

U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
 PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Quality Inspection, Measurement, and Building Codes

Metric Activity: Other

Quarter: 01/01/2010 - 03/31/2010

% of Work Complete: 0

Status: Active

Activity Description:

The following provides additional detail to each of the this activity's 3 proposed projects.

PROJECT TITLE: Quality Inspection

Lake County proposes to create an inspection program to ensure that the energy efficiency upgrades partially financed through the rebate program under eligible activity #4 are properly installed so that the expected savings can be fully realized. This inspection program will utilize existing inspectors or create a new position on the County staff. The quality inspections will occur throughout the rebate program's performance period on a representative sample of building upgrade projects.

PROJECT TITLE: Measurement and Verification

Lake County proposes to complete a study toward the end of the 36-month performance period to measure and verify the outcomes of the energy efficiency programs implemented with EECBG funds.

PROJECT TITLE: Building Codes

PROJECT TITLE: Building Codes

Lake County seeks to identify barriers and roadblocks to energy efficiency upgrades by examining and revising County building codes and permitting procedures. This program falls under EECBG eligible activity #8, Building Codes and Inspections.

This EECBG activity has three parts:

1. Frame a path to International Energy Conservation Code (IECC) 2009 compliance and set up a program to meet IECC requirements.
2. Train County officials, architects, and builders on the updated building codes.
3. Evaluate the current building permitting process to identify bottlenecks, reduce/eliminate permitting fees, and simplify permitting paperwork to encourage energy efficiency projects.

Lake County will use existing County staff to perform this task.

Key Dates:

DESCRIPTION	START DATE	COMPLETION DATE
Activity Planned		
Activity Actual		

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PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Quality Inspection, Measurement, and Building Codes - continued -

Quarter: 01/01/2010 - 03/31/2010

Status: Active

Metric Activity: Other

% of Work Complete: 0

APPROVALS

Reporting Period: 01/01/2010- 03/31/2010				
APPROVER NAME	EMAIL ADDRESS	PHONE	STATUS	STATUS DATE
Kelsie Bell	kelsie.bell@go.doe.gov	(720) 356-1643	Approved	05/21/2010
Lori Barnes	lbarnes@lakecountyfl.gov	(352) 343-9503	Submitted	04/30/2010

U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
 PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Greenhouse Gas Reduction Program

Quarter: 01/01/2010 - 03/31/2010

Status: Active

Metric Activity: Building Codes and Standards

% of Work Complete: 0

Activity Description:

Lake County is proposing an emissions reduction program encompassing several specific initiatives that will not only reduce the County's GHG emissions, but also develop methodologies for measuring and achieving Lake County's environmental goals. Paired with the County's GHG Inventory Management Plan, these efforts will continue to reduce GHG emissions into the future. These measures fall under eligible activity #11, Reduction/Capture of Methane/Greenhouse Gases.

Lake County's strategy for reducing and capturing methane and GHGs includes the following specific activities:

1. Landfill Gas (LFG) Feasibility Study: Lake County will conduct feasibility studies on two (2) of the County's landfills to assess the available capacity for the capture of methane. The feasibility studies will evaluate the potential landfill gas (LFG) flow created from each landfill, the options for achieving reductions in GHG emissions, and the use of the intrinsic heat content of LFG to realize additional revenue streams. During these feasibility studies, a high-level comparative analysis of the characteristics of the County's other landfills will be performed to confirm that no LFG potential recovery potential exists there.
2. Regulatory Support for Compliance with EPA's GHG Reporting Rule: On September 22, 2009, the EPA Administrator signed a rule that requires facilities that emit over 25,000 metric tons of carbon dioxide equivalent GHG emissions to report emissions to EPA. Lake County's waste-to-energy (WTE) plant may fall under this rule, and the emissions reporting will likely be the responsibility of County staff. Additionally, this rule may cover private sector industries conducting business in the County. Lake County will attend training and offer support to comply with these new GHG rules, both for the WTE plant and for the community.
3. Lake County's Waste-To-Energy (WTE) Plant: Lake County's WTE facility, operated by Covanta Lake of Okahumpka, already contributes to the reduction of GHGs by decreasing the dependence on fossil-based power generation, reducing landfill space and methane emissions, potentially reducing waste transportation costs, and recovering ferrous metals. However, the emissions from this plant are currently not adequately tracked; the current GHG benefits of the plant have not been quantified; and the opportunities for further benefits have not been explored in-depth from a GHG perspective. As the incinerator at the WTE facility will most likely be one of the County's largest GHG emitters, the County proposes to target this facility in two ways: (1) quantify and track emissions (applicable because the facility may emit over 25,000 metric tons of carbon dioxide equivalent emissions thus requiring the facility to report under EPA's mandatory GHG regulation), and (2) utilize the waste stream audit performed under activity #10 and analyze the WTE operation to determine further opportunities for emissions reductions, including diversion of waste to landfills and reduction in fossil fuel use for co-firing. This program creates the base for future action by establishing the infrastructure to measure and track GHGs, which will better enable the County to manage these emissions. It also determines the feasibility of options for using or destroying landfill gas. In addition to these lasting benefits, this activity will create 2 jobs, including a third-party GHG Manager who will be contracted to track progress and ensure that goals have been reached.

Key Dates:

DESCRIPTION	START DATE	COMPLETION DATE
Activity Planned		
Activity Actual		

U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Greenhouse Gas Reduction Program - continued -

Quarter: 01/01/2010 - 03/31/2010

Status: Active

Metric Activity: Building Codes and Standards

% of Work Complete: 0

APPROVALS

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Kelsie Bell	kelsie.bell@go.doe.gov	(720) 356-1643	Approved	05/21/2010
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U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
 PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Incentive Funds

Metric Activity: Loans and Grants

Quarter: 01/01/2010 - 03/31/2010

% of Work Complete: 0

Status: Active

Activity Description:

Lake County proposes to create a three-part financial incentive program to encourage energy efficiency upgrades and reduce energy waste: (1) a Residential and Small Commercial (RSC) incentive, (2) a County "lead by example" green building program with funds to pay for the incremental cost high-efficiency equipment and energy efficiency services, and (3) an internal revolving loan to finance energy-related emergency repairs. This program falls under eligible activity #4, Financial Incentive Program.

1. The RSC rebate incentive is a program intended for residential and small commercial property owners, which will pay for up to 20% of energy efficiency retrofits up to a total of \$500 per home and \$1,000 per business. Retrofits may include lighting retrofits; HVAC systems, duct sealing, and building envelope retrofits, including increased insulation; plumbing or site retrofits aimed toward energy efficiency gained through water conservation; and others. In the past year, 49 homes were retrofitted. This program's goal is 650 homes per year, a twelvefold increase, and 45 businesses per year. Due to the marked increase of work in these target markets, the RSC incentive will create competition, create jobs, and reduce the per-unit cost of weatherization-related retrofits for homeowners and small business owners. The building owners will benefit from the reduced initial cost due to volume and the County incentive, plus utility rebates where available and federal tax credits. This program will leverage resources by encouraging home and business owners to invest their own money to maximize efficiency and sustainability through green building measures.

2. As part of eligible activity #3, Lake County is benchmarking its facilities to identify cost-effective energy retrofits in County-owned facilities, for example the County parking facilities. The Lake County ARRA Program Manager will work with facility managers to put together a performance contract bid to improve those facilities with measures that meet County specifications. The performance contracting "plus" financial incentive will cover the incremental cost of purchasing high efficiency equipment and services that lead to efficient operation such as building commissioning, recommissioning, or retrocommissioning. These investments in efficiency may allow for LEED certification and ENERGY STAR labeling for qualifying buildings.

3. The internal revolving loan fund will provide short-term loans for emergency repairs that would otherwise have to wait weeks or until the following fiscal year to be done. Funds for these repairs would target those incidents, which, if left in disrepair, would create significant energy waste. When feasible, these funds will allow for early replacement with efficient equipment rather than repair. The beneficiary of the short-term loan will replenish the fund at the start of the next fiscal year.

The ongoing benefits of this activity include lower County energy costs. Because of reduced energy use owing to the performance improvements in buildings, the County will also reduce GHG emissions. In addition, building retrofits provide other benefits, including enhanced occupant comfort and reduced deferred maintenance.

Key Dates:

DESCRIPTION	START DATE	COMPLETION DATE
Activity Planned		
Activity Actual		

U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Incentive Funds - continued -

Quarter: 01/01/2010 - 03/31/2010

Status: Active

Metric Activity: Loans and Grants

% of Work Complete: 0

APPROVALS

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U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
 PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Traffic Signal Synchronization and System Improvement

Metric Activity: Transportation

Quarter: 01/01/2010 - 03/31/2010

% of Work Complete: 0

Status: Active

Activity Description:

Lake County proposes to inventory the County-wide traffic signal and street light system and design short- and long-term implementation plans for retrofits and upgrades. Lake County currently maintains 182 traffic signals (75 County-owned, 107 through Interlocal agreements with cities), 52 warning flashers, 19 overhead warning beacons, 84 school flashers, and 30 street lights. Traffic signals will be evaluated for corridor synchronization and updating of existing timing plans. Intelligent Transportation Systems (ITS) will be evaluated for their usefulness to the County and implementation costs. EECBG funds will be used for a consulting engineer to develop policies and a comprehensive plan. Funds will also be utilized for implementation of the plan, including hardware and component installations such as, but not limited to, signal timing, upgraded signal controllers, and upgraded LED street lights. This program falls under EECBG eligible activity #7, Development and Implementation of Transportation Programs.

This EECBG activity has the following 4 parts:

1. Consultant activity to review the entire County-wide traffic signal and street light system. The consultant will also provide a planning and implementation program for Lake County. This plan will develop the program in stages with time frames based on cost and efficiency. The plan will prioritize which improvements should be performed in the short term and which one should be performed in the long term. The consultant will also provide a plan to track and assess energy savings and reductions in energy use.
2. Consultant activity to develop the timing programs, construction plans, and specifications for short-term improvements.
3. Consultant activity to assist in the construction engineering and inspection of all new hardware, systems, and signal synchronization timings put into effect to ensure that they are performing at optimum efficiency as proposed in the developed construction plans. The consultant will make necessary adjustments in the field for the new timing plans.
4. Hiring of a contractor for the installation of new hardware, street lights, LED traffic signals, ITS, and other systems as programmed and funded by the plan under this program. This program will have a number of long-term benefits. It will improve traffic flow and efficiency by reducing delays, which will, in turn, reduce carbon monoxide (CO) and hydrocarbon (HC) emissions. The reduction in delays will lead to projected travel time improvements of up to 20%. This will help the overall local air quality. The program will also convert outdoor lighting from inefficient to efficient energy systems. Lamp energy use on retrofitted systems will improve by up to 80%. Replacing these lights results in a significant long-term reduction of County funds spent on outdated high-pressure sodium lighting. Use of more efficient fixtures also reduces GHG emissions originating from lighting energy consumption and maintenance. Financial support for this project promotes a greater market for the technology, reducing future initial costs and payback time. This activity will create approximately 4 jobs in the form of positions at engineering firms and positions for contractors.

Key Dates:

DESCRIPTION	START DATE	COMPLETION DATE
Activity Planned		
Activity Actual		

U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Traffic Signal Synchronization and System Improvement - continued -

Quarter: 01/01/2010 - 03/31/2010

Status: Active

Metric Activity: Transportation

% of Work Complete: 0

APPROVALS

Reporting Period: 01/01/2010- 03/31/2010				
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Kelsie Bell	kelsie.bell@go.doe.gov	(720) 356-1643	Approved	05/21/2010
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U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Renewable Energy Technologies

Quarter: 01/01/2010 - 03/31/2010

Status: Active

Metric Activity: Renewable Energy Market Development

% of Work Complete: 0

Activity Description:

Lake County proposes to establish a pilot program to allow the County to take advantage of Florida's focus on renewable energy. This program aligns with eligible activity #13, Renewable Energy Technologies on Government Buildings. This EECBG activity consists of the following three tasks:

1. Identification of renewable technology candidates: County facilities will be selected based on their energy performance rating in EPA's Portfolio Manager and/or renewable facility assessments conducted through a partnership with Lake Sumter Community College. A secondary selection criteria is to seek high-visibility sites, sites with special educational opportunities, and sites providing public services; these will be given priority because they will have the most public visibility and thus the greatest potential for increasing public awareness and education about energy efficiency and solar renewable energy.
2. Fund matching: The County will set aside the EECBG funds for the purpose of matching Florida renewable energy funds. As funds become available through state programs -- such as the Renewable Energy Sector Grant Program, the Sunshine State Buildings Initiative, and the Solar Thermal Loan Program -- the County will then use the combined funds to install renewable technologies on eligible buildings.
3. Energy savings tracking: Lake County will track and report ongoing results from Portfolio Manager as part of its benchmarking efforts in eligible activity #3. This program results in a number of long-term benefits. The use of renewable energy technology on efficient or upgraded buildings provides sustainable benefits by reducing energy losses and GHG emissions, lowering peak demand on power generation plants, and educating the public on the thorough integration of energy efficiency with renewable energy generation. This activity is expected to create approximately 1 job.

Key Dates:

DESCRIPTION	START DATE	COMPLETION DATE
Activity Planned		
Activity Actual		

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**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
 PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Benchmarking, Education, and Outreach

Quarter: 01/01/2010 - 03/31/2010

Status: Active

Metric Activity: Other

% of Work Complete: 0

Activity Description:

The following provides additional detail to each of this activity's 6 proposed projects.

PROJECT TITLE: Energy Performance Benchmarking and Associated Public Education and Outreach Campaign

Lake County proposes to establish a program for benchmarking the energy performance of county buildings and executing two pilot energy audits and retrofits to promote energy efficiency to the community. This EECBG activity has four parts: hire a temporary worker, use EPA's Portfolio Manager to benchmark the energy performance of all municipal bdlands greater than 5,000 square feet; complete greenhouse gas (GHG) inventory; and hire a contractor to complete energy audits on one home and one small business and then complete an energy efficiency retrofit on each.

PROJECT TITLE: Public Education & Outreach

Lake County proposes to establish a public education and outreach campaign to inform members of the community about the benefits of energy efficiency. This campaign will publicize county programs available to assist home and business owners with their energy efficiency efforts. With the help of a consultant, the project will also result in the creation of an inter-jurisdictional task force to help facilitate information sharing.

PROJECT TITLE: Adult Education & Training-Lake Sumter Community College

Lake County proposes to implement an Adult Education and Training project to ensure that the current workforce is prepared for green collar jobs related to energy efficiency and clean energy. This EECBG activity has three parts: develop course curricula; subsidize tuition; and assist with job placement.

PROJECT TITLE: Adult Education & Training - Lake Tech

The first part of this project is the development of curriculum and instructional staff to offer certification classes to construction professionals in the areas of installation and maintenance of photovoltaic and solar energy systems. The funds requested will be used for instructor salaries, student training materials and train the trainer activities. If available, additional funds will enable Lake Tech to offer the classes tuition free to local industry. The second part is to reopen the HVAC program at Lake Tech with a curriculum focused on energy efficiency. The funds would pay for the instructional cost to upgrade the curriculum and to replace outdated equipment for student use.

PROJECT TITLE: Design and Operation of Energy Efficiency Programs

Lake County proposes to hire a consultant to prepare a detailed program guide for projects that will maximize the impact of the County's EECS. Specifically, this activity will help develop the programmatic content for: Part A - the residential and small commercial rebate program; Part B- the quality inspection program; Part C- the performance contract plus program; and Part D - Lake County's revolving loan opportunity fund.

PROJECT TITLE: Participation & Efficiency Study

Lake County Proposes to hire a consulting firm to conduct a study to identify the most effective methods for increasing participation in energy efficiency programs and maximizing the energy saved through county programs.

Key Dates:

DESCRIPTION	START DATE	COMPLETION DATE
Activity Planned		
Activity Actual		

U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Benchmarking, Education, and Outreach - continued -

Quarter: 01/01/2010 - 03/31/2010

Status: Active

Metric Activity: Other

% of Work Complete: 0

APPROVALS

Reporting Period: 01/01/2010- 03/31/2010				
APPROVER NAME	EMAIL ADDRESS	PHONE	STATUS	STATUS DATE
Kelsie Bell	kelsie.bell@go.doe.gov	(720) 356-1643	Approved	05/21/2010
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U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Energy Efficiency & Conservation Strategy

Quarter: 01/01/2010 - 03/31/2010

Status: Active

Metric Activity: Other

% of Work Complete: 0

Activity Description:

Lake County intends to retain a consultant to prepare the EECS.

Key Dates:

DESCRIPTION	START DATE	COMPLETION DATE
Activity Planned		
Activity Actual		

QUALITATIVE DESCRIPTIONS

Reporting Period: 01/01/2010- 03/31/2010

Remarks
N/A in Strategy Development Stage.

APPROVALS

Reporting Period: 01/01/2010- 03/31/2010				
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Kelsie Bell	kelsie.bell@go.doe.gov	(720) 356-1643	Approved	05/21/2010
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U.S. Department of Energy
**ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG)
PROGRAM PERFORMANCE REPORT**

Grant Number: EE0000786

Grantee: Lake, County of

Activity: Expansion of County Recycling Program

Quarter: 01/01/2010 - 03/31/2010

Status: Active

Metric Activity: Other

% of Work Complete: 0

Activity Description:

Lake County recognizes the significant environmental impact that occurs when waste is disposed of in a landfill. To reduce the amount of waste placed in landfills, Lake County proposes to expand and enhance its County Recycling Program by conducting a waste stream audit, identifying areas for improvement, and evaluating additional waste-related regulations. These efforts fall under eligible activity #10, Material Conservation Program.

This program has three parts: First, Lake County will perform a waste stream audit on a representative sample of County facilities. These audits will be done using standard practices detailed in Materials & Resources Credit 6 under the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design for Existing Buildings: Operations & Maintenance (LEED-EB:O&M) Rating System. The waste stream audit will identify which materials are being put in landfills and which materials are being diverted.

Second, the County will analyze the results of the audit and identify areas for improvement. As a recycling program is already in place, the audit will allow Lake County to see its unrealized opportunities. For example, if a significant amount of glass is put in the landfill, Lake County will emphasize recycling glass and re-using dishware to reduce the amount of glass being disposed of. The County will promote its recycling program and facilitate participation by providing recycling bins and containers that are well-marked and easily accessible, as well as by placing signage in facilities promoting the recycling program to occupants and visitors. The County will also encourage occupants to decrease waste by reducing and reusing materials where appropriate. Additionally, the current styrofoam recycling program will be expanded.

Third, Lake County will consider expanding its recycling efforts to the community by investigating opportunities to regulate particularly environmentally stressful bulk waste, such as styrofoam. Lake County will investigate local recycling companies and find alternate solutions for companies that wish to dispose of waste in bulk. This solution will prove fiscally advantageous to both the disposer and the recycler. This program will have numerous and lasting impacts. First, landfills will fill up more slowly, as less material will be sent to them. Second, fewer raw materials will be harvested. Third, local companies will benefit (and potentially jobs will be created) from the increased recycling volume (for recycling companies) and from reduced disposal fees.

Key Dates:

DESCRIPTION	START DATE	COMPLETION DATE
Activity Planned		
Activity Actual		

APPROVALS**Reporting Period:** 01/01/2010- 03/31/2010

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