

## EECBG Activity Worksheet

090010

Grantee: City of Gainesville Date: \_\_\_\_\_

DUNS #: 82635004 Program Contact Email: shepherdwj@gru.com

Program Contact First Name: Bill Last Name: Shepherd

Project Title: Energy efficiency through behavior change

Activity: 1. Energy Efficiency and Conservation Strategy If Other: \_\_\_\_\_

Sector: Residential If Other: \_\_\_\_\_

Proposed Number of Jobs Created: 2.00 Proposed Number of Jobs Retained: 250,000.00

Proposed Energy Saved and/or Renewable Energy Generated: 9,900 MegaWatt Hours per year

Proposed GHG Emissions Reduced (CO2 Equivalents): 8,791.000

Proposed Funds Leveraged: \$250,000.00

Proposed EECBG Budget: 250,000.00

Projected Costs Within Budget: Administration: \_\_\_\_\_ Revolving Loans: \_\_\_\_\_ Subgrants: \_\_\_\_\_

Project Contact First Name: Bill Last Name: Shepherd Email: shepherdwj@gru.com

Metric Activity: Other If Other: \_\_\_\_\_

Project Summary: *(limit summary to space provided)*

There are programs available that use behavioral science, software, and data-driven analytics to engage residential energy customers. One program involves sending highly customized energy usage history reports to 45,000 households. The reports are designed to encourage behavioral modifications in order to reduce individual energy usage at the residence. The report notifies the customers how their usage compares to other homes in their neighborhood. It also provides energy reduction tips and marketing messages. Sacramento Utility District has had this program in place since the summer of 2008. They have already seen a 2% reduction in energy usage on those 45,000 homes. Average annual energy usage for GRU customers is about 11,000 kWh per household. Applying the same 2% reduction to our customers would amount to 9,900 MWh of energy reduction.

\$250,000 will be requested for the next two years as well with matching funds provided.

EECBG cost: \$0.025 per kWh  
\$28.44 per metric ton of carbon

## EECBG Activity Worksheet

090010

Grantee: City of Gainesville Date: \_\_\_\_\_

DUNS #: 82635004 Program Contact Email: \_\_\_\_\_

Program Contact First Name: Bill Last Name: Shepherd

Project Title: LEEP (Low-income Energy Efficiency Program)

Activity: 1. Energy Efficiency and Conservation Strategy If Other: \_\_\_\_\_

Sector: Residential If Other: \_\_\_\_\_

Proposed Number of Jobs Created: 7 00 Proposed Number of Jobs Retained: 528,500.00

Proposed Energy Saved and/or Renewable Energy Generated: 2977 MWh

Proposed GHG Emissions Reduced (CO2 Equivalents): 2,644.000

Proposed Funds Leveraged: \$342,000.00

Proposed EECBG Budget: 528,500.00

Projected Costs Within Budget: Administration: \$42,500.00 Revolving Loans: \$0.00 Subgrants: \$486,000.00

Project Contact First Name: Tara Last Name: Thomas Email: thomastr@gru.com

Metric Activity: Building Retrofits If Other: \_\_\_\_\_

Project Summary: *(limit summary to space provided)*

GRU developed a Low-income Energy Efficiency Program (LEEP) to assist low income customers to upgrade their home with energy efficiency measures to reduce energy use, cost and improve comfort. This program uses a "whole house system" approach similar to Home Performance with Energy Star Program. According to research, one of the most cost effective ways to improve energy efficiency is by making changes or improvements to an entire system rather than taking a piecemeal approach. All energy efficiency improvements are implemented on our low income customers' homes based on the most effective energy efficiency measures for the least cost. Improvements covered under this program can include insulation (attic and/or floor), duct repair (sealing and repairing), central air conditioning maintenance or repair, water heater repair or replacement, air conditioner replacement, programmable thermostat and compact fluorescent lighting. The average cost for total improvements is \$3000, which is paid directly to the contractor. Additionally, a GRU energy auditor goes to the home before and after the improvements are made to inspect and educate the homeowner about their newly installed measures and provide them other information to further reduce their energy and water usage.

To meet eligibility for this program, customers must be a residential electric customer, own and occupy a single family dwelling built prior to 1993, meet income qualifications (at or below 80% Median Family Income) following HUD Guidelines, and show proof of income.

Currently there \$342,000 in the utility's budget with a goal to improve 114 homes. This adds to the 158 homes already improved since the program began in 2006. With the requested additional funding of \$528,500, GRU would complete an additional 162 more homes.

These requested funds would supplement administrative costs as well as the cost of improvements. The total projected energy savings (combining the existing program) would be 297,705 kWh annually for 10 years, an annual energy cost savings of \$37,213 and 264 metric tons of CO2 per year.

Two employees would need to be added to oversee the work on 162 additional homes, and we estimate that five new contractor jobs would also be needed (HVAC, insulators, electricians, plumbers and general). Additional GRU staff is necessary to continue program coordination, provide pre and post inspections, post measure energy education to the recipients, processing of the application paperwork, and program tracking.

If the same amount of funding were available in the next two years, 162 homes could be upgraded each year.

EECBG cost: \$0.176 per kWh  
\$199.89 per tonne of Carbon

## EECBG Activity Worksheet

Grantee:	City of Gainesville	Date:	04/10/2009
DUNS #:		Program Contact Email:	cooperce@cityofgainesville.org
Program Contact First Name:	Christopher	Last Name:	Cooper
Project Title:	Traffic Signal LED's		
Activity:	7. Transportation	If Other:	
Sector:	Public	If Other:	
Proposed Number of Jobs Created:		Proposed Number of Jobs Retained:	160,000.00
Proposed Energy Saved and/or Renewable Energy Generated:	1,062,000 kWh saved per year system wide		
Proposed GHG Emissions Reduced (CO2 Equivalents):	1,590.000		
Proposed Funds Leveraged:	\$108,000.00		
Proposed EECBG Budget:	160,000.00		
Projected Costs Within Budget:	Administration:	Revolving Loans:	Subgrants:
Project Contact First Name:	Phillip	Last Name:	Mann
		Email:	mannpr@cityofgainesville.org
Metric Activity:	Transportation	If Other:	

Project Summary: *(limit summary to space provided)*

City has replaced 60% of our traffic signal indications with LED bulbs. An additional \$160,000 is needed to purchase the remaining 2,430 LED bulbs. The total reduction in emissions is estimated to be 1,590 metric tons of CO2 each year. The savings in cost is associated with reduction in maintenance for bulb replacements as the projected life of the LED bulb is seven years compared to 6 to 12 months for the incandescent bulbs (approximately \$36,000/year). A second area for cost savings is the actual reduction in energy usage (approximately \$140,000/year).



## EECBG Activity Worksheet

090010

Grantee: City of Gainesville Date: 04/10/2009

DUNS #: \_\_\_\_\_ Program Contact Email: cooperce@cityofgainesville.org

Program Contact First Name: Christopher Last Name: Cooper

Project Title: Streetlight LED's

Activity: 7. Transportation If Other: \_\_\_\_\_

Sector: Public If Other: \_\_\_\_\_

Proposed Number of Jobs Created: \_\_\_\_\_ Proposed Number of Jobs Retained: 450,000.00

Proposed Energy Saved and/or Renewable Energy Generated: 60,000 Kwh/year

Proposed GHG Emissions Reduced (CO2 Equivalents): \_\_\_\_\_

Proposed Funds Leveraged: \_\_\_\_\_

Proposed EECBG Budget: 450,000.00

Projected Costs Within Budget: Administration: \_\_\_\_\_ Revolving Loans: \_\_\_\_\_ Subgrants: \_\_\_\_\_

Project Contact First Name: Sundaram Last Name: Jaishankar Email: jaishankar@cityofgainesville.org

Metric Activity: Transportation If Other: \_\_\_\_\_

Project Summary: *(limit summary to space provided)*

The city is interested in switching all streetlights to LED fixtures. LED fixtures are estimated to provide a 40 to 70% reduction in energy usage. The City's streetlight system's energy usage is approximately 9,173,000 Kwh/year. A 40% savings would provide a total reduction in energy usage of 3,669,200 Kwh/year. This project is a proposed 200 lamp pilot program in the Downtown area that would be a combination of standard streetlights and pedestrian level lighting. These 200 lamps use an estimated 150,000 Kwh/year; which would result in a reduction of 60,000 Kwh/year.

## EECBG Activity Worksheet

U90010

Grantee:	City of Gainesville	Date:	04/15/2009
DUNS #:	82635004	Program Contact Email:	koppitchkc@gru.com
Program Contact First Name:	Kik	Last Name:	Koppitch
Project Title:	Gainesville Regional Utilities Administration Building Renewable Resource Demonstration		
Activity:	13 Onsite Renewable Technology	If Other:	
Sector:	Public	If Other:	
Proposed Number of Jobs Created:		Proposed Number of Jobs Retained:	130,000.00
Proposed Energy Saved and/or Renewable Energy Generated:	210,440 kWh over the life of the panels		
Proposed GHG Emissions Reduced (CO2 Equivalents):	186.870		
Proposed Funds Leveraged:	\$70,000.00		
Proposed EECBG Budget:	130,000.00		
Projected Costs Within Budget:	Administration:	Revolving Loans:	Subgrants:
Project Contact First Name:	Kik	Last Name:	Koppitch
		Email:	koppitchkc@gru.com
Metric Activity:	Renewable Energy Market Development	If Other:	

Project Summary: *(limit summary to space provided)*

In an effort to foster cutting edge building integrated solar technologies, a portion of the atrium skylight in the GRU administration building will be replaced with semitransparent photovoltaic panels. This 5.77 kilowatt system will serve multiple purposes; First it will utilize advanced PV technologies in an effort to further develop the building integrated PV market. Second, it will be clearly visible to GRU customers and visitors to the lobby. Third, it will help enhance the energy efficiency upgrades to the administration building that are currently underway. It will do this by reducing the amount of heat gain realized through the skylights. Lastly, it will be leveraging customer donations for the advancement of PV technology.

EECBG cost: \$0.62 per kWh  
\$695.67 per tonne of Carbon

## EECBG Activity Worksheet

090010

Grantee: City of Gainesville Date: 05/04/2009  
 DUNS #: \_\_\_\_\_ Program Contact Email: abbottle@cityofgainesville.org  
 Program Contact First Name: Larry Last Name: Abbott  
 Project Title: Energy Efficiency Audits to City-owned Facilities  
 Activity: 3. Residential and Commercial Buildings and Audits If Other: \_\_\_\_\_  
 Sector: Public If Other: \_\_\_\_\_  
 Proposed Number of Jobs Created: 1.00 Proposed Number of Jobs Retained: 40,000.00  
 Proposed Energy Saved and/or Renewable Energy Generated: \_\_\_\_\_  
 Proposed GHG Emissions Reduced (CO2 Equivalents): \_\_\_\_\_  
 Proposed Funds Leveraged: \_\_\_\_\_  
 Proposed EECBG Budget: 40,000.00  
 Projected Costs Within Budget: Administration: \_\_\_\_\_ Revolving Loans: \_\_\_\_\_ Subgrants: \_\_\_\_\_  
 Project Contact First Name: Larry Last Name: Abbott Email: abbottle@cityofgainesville.org  
 Metric Activity: Energy Audits If Other: \_\_\_\_\_

Project Summary: *(limit summary to space provided)*

There are several City facilities whose energy consumption could be reduced by upgrading/retrofitting existing systems. Initial walk through audits will be done on the facilities listed below followed by an investment grade audit on those facilities identified as having large potential. An industry standard of \$1.00 per square foot will be used to budget for a total of 40,000 square feet. The facilities identified for this analysis are listed below;

Northeast Complex - Building's A, B, and C	16,124 ft <sup>2</sup>
Martin Luther King Gymnasium	19,800 ft <sup>2</sup>
Thelma Bolton Center	12,000 ft <sup>2</sup>
Rosa B. Williams Center	3,895 ft <sup>2</sup>
Wilhelmina Johnson Center	2,605 ft <sup>2</sup>
Westside Recreation Center	8,402 ft <sup>2</sup>
McPherson Recreation Center	1,040 ft <sup>2</sup>