#### CITY OF MARATHON, FLORIDA RESOLUTION 2011-88

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, APPROVING AN AGREEMENT BETWEEN THE CITY OF MARATHON, FLORIDA AND ENERGY SYSTEMS GROUP, LLC TO CONDUCT AN ENERGY AUDIT OF CITY FACILITIES AND TO RETROFIT CITY LIGHTING FIXTURES IN AN AMOUNT NOT TO EXCEED \$450,000.00; WAIVING THE CITY'S PURCHASING POLICIES AND PROCEDURES; AUTHORIZING THE CITY MANAGER TO EXECUTE THE AGREEMENT AND EXPEND BUDGETED FUNDS ON BEHALF OF THE CITY; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City of Marathon (the "City") desires to engage Energy Systems Group, LLC (the "Contractor") to provide certain services and work to include, but not limited to, an energy audit of City facilities and to retrofit City lighting fixtures (the "Project"); and

**WHEREAS,** the City Manager recommends the City Council waive the City's purchasing policies and procedures due to the sole source status of the Contractor.

# NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THAT:

Section 1. The above recitals are true and correct and incorporated herein.

**Section 2.** Based upon the recommendation of the City Manager the City Council finds that the Contractor is the only vendor possessing the unique and singular capability to meet the requirements of the Project, the City's purchasing policies and procedures are waived.

**Section 3.** The Project agreement between the City and Contractor in an amount not to exceed \$450,000, a copy of which is attached hereto as Exhibit "A," together with such non-material changes as may be acceptable to the City Manager and approved as to form and legality by the City Attorney, is hereby approved. The City Manager is authorized to execute the agreement and expend budgeted funds on behalf of the City.

Section 4. This resolution shall take effect immediately upon its adoption

# PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THIS 13th DAY OF SEPTEMBER, 2011.

THE CITY OF MARATHON, FLORIDA

Ginger Snead, Mayor

AYES: Cinque, Keating, Ramsay, Worthington, Snead NOES: None None ABSENT: ABSTAIN: None

**ATTEST:** 

OR Diane Clavier, City Clerk

(City Seal)

APPROVED AS TO FORM AND LEGALITY FOR THE USE AND RELIANCE OF THE CITY OF MARATHON, FLORIDA ONLY:

City Attorney

# ENERGY SERVICES PROGRAM AGREEMENT BETWEEN THE CITY OF MARATHON AND ENERGY SYSTEMS GROUP, LLC

**THIS AGREEMENT** is made between the City of Marathon, Florida, a Florida municipal corporation whose address and principal place of business is 9805 Overseas Highway, Marathon, Florida 33050, (hereinafter the "City") and Energy Systems Group, LLC, an Indiana limited liability company whose address and principal place of business is: 4655 Rosebud Lane, Newburgh, Indiana 47630, (hereinafter the "Contractor"), and

**WHEREAS**, the City desires to engage the Contractor to provide certain services and work to include, but not limited to, an energy audit of City facilities and to retrofit City lighting fixtures as specified below (the "Work").

**NOW, THEREFORE,** in consideration of the mutual covenants and conditions contained herein, the Contractor and the City agree as follows.

# 1. <u>Scope of Services/Deliverables.</u>

(a) The Contractor shall provide the Work as specified in Exhibits "A," "B,"
"C," and "D" attached to this Agreement, and made a part hereof by this reference.

# 2. <u>Term/Commencement Date.</u>

- (a) This Agreement shall become effective upon the City issuing Contractor a written Notice to Proceed, and the Work shall be completed to the City's satisfaction no later than March 1, 2012 (anticipated date of submission of final report to the City Council as provided for in the Work). The City Manager may extend the term of this Agreement up to an additional sixty (60) days at his sole discretion based upon the recommendation of the City's Community Services Director.
- (b) Contractor agrees that time is of the essence and Contractor shall complete each deliverable for the Work within the timeframes set forth in the Work Schedule, unless extended by the City Manager.

# 3. <u>Compensation and Payment.</u>

(a) The Contractor shall invoice the City on a monthly basis. The total amount invoiced shall not exceed \$450,000.00. All invoices shall provide a detailed statement of the Work performed by Contractor for the period of time covered by the invoice.

- (b) The City shall pay Contractor in accordance with the Florida Prompt Payment Act.
- (c) If a dispute should occur regarding an invoice submitted, the City Manager may withhold payment of the disputed amount and shall pay to the Contractor the undisputed portion of the invoice. Upon written request of the Finance Director, the Contractor shall provide written documentation to justify the invoice. Any compensation disputes shall be decided by the City Manager whose decision shall be final.

#### 4. <u>Subcontractors.</u>

- (a) The Contractor shall be responsible for all payments to any subcontractors and shall maintain responsibility for all work related to the Work. Prior to any payments to Contractor under this Agreement, Contractor shall provide City with partial and final releases (as may be the case for partial or final payment for the Work) of claims by all subcontractors and materialmen.
- (b) Any subcontractors used on the Work must have the prior written approval of the City Manager.

# 5. <u>City's Responsibilities.</u>

- (a) Furnish to Contractor, at the Contractor's written request, all available maps, plans, existing studies, reports and other data pertinent to the Work, in possession of the City.
- (b) Arrange for access to, and make all provisions for Contractor to enter upon, real property as required for Contractor to perform the Work as may be requested in writing by the Contractor.

#### 6. <u>Contractor's Responsibilities</u>.

(a) The Contractor shall exercise the same degree of care, skill and diligence in the performance of the Work as is ordinarily provided by a professional under similar circumstances. If at any time during the term of this Agreement or within one year from the completion of the Work, it is determined that the Contractor's deliverables are incorrect, defective or fail to conform to the Scope of Work, upon written notification from the City Manager, the Contractor shall at Contractors sole expense, immediately correct the work.

# 7. <u>Termination.</u>

- (a) The City Manager without cause may terminate this Agreement upon thirty (30) days written notice to the Contractor, or immediately with cause. The Contractor without cause may terminate this Agreement upon thirty (30) days written notice to the City.
- (b) Upon receipt of the City's written notice of termination, Contractor shall stop the Work unless directed otherwise by the City Manager.
- (c) In the event of termination by the City, the Contractor shall be paid for all Work accepted by the City Manager up to the date of termination.
- (d) The Contractor shall transfer to the City all complete and incomplete books, records, reports, working drafts, documents, maps, and data created as part of or in furtherance of the Work under this Agreement, in a hard copy and/or electronic format (as specified by the City) within 14 days from the date of the written notice of termination or the date of expiration of this Agreement.

# 8. Insurance.

The Contractor shall secure and maintain throughout the duration of this Agreement insurance of such type and in such amounts as required herein. The underwriter of such insurance shall be qualified to do business in the State of Florida and have agents upon whom service of process may be made in the State of Florida. The insurance coverage shall include a minimum of:

- (a) Worker's Compensation and Employer's Liability Insurance. If applicable, coverage to apply for all employees at minimum statutory limits as required by Florida Law.
- (b) Comprehensive Automobile and Vehicle Liability Insurance. Motor vehicle liability insurance, including applicable no-fault coverage, with limits of liability of not less than \$500,000.00 per occurrence, combined single limit for Bodily Injury Liability and Property Damage Liability. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
- (c) Commercial General Liability. Commercial general liability coverage with limits of liability of not less than \$1,000,000.00 per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability.

- (d) Professional Liability. Professional liability coverage with limits of liability of not less than \$500,000.00 per occurrence and \$1,000,000.00 combined aggregate per year.
- (e) Certificates of Insurance shall be provided to the City at the time of execution of this Agreement. Certificates of Insurance shall include the City as additional insured on the Comprehensive Automobile and Vehicle Liability and Commercial General Liability policies. Contractor shall provide not less than fifteen (15) calendar days' written notice shall be provided to the City before any policy or coverage is cancelled or restricted.
- (f) If at any time during the term of this Agreement Contractor fails to maintain the above specified insurance coverage it shall indemnify and hold harmless the City against any claim for damages, unless such claim is solely the result of City's negligence.

# 9. Nondiscrimination.

(a) During the term of this Agreement, Contractor shall not discriminate against any of its employees or applicants for employment because of their race, color, religion, sex, or national origin, and to abide by all Federal and State laws regarding nondiscrimination.

#### 10. Agreement Documents.

The following documents (if applicable) shall, by this reference, be considered part of this Agreement:

Instructions to Bidders; All Addendums; Agreement; Bid Form; Exhibits; Scope of Work/Specifications; Qualification Statement; Insurance Certificates; and Bonds

# 11. Attorneys Fees and Waiver of Jury Trial.

(a) In the event of any litigation arising out of this Agreement, the prevailing party shall be entitled to recover its attorneys' fees and costs, including the fees and expenses of any paralegals, law clerks and legal assistants, and including fees and expenses charged for representation at both the trial and appellate levels.

(b) In the event of any litigation arising out of this Agreement, each party hereby knowingly, irrevocably, voluntarily, and intentionally waives its right to trial by jury.

# 12. Indemnification.

- (a) Contractor shall defend, indemnify, and hold harmless the City, its officers, agents and employees, from and against any and all demands, claims, losses, suits, liabilities, causes of action, judgment or damages, arising out of, related to, or any way connected with Contractor's performance or non-performance of any provision of this Agreement including, but not limited to, liabilities arising from contracts between the Contractor and third parties made pursuant to this Agreement. Contractor shall reimburse the City for all its expenses including reasonable attorneys' fees and costs incurred in and about the defense of any such claim or investigation and for any judgment or damages arising out of, related to, or in any way connected with Contractor's performance or non-performance of this Agreement, unless such claim is solely the result of City's negligence.
- (b) The provisions of this section shall survive termination of this Agreement.

# 13. Notices/Authorized Representatives.

- (a) Any notices required by this Agreement shall be in writing and shall be deemed to have been properly given if transmitted by hand-delivery, by registered or certified mail with postage prepaid return receipt requested, or by a private postal service, addressed to the parties (or their successors) at the following addresses:
- For the City: Roger Hernstadt, City Manager City of Marathon, Florida 9805 Overseas Highway Marathon, Florida 33050
- With a Copy to: John Herin City Attorney Stearns Weaver Miller Weissler Alhadeff & Sitterson, P.A. 150 W Flagler St., Suite 2200 Miami, Florida 33130
- For The Contractor: Chris Summers Regional Director Energy Systems Group, LLC

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17757 U.S. Hwy. 19 N. Suite 210 Clearwater, Florida 33764

With a Copy to: Energy Systems Group, LLC 4655 Rosebud Lane Newburgh, Indiana 47630 Attention: General Counsel

#### 14. Governing Law.

(a) This Agreement shall be construed in accordance with and governed by the laws of the State of Florida. Exclusive venue for any litigation arising out of this Agreement shall be in Monroe County, Florida, Middle Keys Division of the Circuit Court or the Southern District of Florida.

# 15. Entire Agreement/Modification/Amendment.

- (a) This writing contains the entire Agreement of the parties and supersedes any prior oral or written representations. No representations were made or relied upon by either party, other than those that are expressly set forth herein.
- (b) No agent, employee, or other representative of either party is empowered to modify or amend the terms of this Agreement, unless executed with the same formality as this document.

#### 16. Ownership and Access to Records and Audits.

- (a) All complete and incomplete records, books, documents, maps, data, deliverables, papers, and financial information (the "Records") created as part of or in furtherance of the Work under this Agreement shall be the property of the City.
- (b) The City Manager or his designee shall, during the term of this Agreement and for a period of three (3) years from the date of termination of this Agreement, have access to and the right to examine and audit any Records of the Contractor involving transactions related to this Agreement.
- (c) The City may cancel this Agreement for refusal by the Contractor to allow access by the City Manager or his designee to any Records pertaining to work performed under this Agreement that are subject to the provisions of Chapter 119, Florida Statutes.

# 17. Nonassignability.

(a) This Agreement shall not be assignable by Contractor unless such assignment is first approved by the City Manager. The City is relying upon the apparent qualifications and personal expertise of the Contractor, and such firm's familiarity with the City's area, circumstances, and desires.

# 18. <u>Severability.</u>

(a) If any term or provision of this Agreement shall to any extent be held invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, and each remaining term and provision of this Agreement shall be valid and be enforceable to the fullest extent permitted by law.

# 19. Independent Contractor.

(a) The Contractor and its employees, volunteers and agents shall be and remain independent contractors and not agents or employees of the City with respect to all of the acts and services performed by and under the terms of this Agreement. 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.

#### 20. Compliance with Laws.

(a) The Contractor shall comply with all applicable laws, ordinances, rules, regulations, and lawful orders of public authorities relating to the Work, including, but not limited to the American Recovery and Re-investment Act of 2009.

# 21. <u>Waiver.</u>

(a) The failure of either party to this 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.

# 22. Survival of Provisions.

(a) Any terms or conditions of either this Agreement that require acts beyond the date of the term of the Agreement, shall survive termination of the Agreement, shall remain in full force and effect unless and until the terms or conditions are completed and shall be fully enforceable by either party.

# 23. **Prohibition of Contingency Fees.**

(a) The Contractor warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Contractor, to solicit or secure this Agreement, and that it has not paid or agreed to pay any person(s), company, corporation, individual or firm, other than a bona fide employee working solely for the Contractor, any fee, commission, percentage, gift, or any other consideration, contingent upon or resulting from the award or making of this Agreement.

# 24. Counterparts.

(a) This Agreement may be executed in several counterparts, each of which shall be deemed an original and such counterpart shall constitute one and the same instrument.

# 25. Authorization to Sign Agreement.

(a) The execution and delivery of this Agreement by Contractor is within Contractor's capacity and all requisite action has been taken to make this Agreement valid and binding on Contractor in accordance with its terms.

# 26. Non-Exclusive Agreement.

(a) The services to be provided by the Contractor pursuant to this Agreement shall be non-exclusive and nothing herein shall preclude the City from engaging other firms to perform the same or similar services for the benefit of the City as determined in its sole and absolute discretion.

# 27. Performance and Payment Bonds.

(a) Prior to commencing the lighting retrofit work identified in Exhibit "D," the Contractor shall deliver to the City Performance and Payment Bonds securing its obligations to be performed for the lighting retrofit. Each Bond shall be in an amount equal to the contract price for the lighting retrofit work. The Performance and Payment Bonds will cease to be effective on the date of the City's acceptance of the Work. Effective immediately thereafter, a Maintenance Bond will be provided for the one year period commencing on the date of the City's acceptance of the project in the amount of twenty five percent (25%) of the contract price related to the lighting retrofit work. Notwithstanding any other provision of this Agreement or the bonds, in no event and in no manner shall coverage under the Performance and Payment Bonds extend to any energy guarantees.

# [THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

**IN WITNESS WHEREOF**, the parties execute this Agreement on the respective dates under each signature. The City, signing by and through its City Manager, attested to by its City Clerk, duly authorized to execute same; and by Contractor by and through its President, who has been duly authorized to execute same.

ATTEST:

CITY OF MARATHON:

Diane Clavier, City Clerk

By: Roger Hernstadt, City Manager

C Date:

APPROVED AS TO FORM AND LEGALITY FOR THE USE AND RELIANCE OF THE CITY OF MARATHON, FLORIDA ONLY:



CONTRACTOR:

Grego y F. ollins, President

Date:

# EXHIBIT "A"

#### **Energy Audit Scope of Work**

The Contractor will conduct an Investment Grade Energy Audit ("IGA") and prepare a Report that specifically identifies the energy improvements and operational changes ("ECMs"), which are recommended to be installed or implemented at each of the facilities. The Report shall contain detailed projections of energy and cost savings to be obtained at each facility as a result of the installation of the recommended ECMs. The savings calculations must utilize assumptions, projections and baselines which best represent the true value of future energy or operational savings for each facility. The Report shall clearly describe how utility tariffs were used to calculate savings for all ECMs. The Report shall describe Contractor's plan for installing or implementing the ECMs, including all anticipated costs associated with such installation and implementation.

The facilities to be included in this study are listed below. This list may be modified by mutual written agreement of both Parties.

#### **City Hall**

9805 Overseas Highway Bldg and Plan Trailer (60ft X 72ft) Admin Trailer (56ft X 72ft)

#### **New Fire Station**

8900 Overseas Highway (120ft X 59ft)(Admin Area) and (126ft X 77ft Bay Area) Light Look at new technology 2007)

# City Marina Building

800 35<sup>Th</sup> Street Marina Building (40ft X 250ft) Marina Bath House (92ft X 28ft) Electrical Power at docks

#### **Community Park**

200 36<sup>th</sup> Street Admin Building (20ft X 20ft) Electrical panel issue Restrooms (20ft X 20ft) Concession/Bathroom facility (30ft X 20) Amphitheatre (25ft X 20ft) Disconnect issue

#### Sombrero Beach

2130 Sombrero Beach Road 2 Bathroom facilities Pavilions Teen Center 810 33<sup>rd</sup> Street Building (31ft X 67ft)

#### Lights

#### Sombrero Beach Road

Path Lights – 140 Turtle Lights

# Community Park and Community Park Phase 1, Electric Panel Revamp

Tall Park Lights		Short Park Lights	
Skate Park	12	Skate Park	11
Soccer Fld 1	16	Soccer Fld 1	10
Soccer Fld 2	26	Amph Lt	12
Baseball 1	26	Exerc Pth	10
Baseball 2	26	Baseball	11
Hockey	10	Tennis Crt and Office	14
Tennis Crt	12		
Total Tall Park Lights	128	Total Short Lights	68

#### Jesse Hobbs Park Lights

# **Rotary Park Lights**

# City Boat Ramps (33<sup>rd</sup> Street Boat Ramp, Dodge Lake, and Quay)

The Contractor shall perform the following tasks in performing the IGA and preparing the Report:

#### A. Collect General Facilities Information

The Contractor shall collect general Facilities information such as: size, age, construction type, condition and general use. The Contractor shall also collect and summarize utility cost and consumption data for the most recent 24-36 month period. The impact on utility cost and consumption of any energy initiatives currently being installed or currently planned to be installed by the City will also be evaluated.

As part of these efforts, Contractor shall catalog and document energy and water usage for each Facility for the most current 24-36 month period, occupancy information, any changes in the structure of the buildings or its heating, cooling, lighting or other systems or energy requirements, descriptions of all major energy and water consuming or energy and water saving equipment; any comfort problems, code deficiencies, and description of energy management procedures presently utilized.

# B. Analyze Existing Systems and Equipment

The Contractor shall compile an analysis based on a physical inspection of the major electrical and mechanical systems of the buildings, including:

- 1. Cooling systems and related equipment
- 2. Heating and heat distribution systems
- 3. Automatic temperature control systems and equipment
- 4. Air distribution systems and equipment
- 5. Outdoor ventilation systems and equipment
- 6. Kitchen and associated dining room equipment, if applicable
- 7. Exhaust systems and equipment
- 8. Hot water systems
- 9. Electric motors 5 HP and above, transmission and drive systems
- 10. Interior and exterior lighting
- 11. Laundry equipment, if applicable
- 12. Water consumption end uses, such as restroom fixtures, water fountains, irrigation, etc.
- 13. Other major energy using systems, if applicable.

Interviews will be conducted with operation and maintenance staff regarding the mechanical system operations, occupancy patterns, and problems with comfort levels or equipment reliability.

#### C. Establish Consumption Baseline

The Contractor shall examine the most recent 24-36 months of utility bills and establish Base Year consumption for electricity, fossil fuels and water by averaging or selecting the most representative contiguous 12 months. The Contractor shall consult with City staff and account for any unusual or anomalous utility bills which may skew Base Year consumption from a reasonable representation.

#### D. <u>Develop List of Potential ECMs</u>

The Contractor shall:

- 1. Conduct a detailed rate analysis on all Facilities' utility bills to insure that each building is operating on the best available utility rate structure and identify any refunds that may be due to City as a result of past over billing
- 2. Identify opportunities for no-cost, changes to Facilities operational practices that can be easily implemented by City staff that will lower energy consumption profiles
- 3. Provide the cost, savings and life expectancy of each proposed ECM
- 4. Provide analysis methodology, supporting calculations and assumptions used to establish savings projections
- 5. Provide a preliminary savings measurement and verification plan

- 6. Detail environmental benefits of the proposed ECMs such as reduced emissions and carbon footprint reduction
- 7. For all proposed ECMs, the Contractor shall comply with all applicable state, federal and local codes and regulations in effect at the time of this analysis

#### E. <u>Select Final Recommended ECMs</u>

The Contractor shall, in consultation with City, recommend specific ECMs from its preliminary compilation for installation and implementation at the Facilities

#### F. Provide Cost and Fee Estimates

G.

The Contractor shall provide detailed estimates of all costs and fees associated with the installation and implementation of the ECMs

#### Deliver the Report

The Contractor shall complete and deliver the Report to City in the following format:

- 1. An executive summary which describes the Facilities, ECMs evaluated, analysis methodology, results and a summary table presenting the cost and savings estimates for each ECM.
- 2. A discussion of ECMs not evaluated in detail and the explanation of why a detailed analysis was not performed.
- 3. A summary of all utility bills, Base Year consumption and how it was established, and end use reconciliation with respect to the Base Year including a discussion of any unusual characteristics and findings.
- 4. Detailed descriptions for each ECM including analysis method, supporting calculations (may be submitted in appendices), results, proposed equipment and implementation issues.
- 5. Conclusions, observations and caveats regarding cost and savings estimates.
- 6. Thorough appendices which document the data relied upon to prepare the analysis and how that data was collected.

#### H. Acceptance of the Report by City

City shall conduct and complete a technical review within thirty (30) days of its receipt of the Report. If the City determines that there are any deficiencies in the Report, the City shall give the Contractor written notice of any and all said objections in detail. The Contractor shall correct the Report and submit a revised draft within fourteen (14) days of said notification. City shall have seven (7) days from receipt of the revised Report to notify the Contractor if any objections have not been corrected.

EXHIBIT "B"

# Community Audit Scope of Work

The Contractor will work with the City and Keys Electric Co-Op to support and promote an existing residential audit program that will provide free residential and small business audits for the Marathon Community.

A portion of the Agreement funds will be utilized to promote the program throughout the local community including advertisements and flyers, and to help subsidize Keys Electric Co-Op for completing the audits under an existing program that they already offer to the community.

The Contractor will be responsible for all promotional efforts including developing and distributing various materials. The Contractor shall also work with Keys Electric Co-Op staff to track and summarize all community auditing activities conducted as part of the program.

The goal is to offer and complete 600 of these community audits as part of the program.

# EXHIBIT "C"

#### Carbon Inventory & Analysis Scope of Work

Contractor will work with personnel from the City following an established process to create municipal operations and community-wide Green House Gas ("GHG") inventories that are compliant with Federal American Recovery and Reinvestment Act ("ARRA") requirements. The provided report will also include recommended reduction targets and recommended reduction action plans for the City and Community.

#### Carbon Inventory

# 1. Kickoff Meeting

Contractor will conduct a kick-off meeting via conference call with the key City staff. The purpose of this meeting is to introduce the teams, confirm roles and responsibilities, reconfirm the elements of the Inventory, discuss the scope of work and schedule, and identify existing information sources / relevant reports. Information and reports required to complete the inventory will be requested at the end of this meeting. It is understood that much information will not be readily available and that Contractor will assist the City with identifying appropriate data sources, and/or proxy data.

#### 2. Evaluate and Summarize Existing Data and Information

After City staff members have provided the requested information, Contractor will evaluate and summarize the most salient portions for the inventory. It is anticipated the City will provide, at a minimum, key statistics (population, list of city facilities, equipment, energy providers, vehicle miles travelled, etc.) as well as reports developed outside this scope of work. Also, any previous sustainability reports, strategies, environmental or energy policies, cross-jurisdictional efforts and documents or any other relevant information will be provided by the City.

Contractor will complete two baseline GHG inventories: municipal operations and community-wide. As proposed, the municipal operations inventories will include Scope 1 and 2 emission sources under the City's operational control. Scope 1 sources may include, but are not limited to, stationary, mobile, fugitive and process emission sources (i.e. wastewater treatment facilities, vehicle fleets, furnaces). Scope 2 sources may include purchased electricity, steam, heating and/or cooling.

The community-wide GHG inventories will include emissions from businesses and residences within the City limits. Proposed inventory boundaries include: Scope 1 emissions for businesses (i.e., fuels combusted in boilers/furnaces and vehicles); Scope 1 emissions for residences (fuels combusted in vehicles and in the home); and Scope 2 emissions for commercial, industrial and residences (electricity consumed). Contractor proposes that the municipal operations and community-wide GHG inventories cover carbon dioxide, nitrous oxide, and methane only as these are the primary gases from combustion.

Contractor proposes to use the Local Government Operations Protocol – For the quantification and reporting of greenhouse gas emissions inventories and the Draft ICLEI Community-scale GHG Accounting and Reporting Protocol to develop the GHG inventories, for any sources where primary emissions data is available (such as aggregated energy consumption data from the local utility). For sources that are not tracked directly and for which activity data cannot be readily accessed, best practice models will be used as a proxy for actual emissions (e.g. emissions as a function of vehicle miles travelled by residents).

Finally, Contractor will conduct a detailed analysis of the existing data and information in order to create a data matrix to identify key data areas, known gaps in the existing data and expected sources of proxy data. Contractor will summarize outstanding issues with respect to management systems and data quality and address any data gaps with City staff.

Exclusions: sources that emit gases other than those in the chemical boundary (e.g. HFCs from chillers), sources that cross the geographic boundaries (such as some nautical emissions), small *de minimis* sources (e.g. landscaping equipment, construction equipment, etc.) and lifecycle emissions are specifically excluded.

# 3. Data Gathering and Handling.

Following the completion of the previous tasks, Contractor will consolidate all data for the selected baseline year for the City and ensure that all sources are correctly reported using best GHG accounting practices. Contractor will work with City staff to gather all data, ensure all activity data are within the calendar year of the inventory and that data sets are complete and free of material errors and/or omissions.

Contractor will assist the City in the data collection effort to ensure and make recommendations on best practices. Contractor will help verify the completeness and accuracy of the data using quality assurance/quality control procedures to identify 'red flags'. Red flags refer to apparent inconsistencies in received data such as large fluctuations in temporal data, potential data gaps from unreported activities or facilities and significant discrepancies between similar facilities. Data quality checks may include informal interviews with appropriate on-site personnel to evaluate whether emissions sources are being reported accurately. If irregularities are found, Contractor will make suggestions to the City for review of the data and/or modification of the data collection methodologies.

In order to provide the City with all the tools necessary to repeat the GHG inventory in subsequent years, Contractor will develop a master spreadsheet to manage and maintain all data sources and data management such as assumptions, estimates and data sources.

# 4. Emissions Calculations, Forecasts & Emissions Report.

The climate planning context is evolving, as are tools and models that are endorsed by agencies with an interest in carbon management. Contractor proposes to use ICLEI's Clean Air & Climate Protection Software (CACP) to conduct emissions estimation calculations for the inventories. Contractor will assemble and process the data and perform the necessary emissions calculations according to the appropriate emissions accounting guidelines and published emissions factors. All processing of activity data (e.g. gallons of diesel usage) will be performed and managed in spreadsheets outside of the CACP tool. When entering data to the tool, Contractor will enter activity data (e.g. gallons of diesel usage) and rely on CACP's embedded emission factors where possible to calculate emissions. This minimizes the possibility of human error and facilitates the replication of the process in subsequent years.

Emissions will be calculated for the City for the selected baseline year. Where possible, emissions will be calculated per facility or operational division for internal government operations. Organizing the data in this manner and reporting at the facility level provides more GHG management flexibility and facilitates future inventory adjustments that may be desired due to organizational changes or participation in additional GHG programs/registries. Within the community-wide inventories, aggregations of the data will be conducted per source category (e.g. mobile combustion, stationary combustion, fugitive emissions, etc.). Emissions will be provided in terms of metric tons carbon-dioxide equivalents (MT  $CO_2e$ ). Energy use will be summarized in terms of kilowatt hours (kWh) for electricity or Megawatts (MW) where appropriate and therms for natural gas usage.

In addition to the baseline emission year, Contractor will forecast GHG emissions for the community-wide GHG inventory using the best available data (i.e. projected population growth, projected job growth, projected vehicle miles traveled, etc.). For each inventory, two forecasts will be prepared using a "business as usual" scenario and long range "forecast year". Contractor will consult with City staff to determine desired and appropriate scenarios and forecasts.

# Establish Carbon Reduction Goals

# 1. Data collection:

- Coordinate with City to determine timing and data collection to be used in development of GHG inventory/energy audit.
- Discuss additional City Council current and future energy/greenhouse gas management goal development beyond that in this Agreement.
- Review and analyze existing and predicted regulatory requirements including, but not limited to, greenhouse gas reporting/reductions, climate change, and cap and trade at the State and Federal levels.

- Determine outcomes of 2010 and 2011 State and Federal Legislative sessions and impact on project approach. Discuss opportunities for additional legislation or changes necessary for 2012 State and Federal Legislative sessions.
- Brief City on project approach and coordinate to develop tools and recommendations such as procurement policy, waste management, fleet policies, etc. Discuss quality and format of available data for energy audits and greenhouse gas inventory.
- Recommend greenhouse gas emissions inventory protocol to best suit the City's goals.
- Develop options for greenhouse gas reduction targets, choose baseline year (based upon best available data and "representative" year) and forecast year (evaluate options for reduction targets).

# 2. Engage Citizens and Businesses:

- Coordinate with City to establish citizen engagement process to meet for 6 months and identify key issue areas from process.
- Coordinate with City to work with citizen engagement process to finalize recommendations.
- Hold three community workshops to solicit additional input beyond the citizen engagement process with target dates: Summer 2011, Fall 2011, first quarter 2012. Develop presentation materials, expenses associated with staffing workshops, coordination with City of advertising and notification, final report on community feedback. Focus outreach for the workshops on the minority and business community.
- Presentation to City staff and Council and feedback.

# Carbon Reduction Plan

# 1. Develop Local Action Plan, Implementation and Monitoring

- Coordinate results of energy audit and City wide greenhouse gas inventory related to net metering, feed-in-tariff and alternative solutions for electric service including renewable energy.
- Collect water usage data and review feasibility of water reuse and conservation options. Evaluate existing water conservation (state and local) regulations, rules and practices for effectiveness and determine opportunities for enhanced water conservation program.
- Review City's building code and land development regulations to determine opportunities to increase energy & water efficiency requirements including cisterns and rain barrels. Include other "green building" incentives and provisions as appropriate. Assure consistency with increasing energy efficiency requirements for construction in Chapter 255, F.S. and other rules and laws. Develop draft ordinance.

- Analyze recommendations from citizen engagement process/workshops and prioritize them based upon greenhouse gas emissions inventory, baseline and forecast projections.
- Review existing and projected laws and regulations related to greenhouse gas emissions and energy efficiency (such as resulting legislation from State and Federal 2010 and 2011 Legislative Sessions, Mandatory EPA Greenhouse Gas Reporting rules and other related provisions).
- Establish options, timelines, areas of responsibility, and funding strategies for City facilities and infrastructure retrofits.
- Develop implementation approach for Local Action Plan through Comprehensive Plan, Code of Ordinances and other mechanisms.
- Explore options to develop energy financing district and secure funds to finance retrofits on homes and businesses through voluntary non-ad valorem assessments.
- Determine if additional legislative changes are necessary to implement a successful program.
- Develop annual/internal monitoring process to measure progress towards achieving greenhouse gas reduction and energy efficiency goals.
- Finalize Draft of Local Action Plan.
- Coordinate with City and stakeholders on work products as appropriate.
- Presentation to City staff and Council.
- Finalize Local Action Plan.

# Assumptions

- The baseline GHG inventory will consist of one single calendar year.
- Many data sources may not meet the 5% accuracy requirements specified in the ICLEI reporting protocol. Contractor expects to use proxy information or assumptions for the majority of the community-wide mobile emissions sources (specifically vehicle miles travelled) as well as some assumptions on other sources when data is not available.
- Contractor will hold an opening meeting to provide City staff with direction for collecting certain activity data for the emissions year in a consistent and accurate manner. Contractor will also discuss the collection of proxy information and the use of assumptions for filling any remaining gaps. City staff will be responsible for collecting and providing limited quality assurance/quality control for data provided to Contractor.
- The inventories will not include any emissions sources or gases that have not been specifically identified in the scope of work (such as refrigerants and fire suppressants from stationary mobile sources).
- No travel will be required to complete the proposed scope of work.

EXHIBIT "D"

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# Street & Park Lighting Retrofit Scope of Work

Contractor shall retrofit a total of 250 City Street and Park lights with new high efficiency LED or Induction lights.

#### Sombrero Beach Road - 140 Pathway Lights

The Sombrero Beach Road path is currently illuminated with 140 pathway lights utilizing high pressure sodium lamps. The lights will be retrofitted with either an LED or Induction lighting kit that will greatly improve the fixtures' energy efficiency, rated life, and light quality. The following table summarizes the anticipated scope of work. The final scope of work for these retrofits will be determined though the Investment Grade Audit and approved by City Staff prior to implementation.

	Existing	Anticipated
Fixture Type	Lumac Domus Small Series	Same
Lamp Type	HPS	LED
Est. System Wattage	128w	47w
Est. Rated Lamp Life	20,000 hrs	100,000 hrs
Est. Reduction in		63%
Consumption		
Total Savings Per Year		\$ 5,895

\*The above numbers are based on a cursory review of the existing systems. All details will need to be verified and recommendations revised accordingly for City review and acceptance prior to implementation

#### Community Park - 68 Pathway Lights

Community Park currently has 68 decorative acorn pathway lights utilizing high pressure sodium lamps. The lights will be retrofitted with either an LED or Induction lighting kit that will greatly improve the fixtures' energy efficiency, rated life, and light quality. The following table summarizes the anticipated scope of work. The final scope of work for these retrofits will be determined though the Investment Grade Audit and approved by City Staff prior to implementation.

	Existing	<u>Anticipated</u>
Fixture Type	Decorative Acorn	Same
Lamp Type	HPS	Induction
Est. System Wattage	128w	54w
Est. Rated Lamp Life	20,000 hrs	100,000 hrs
Est. Reduction in Consumption		58%
Total Savings Per Year		\$ 2,615

\*The above numbers are based on a cursory review of the existing systems. All details will need to be verified and recommendations revised accordingly for City review and acceptance prior to implementation

# To Be Determined – 42 Additional Lights

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Through the Investment Grade Audit Process, Contractor will identify additional groupings of park and pathway lighting to be retrofitted as part of this scope of work. The City shall select their preferred grouping of a minimum additional 42 lights that fits within the total project budget.

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EXHIBIT "E"

#### **Project Budget and Schedule**

#### **Project Budget**

The project will consist of a minimum scope of work as defined in Exhibits A, B, C, and D with a not to exceed total cost of \$450,000. The following details Contractor's estimated project budget for turnkey implementation of the defined scope of work of this Agreement as required under the Grant Agreement. In the event that additional budget funds remain after the implementation of the defined scope, Contractor will work with the City to utilize those remaining funds to implement selected recommendations identified in the Investment Grade Energy Audit Report to be generated as the scope of work identified in Exhibit A.

<u>Task</u>	Budget	
GHG Inventory	\$ 78,000	
City Audit	\$ 32,000	
Community Audit	\$ 56,000	
Lighting Retrofits (250)	\$ 284,000	
Total	\$ 450,000	

#### **Project Schedule**

Upon Execution of the Agreement, The Contractor will work with City to develop a detailed project schedule for each scope of work item. The schedule shall be developed to ensure project completion no later than the Grant Agreement deadline.