have solar pool and water heaters;
10.4.6 Consider reducing the required number of parking spaces and increasing the number of bicycle spaces or employee showers as incentive for wind and solar energy use;

10.5 Waste Water Treatment

10.6.1 Install diffused air system at plant;
10.6.2 Have full A/C system designed for current high efficiency standards by HVAC engineer;
10.6.3 Have an ESCO for the full waste water system;
10.6.4 Change facility lights to exterior lights to LED's;
10.6.5 Add wind powered 250 kw energy to generator unit;
10.6.6 Change fleet to alternative energy vehicles;
10.6.7 Install cistern water systems for vacuum truck;
10.6.8 Installation of compost system for solids;
10.6.9 Install chlorine system and provide FKAA water for reclaimed H2O Systems.
10.6.10 Look into digester gas recovery; and
10.6.11 Develop partnership with FKAA and SFWMD to reduce water use by 10% .

10.7 Planning and Building

10.7.1 Do not approve a variances for reduced open spaces and reduced pervious surface;
10.7.2 Modify code to disallow pervious pavement and "pervious bricks" without a healthy grass volume;
10.7.2 Modify the comprehensive plan to include the wide array of green incentives into the City of Key West;
10.7.3 Indentify all capital projects and have them reviewed for green building construction elements;
10.7.4 Incentivize alternative transportation for all City facilities and planning department approvals;
10.7.5 Incentivize green building components (reduced building fees, faster inspection...);
10.7.6 Encourage LED exterior lighting;

10.7.7 Enforce bike rack installation at city property and private property;
10.7.8 Consider changing parking ratio for less car parking and more bike parking;
10.7.9 Require waste contractor to approve waste recycle area for all DRC approvals;

10.8 City Commission

10.8.1 Direct City Manager to allocate 25% of energy savings (fuel and electric) to staff bonus;
10.8.2 Create mandatory reduction, reuse and recycling programs for all city facilities;
10.8.3 Enforce existing and improve codes that require building owner to maintain the sidewalks and right of way in front of their building. This will reduce city maintenance and landscape as well as contractor vehicle emissions (and contractor costs);
10.8.4 Add greenhouse gas emissions a waste product that falls under the Solid Waste Utility to fund emission reduction and sequestration;
10.8.5 Promote product stewardship though mandatory commercial take-back programs;
10.8.6 Only give grants to organization which are green certified and for construction projects, that have green components projects;
10.8.7 Create an education and outreach program with the assistance of a marketing and advertising firms that meets the goals of the Climate Action Plan;
10.8.8 Create an ordinance that all flat roofs must be highly reflective, and
10.8.9 Have the City Manager report on City government goal progress.

10.9 Facilities

10.9.1 Perform commercial grade energy audits of all City owned buildings;
10.9.2 Implement the cost effective audit recommendations initially;
10.9.3 Hire an energy manager to perform energy audits;
10.9.4 Have written Standard Operating Procedures for the management of every building owned by the city;
10.9.5 Phase out the use of desk top PC's and use thin clients by 2015;
10.9.6 Install central surge protectors to eliminate the need for at desk systems;
10.9.7 Hire an ESCO make recommendation for the waste water treatment system;
10.9.8 Install electric charging stations at all utility parking city with electric metering;
10.9.9 Create and train associates on paper reduction program;
10.9.10 Enforce existing "Green Policies" in all facilities;
10.9.11 Obtain GLEE Green Business certification for all buildings;
10.9.12 Have all city buildings EPA energy portfolio certified;
10.9.13 Require all electronics and electronic equipment in city buildings to be energy star rated;
10.9.14 Create a building and departmental tracking system to track energy, money and carbon saved by departments and develop a recognition system;
10.9.15 Install more and accessible bike racks at all city facilities;
10.9.16 Trim all plants to make a walkway and bikeways accessible at all city buildings;
10.9.17 Apply for water and energy conservation grants;
10.9.18 Change park and ride to LED & solar power;
10.9.19 Replace street and parking lot lights with LED's;
10.9.20 Create cisterns at all large city facilities to supply street sweepers and water buffalos;

10.9.21 Install occupancy sensors in selected offices bath and conference rooms;
10.9.22 Install insulation in un-insulated conditioned spaces;
10.9.23 Paint all roofs that are dark, white (ROI 1.5 yrs);
10.9.24 The City shall publish monthly the energy use for the last 24 months in a local publication;
10.9.25 Install window film or shade covers on select city windows on west face; and
10.9.26 Install shade trees on west side of buildings; and
10.9.27 Ensure all exit signs are lighted by LED's.

11.1

APPENDIX 1

Resolution 07-160- Kyoto Protocol; Directing a Sustainability Plan

RESOLUTION NO. 07-160

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, URGING PRESIDENT BUSH TO SIGN THE KYOTO PROTOCOL TO THE UNITED NATIONS AND CALLING FOR IMMEDIATE LOCAL AND NATIONAL ACTION TO ADDRESS GLOBAL WARMING; SUPPORTING IMPLEMENTATION OF SARASOTA COUNTY, FLORIDA'S ROADMAP TO SUSTAINABILITY IN THE CITY OF KEY WEST; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the citizens of Key West are concerned about the effects of global warming on the planet, and specifically on their vulnerable, low-lying island home; and

WHEREAS, the United States is the largest single emitter of carbon dioxide from the burning of fossil fuels; and

WHEREAS, the Kyoto Protocol, an agreement negotiated through the United Nations, and ratified by 169 international governmental entities to date, seeks to control and reduce greenhouse gases on a global scale; and

WHEREAS, President Bush has declined to submit the Kyoto Protocol for ratification by United States Congress, citing economic concerns, and an exemption granted to the nation of China, the second-largest emitter of carbon dioxide; and

WHEREAS, it is imperative that the United States and its leaders take prompt action to ensure our future well-being; and

WHEREAS, the City of Key West calls upon President Bush and his Administration to ratify the Kyoto Protocol, and to take immediate action to address the issue of global warming, to

preserve and protect the health, safety and welfare of the citizens of Key West, the United States, and the entire world;

WHEREAS, Sarasota County, Florida has developed a "Roadmap to Sustainability" incorporating principles of the Protocol on a local level that can be instructive to the City of Key West;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That President Bush is hereby urged to submit the Kyoto Protocol for ratification, and to lead the United States in the necessary efforts to reduce global warming.

Section 2: That the City Manager is encouraged to develop a similar "roadmap", or utilize the principles of the Sarasota County Plan, to ensure the City of Key West takes an environmentally sustainable approach to the operation of City business.

Section 3: That the City Clerk is hereby authorized to transmit certified copies of this Resolution to President George Bush, Vice President and Senate President Richard Cheney, House Speaker Nancy Pelosi, Senators Nelson and Martinez and Representative Ros-Lehtinen.

Section 4: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 1 day of May, 2007.

Authenticated by the presiding officer and Clerk of the Commission on May 2, 2007.

Filed with the Clerk May 2, 2007.

MORGAN McPHERSON, MAYOR

ATTEST:

CHERYL SMITH, CITY CLERK

11-2

APPENDIX

Resolution 07-273 – Undertake 5 Milestone Plan for Carbon Reduction

RESOLUTION NO. 07-273

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, COMMITTING TO PARTICIPATION IN THE "CITIES FOR CLIMATE PROTECTION CAMPAIGN"; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, a scientific consensus has developed that carbon dioxide and other greenhouse gases released into the atmosphere have a profound effect on the Earth's climate; and

WHEREAS, 162 countries, including the United States, pledged under the united Nations Framework Convention on Climate Change to reduce its greenhouse gas emissions; and

WHEREAS, energy consumption, specifically the burning of fossil fuels, accounts for more than 80% of U.S. greenhouse gas emissions; and

WHEREAS, local government in Key West and the Florida Keys can influence local emissions by exercising legislative powers over land use, transportation, construction, waste management and energy management; and

WHEREAS, local government actions taken to reduce greenhouse gas emissions and increase energy efficiency provide local benefits by decreasing air pollution, creating jobs, reducing energy expenditures and saving money for government, local businesses, and residents as well; and

WHEREAS, the City Commission believes that committing to five milestones to reduce greenhouse gas and air pollution emissions,

set forth in the International Council for Local Environmental Initiatives (ICLEI)'s Cities for Climate Protection Campaign, would serve to protect the health, safety and welfare of the citizens and visitors of Key West;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That the City of Key West will undertake the Cities for Climate Protection Campaign Program five milestones to reduce both greenhouse gas and air pollution emissions throughout the community. The five milestones are:

1. Conduct a greenhouse gas emissions inventory and forecast to determine the source and quantity of greenhouse gas emissions in the jurisdiction.
2. Establish a greenhouse gas emissions reduction target.
3. Develop an action plan with both existing and future actions which, when implemented, will meet the local greenhouse gas reduction target.
4. Implement the action plan.
5. Monitor to review progress.

Section 2: That the City of Key West hereby requests assistance from the ICLEI's Cities for Climate Protection Campaign as it progresses through the milestones.

Section 3: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 7 day of August, 2007.

Authenticated by the presiding officer and Clerk of the Commission on August 7, 2007.

Filed with the Clerk August 8, 2007.

MORGAN McPHERSON, MAYOR

ATTEST:

CHERYL SMITH, CITY CLERK

11.3

APPENDIX

Resolution 08-067- Setting Goal of 15% less Greenhouse Gas Emissions

RESOLUTION NO. 08-067

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, DIRECTING CITY STAFF TO REDUCE THE CITY'S MUNICIPAL OPERATIONS GREENHOUSE GAS EMISSIONS BY 15% BY 2015; AND FURTHER SETTING A GOAL OF REDUCING GREENHOUSE GAS EMISSIONS THROUGHOUT THE JURISDICTION OF THE CITY OF KEY WEST BY 15% BY 2015; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, in Resolution 07-273, the City Commission committed to five milestones to reduce greenhouse gas and air pollution emissions, set forth in the International Council for Local Environmental Initiatives (ICLEI)'s Cities for Climate Protection Campaign, in order to protect the health, safety and welfare of the citizens and visitors of Key West, and the planet; and

WHEREAS, the first milestone completed was the City of Key West Greenhouse Gas Emissions Inventory Report, which provides a baseline inventory of City energy use and emissions in FY 2005; and

WHEREAS, the second milestone is to set a target for emissions reductions and the third step is to create a Local Climate Action Plan; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That the City staff is hereby directed to reduce municipal operations' greenhouse gas emissions by 15%, by the year

2015, based upon the 2005 baseline data contained in the City of Key West Greenhouse Gas Emissions Inventory Report.

Section 2: That City staff is hereby directed to work to develop a Climate Action Plan for reducing greenhouse gas emissions within the jurisdiction of the City of Key West by 15% by the year 2015.

Section 3: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 4th day of March, 2008.

Authenticated by the presiding officer and Clerk of the Commission on March 5, 2008.

Filed with the Clerk March 5, 2008.

MORGAN McPHERSON, MAYOR

ATTEST:

CHERYL SMITH, CITY CLERK

11.4

APPENDIX 4

City of Key West Greenhouse Gas Emissions Inventory

(For electronic version see separate file)

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11.5

APPENDIX 5

Draft Budget

Preliminary Budget - Climate Action Plan
City of Key West Proposed Projects
(2010 is expected to be able to be funded with little or no over existing approved budget)
Note: Alliances and Partnerships will be sought to share funding / lead/ outline projects for inclusion in RFQ

	2010		2011		2012		2013		2014		2015		Total 5-Year cost
	Funding		Funding		Funding		Funding		Funding		Funding		
	Operations	Construction	Operations	Construction	Operations	Construction	Operations	Construction	Operations	Construction	Operations	Construction	
Social Marketing of Energy Conservation and Transit													
Write RFI (staff time)	$ 500												
Write RFP (staff time)	$ 500												$ 500
Award RFP													$ 500
Web Based Marketing			$ 15,000		$ 10,000		$ 10,000		$ 10,000		$ 15,000		$ 60,000
Creative Logo/Theme Campaign			$ 75,000		$ 25,000		$ 25,000		$ 25,000		$ 25,000		$ 175,000
Replace Street Lights with LED lights/ Solar power													
Feasibility Study (staff time)	$ 5,000			$ 500,000									
* Proposed grant application													$ 505,000
Energy Savings Performance Contracting													
Feasibility Study (staff time)	$ 5,000												
													$ 5,000
Energy Improvements*													
Stimulus Grant - Solar Panels and Raw Training, Travel				$275,000		$ 300,000							
* Proposed grant application													$ 575,000
City Facilities Energy Optimization/Conservation													
Lighting, Timers, Thermostats, Insulation, etc (Maintenance budget)		$ 5,000		$ 50,000									
													$ 55,000
Solid Waste Alternatives Study													
Community Composting, Bio-mass, etc (staff time)	$ 5,000												
Implementation				$ 300,000									$ 5,000
													$ 300,000
Wind Power Proto Types (2)*			$ 10,000			$ 100,000		$ 1,400,000					
*Grant available for 50%													$ 1,510,000
A/C Optimization Sewer Plant **Replacement Already Funded 2009		$ 10,000											
													$ 10,000
A/C Optimization Police Dept ** Replacement Already Funded 2009		$ 10,000											
													$ 10,000
Carbon Sequestration Project													
Develop Non-Profit			$ 5,000										
Develop Marketing Plan			$ 5,000										$ 5,000
Support Non-profit			$ 5,000		$ 10,000		$ 10,000		$ 10,000		$ 10,000		$ 5,000
													$ 45,000
Re-Lamp Grinnell St Parking Garage				$ 75,000									
* Proposed grant application													$ 75,000
Carbon Credit Purchase (20,000 mt if needed)													
												$ 200,000	$ 200,000
Vehicle Miles Traveled Reduction													
Bus Ridership Signage, shade, Trash				$ 10,000		$ 10,000		$ 10,000		$ 10,000			
Traffic Calming and Bike Friendly improvements (5Yr budget)		$ 30,000		$ 100,000		$ 100,000		$ 100,000		$ 100,000			$ 40,000
Commuter Safe bicycle storage				$ 15,000		$ 15,000		$ 15,000		$ 15,000			$ 430,000
Commuter Zip-Bike Rental Program				$ 10,000		$ 5,000		$ 5,000		$ 5,000			$ 60,000
Airport/Ferry/Cruise Ship/Street bus ticket sales kiosk machine				$ 15,000									$ 25,000
Transit Enhancement Project: Electric Plug ins*				$ 50,000		$ 50,000							$ 15,000
*Proposed grant application													$ 100,000
Environmental Programs Manager - implementation**	$ 75,000												
Staffing Energy Manager & Green Coordinator*			$ 170,000		$ 170,000		$ 170,000		$ 170,000		$ 170,000		$ 75,000
* Proposed grant application													$ 850,000
** 70% of existing position													
Operations and Construction Total	$ 91,000	$ 53,000	$ 285,000	$ 1,400,000	$ 215,000	$ 590,000	$ 215,000	$ 1,530,000	$ 215,000	$ 130,000	$ 420,000	$ 420,000	
Grand Total		$ 144,000		$ 1,685,000		$ 795,000		$ 1,745,000		$ 345,000		$ 420,000	$ 5,134,000

11.6

APPENDIX 6

9 inch Sea Level Rise, 11x17

(For electronic version see separate file)

Note:

1. Areas on the US Navy base, although white, were not surveyed and are not included in the rise estimate.
2. College Road and north Stock Island was not surveyed and are not included in the rise estimate.

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11.7

APPENDIX 7

Commercial Climate Challenge Showcase Businesses

Commercial Climate Challenge Showcase Businesses

The following businesses are examples to our community on how energy conservation and other "green" measures can help save the earth and the bottom. These businesses and ones like them will be used in alliances to promote the Climate Action Plan initiatives and meet the City's Goals.

Help Yourself! Organic Restaurant

Help Yourself! restaurateur Charlie Wilson's business model seeks diners who have a social conscience and wish to take care of themselves with organic food and the Earth by minimizing their impact on it. As with all downtown businesses space is an expensive commodity but it is important to them and their customers that their foot print on Earth is friendly, so additional square feet are used to collect rainwater, a/c condensation, collect recyclables and compost.

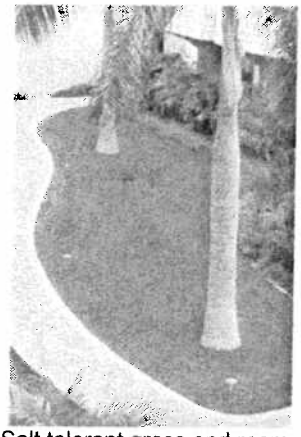
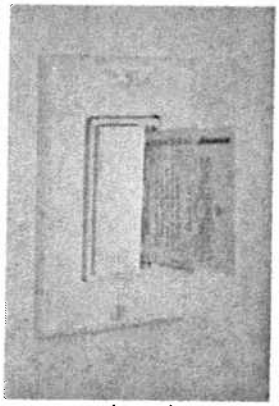
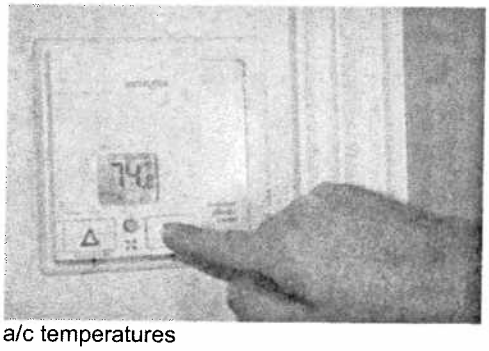
Water collection from A/c Units to water plants

Composter to create high quality soil for organic gardening

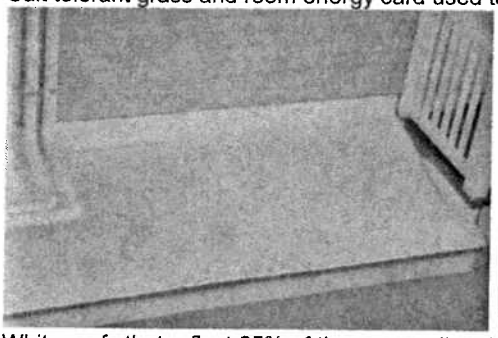
Separate waste receptacles are offered to diners to recycle, compost, and reduce trash leaving the keys

Southernmost Resorts

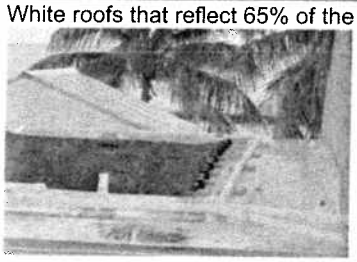
Southernmost Hotel, Southernmost on the Beach and La Mer Hotel & Dewey House have all received the prestigious "One Palm Designation" by the Green Lodging Association of Florida. Green lodging is required for any state employees using lodging or hotel conference centers. The resort uses a variety of energy and water conservation measures as well as sustainable development features like salt water tolerant grass since they are water front, ultra low volume toilets and pervious pavement. They may be the first in Key West to use the energy conservation features that are all the rage in Europe, Enter-gize. This system can preset a/c and lighting components of rooms, At Southernmost on the Beach only when the door key is used can the a/c be increased to the desired temperature of the occupant. This save many hours of energy wasted in unoccupied rooms.

Salt tolerant grass and room energy card used to access a/c temperatures



White roofs that reflect 65% of the suns radiant heat and ultra low flow toilet



A solar pool heating system harnesses the suns energy.