

**EECBG Activity Worksheet**

Grantee: City of Fresno Date: 09/29/2009  
 DUNS #: 71887855 Program Contact Email: keith.bergthold@fresno.gov  
 Program Contact First Name: Keith Last Name: Bergthold  
 Project Title: Sustainable Fresno Center  
 Activity: 1. Energy Efficiency and Conservation Strategy If Other: \_\_\_\_\_  
 Sector: All Sectors If Other: \_\_\_\_\_  
 Proposed Number of Jobs Created: \_\_\_\_\_ Proposed Number of Jobs Retained: 3.00  
 Proposed Energy Saved and/or Renewable Energy Generated: This is a non-resource activity  
 Proposed GHG Emissions Reduced (CO2 Equivalents): \_\_\_\_\_  
 Proposed Funds Leveraged: \$115,500.00  
 Proposed EECBG Budget: 150,000.00  
 Projected Costs Within Budget: Administration: \$14,000.00 Revolving Loans: \$0.00 Subgrants: \$0.00  
 Project Contact First Name: Joseph Last Name: Oldham Email: joseph.oldham@fresno.gov  
 Metric Activity: Clean Energy Policy If Other: \_\_\_\_\_

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

The Sustainable Fresno Center will be an interagency, business, and labor, community partnership for alignment of goals, strategies and implementation of Fresno's environmental and resource objectives. The development of this organization and its subsequent climate change goals and strategies will be the first activity to be funded with the EECBG funds.

This funding is listed as eligible activity #1 in Sec 544 of EISA, and will account for 3% of the total EECBG funding. The EECBG funding is budgeted to account for 56% of this activities total budget.

The Sustainable Fresno Center will aggregate the savings of all its activities. As it monitors the progress of these activities towards the 2025 reductions goals, the Center may choose to shift funding priorities to ensure the most efficient use of resources is being allocated. While the overall goals will remain the same, the tactics to achieve those goals will be housed in a living document that will be regularly evaluated by the members of Sustainable Fresno.

This activity has three primary goals:

- To prepare reports on the progress made by the Sustainable Fresno Center;
- To develop sources of funding to sustain the Center's activities once the EECBG funding has been spent; and
- To promote the Sustainable Fresno Center through outreach, connection, shared focus, and joint mobilization of City departments, public agencies, business, labor, and community interests.

EECBG Activity Worksheet

Grantee: City of Fresno Date: 09/29/2009  
 DUNS #: 71887855 Program Contact Email: keith.bergthold@fresno.gov  
 Program Contact First Name: Keith Last Name: Bergthold  
 Project Title: Sustainable Fresno Center  
 Activity: 2. Technical Consultant Services If Other: \_\_\_\_\_  
 Sector: All Sectors If Other: \_\_\_\_\_  
 Proposed Number of Jobs Created: 9.00 Proposed Number of Jobs Retained: 0.00  
 Proposed Energy Saved and/or Renewable Energy Generated: 22,895,973 kWh  
 Proposed GHG Emissions Reduced (CO2 Equivalents): 11,046.000  
 Proposed Funds Leveraged: \$471,452.00  
 Proposed EECBG Budget: 401,500.00  
 Projected Costs Within Budget: Administration: \$36,500.00 Revolving Loans: \$0.00 Subgrants: \$0.00  
 Project Contact First Name: Joseph Last Name: Oldham Email: joseph.oldham@fresno.gov  
 Metric Activity: Technical Assistance If Other: \_\_\_\_\_

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

Fresno and the Sustainable Fresno Center will require technical assistance to perform all the tasks presented above. In particular, these consulting services will support the Sustainable Fresno Center in the development of the Sustainable Fresno Website, and in the monitoring, verification, and reporting of the resource reductions achieved by the Center's activities.

This funding is listed as eligible activity #2 in Sec 544 of EISA, and will account for 9% of the total EECBG funding. The EECBG funding is budgeted to account for 46% of this activity's total budget.

- This activity has two primary goals:
- Creation and maintenance of the Sustainable Fresno Website
  - Tracking and verification of emissions and energy use reductions

The website will be a vital tool in assisting many of the other functions of the Sustainable Fresno Center. In particular, the website will be critical in delivering a large volume of residential and commercial energy audits. The website will function as a first point of contact for Fresno residents and businesses, and will "pre-screen" homes and businesses that have the most energy savings potential.

This "pre-screening" will also be aided through the work of technical consultants who will model the housing stock of the City of Fresno and determine what package of energy and water saving upgrades has the best cost/benefit impact, broken down by housing type and date of construction. Not only will this work provide greater clarity to the City's baseline emissions, the creation of upgrade packages will help the City lower the cost of upgrades by creating economies of scale for product manufacturers and installers.

**EECBG Activity Worksheet**

Grantee: City of Fresno Date: 09/29/2009  
 DUNS #: 71887855 Program Contact Email: keith.bergthold@fresno.gov  
 Program Contact First Name: Keith Last Name: Bergthold  
 Project Title: Sustainable Fresno Center  
 Activity: 3. Residential and Commercial Buildings and Audits If Other: \_\_\_\_\_  
 Sector: All Sectors If Other: \_\_\_\_\_  
 Proposed Number of Jobs Created: 10.00 Proposed Number of Jobs Retained: 12.00  
 Proposed Energy Saved and/or Renewable Energy Generated: 111,438,669 kWh  
 Proposed GHG Emissions Reduced (CO2 Equivalents): 53,762.000  
 Proposed Funds Leveraged: \$971,452.00  
 Proposed EECBG Budget: 1,237,103.00  
 Projected Costs Within Budget: Administration: \$123,700.00 Revolving Loans: \$0.00 Subgrants: \$0.00  
 Project Contact First Name: Joseph Last Name: Oldham Email: joseph.oldham@fresno.gov  
 Metric Activity: Building Energy Audits If Other: \_\_\_\_\_

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

This key Sustainable Fresno program area will be responsible for performing over 7,000 energy and water conservation audits per year over an initial three year period on residences, businesses, and institutions within the Fresno Metropolitan Area. Sustainable Fresno will seek partnerships with other public agencies and Pacific Gas and Electric (PG&E) programs focusing upon weatherization and efficiency retrofits in order to produce coordinated, complementary, and leveraged results. The goal of this program is to reduce the consumption, and as a result, the cost for energy and water throughout the Fresno Metropolitan Area. This will demonstrate measurable resource savings that can become the basis for negotiating reserve capacities with PG&E and the City Department of Public Utilities to accommodate future energy and water resource needs required for continued economic growth, urban development, and fiscal sustainability.

Historically, these types of audits have resulted in average savings of 2 kWh per day for residential customers and 53 kWh per day for commercial small business customers. Because of this disparity, an effort will be made to target small businesses.

This funding is listed as eligible activity #3 in Sec 544 of EISA, and will account for 27% of the total EECBG funding. The EECBG funding is budgeted to account for 56% of this activity's total budget.

- This activity has three primary goals:
- Perform audits on 1,000 businesses per year for three years
  - Perform audits on 6,000 homes per year for three years
  - Reduce GHG emissions by 10,000 tons per year

## EECBG Activity Worksheet

Grantee:	City of Fresno	Date:	09/29/2009
DUNS #:	71887855	Program Contact Email:	keith.bergthold@fresno.gov
Program Contact First Name:	Keith	Last Name:	Bergthold
Project Title:	Sustainable Fresno Center		
Activity:	4. Financial Incentive Program	If Other:	
Sector:	All Sectors	If Other:	
Proposed Number of Jobs Created:	2.00	Proposed Number of Jobs Retained:	5.00
Proposed Energy Saved and/or Renewable Energy Generated:	2,351,966 kWh		
Proposed GHG Emissions Reduced (CO2 Equivalents):	1,135.000		
Proposed Funds Leveraged:	\$471,452.00		
Proposed EECBG Budget:	128,454.00		
Projected Costs Within Budget: Administration:	\$12,778.00	Revolving Loans:	\$0.00
		Subgrants:	\$0.00
Project Contact First Name:	Joseph	Last Name:	Oldham
		Email:	joseph.oldham@fresno.gov
Metric Activity:	Loans and Grants	If Other:	

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

California Assembly Bill 811 allows for the creation of assessment districts to finance energy efficiency improvements. The Sustainable Fresno Center will examine this type of bond financing mechanism in order to establish the Sustainable Fresno Revolving Loan Bank. The bank will be a revolving and expanding loan pool for making loans to eligible families and businesses installing renewable energy, energy efficiency, and water efficiency systems. The bank will allow a contractual assessment on property taxes for twenty years to pay off such loans. City bond issuance would primarily fund the revolving loan pool as now proposed by other jurisdictions in California. Sustainable Fresno would also recruit additional loan financing pool partners such as pension funds and local banks seeking secure and predictable lending and investment opportunities. Such a financing mechanism will dramatically increase the affordability of expensive systems by stretching payments over 20 years which is much longer than the typically short seven year amortization periods now available. The attractiveness of these arrangements is further enhanced by allowing payments to run with the property so that new owners will automatically assume uncompleted payment obligations. A Sustainable Fresno Revolving Loan Bank will substantially increase renewable energy and water efficiency improvement activity. This activity will not only result in benefits for families and businesses in terms of lower energy bills, it will also create significant local equipment sales and new equipment installation jobs.

The effort is geared towards removing the largest barrier towards implementing energy efficiency: up front costs. Allowing home and business owners to amortize the cost of their improvements over an extended time frame will provide a substantial incentive to install more efficient equipment.

This funding is listed as eligible activity #4 in Sec 544 of EISA, and will account for 3% of the total EECBG funding. The EECBG funding is budgeted to account for 21% of this activity's total budget.

There is one primary goal for this program:

- Provide \$20 million in energy efficiency loans per year for at least five years

## EECBG Activity Worksheet

Grantee: <u>City of Fresno</u>	Date: <u>09/29/2009</u>
DUNS #: <u>71887855</u>	Program Contact Email: <u>keith.bergthold@fresno.gov</u>
Program Contact First Name: <u>Keith</u>	Last Name: <u>Bergthold</u>
Project Title: <u>Sustainable Fresno Center</u>	
Activity: <u>6. Buildings and Facilities</u>	If Other: _____
Sector: <u>All Sectors</u>	If Other: _____
Proposed Number of Jobs Created: <u>19.00</u>	Proposed Number of Jobs Retained: _____
Proposed Energy Saved and/or Renewable Energy Generated: <u>This is a non-resource activity</u>	
Proposed GHG Emissions Reduced (CO2 Equivalents): _____	
Proposed Funds Leveraged: <u>\$721,452.00</u>	
Proposed EECBG Budget: <u>1,002,570.00</u>	
Projected Costs Within Budget: Administration: <u>\$98,997.00</u>	Revolving Loans: <u>\$0.00</u> Subgrants: <u>\$0.00</u>
Project Contact First Name: <u>Joseph</u>	Last Name: <u>Oldham</u> Email: <u>joseph.oldham@fresno.gov</u>
Metric Activity: <u>Clean Energy Policy</u>	If Other: _____

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

Sustainable Fresno will create a retrofit program with specific energy efficiency packages based on an entire community assessment. By leveraging the scale of the program, costs are reduced. Additional financial support to provide low, fixed pricing for predetermined Good, Better, Best retrofit packages may also be possible. Completing this activity will be recruitment and training of local workers. By combining this program with the Revolving Loan Funding Mechanism, the homeowner will see positive cash flow from day one. Local jobs will be created (one local job for every 16.6 homes retrofitted), a significant reduction in greenhouse gases can be tracked, and the program can be sustainable after the stimulus money dissipates.

This funding is listed as eligible activity #6 in Sec 544 of EISA, and will account for 22% of the total EECBG funding. The EECBG funding is budgeted to account for 58% of this activity's total budget.

There are two primary goals for this program:

- Install \$20 million in energy efficiency upgrades per year for at least five years.
- GHG reductions from retrofits of 10,000 tons per year.

This program will work in conjunction with low-income weatherization programs, and will leverage several other sources of non-EECBG funding, both governmental and non-governmental, including consulting services provided under a DOE Building America contract.

## EECBG Activity Worksheet

Grantee:	City of Fresno	Date:	09/29/2009
DUNS #:	71887855	Program Contact Email:	keith.bergthold@fresno.gov
Program Contact First Name:	Keith	Last Name:	Bergthold
Project Title:	Sustainable Fresno Center		
Activity:	8. Codes and Inspections	If Other:	
Sector:	All Sectors	If Other:	
Proposed Number of Jobs Created:	16.00	Proposed Number of Jobs Retained:	6.00
Proposed Energy Saved and/or Renewable Energy Generated:	271,874,053 kWh		
Proposed GHG Emissions Reduced (CO2 Equivalents):	131,162.000		
Proposed Funds Leveraged:	\$471,452.00		
Proposed EECBG Budget:	1,509,566.00		
Projected Costs Within Budget: Administration:	\$137,000.00	Revolving Loans:	\$0.00
		Subgrants:	\$0.00
Project Contact First Name:	Joseph	Last Name:	Oldham
		Email:	joseph.oldham@fresno.gov
Metric Activity:	Building Codes and Standards	If Other:	

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

Although the City of Fresno updated its General Plan in 2002 with many smart growth and resource conservation goals and policies, the City's zoning code, which serves to implement the General Plan, has not been comprehensively updated since the 1960s. It is not informed by nor consistent with more contemporary and up-to-date form-based green, and resource efficiency oriented development standards. Sustainability for Fresno involves the city's economic, fiscal, environmental, energy, and water policies. It will require new and more specific land use plans, policies, building, and development codes. The codes will incorporate cutting-edge green development and revitalization criteria and contain energy and water efficiency, conservation, and innovative design standards that also serve to meet recently enacted California green house gas reduction goals.

This funding is listed as eligible activity #8 in Sec 544 of EISA, and will account for 33% of the total EECBG funding. The EECBG funding is budgeted to account for 76% of this activity's total budget.

This activity has two primary goals:

- To establish Fresno as the leader in the San Joaquin Valley regarding smart growth and green building ordinances
- To improve the percentage of new construction and remodels that comply with Fresno's building codes

The development of these codes and zoning ordinances will follow closely the Statewide codes for energy efficiency and green building currently under development. Additionally, the Sustainable Fresno Center will use the latest available best practices in order to model the impacts of the City's land use decisions. An example of one such best practice is the I-PLACE3S application, which was developed to help regional planners understand the economic and environmental impacts of their decisions. The monitoring and verification activities of the Sustainable Fresno Center will provide constant feedback on the effectiveness of this process, and will help inform future iterations of code development.

**EECBG Activity Worksheet**

Grantee: City of Fresno Date: 09/29/2009  
 DUNS #: 71887855 Program Contact Email: keith.bergthold@fresno.gov  
 Program Contact First Name: Keith Last Name: Bergthold  
 Project Title: Sustainable Fresno Center  
 Activity: 13. Onsite Renewable Technology If Other: \_\_\_\_\_  
 Sector: Institutional If Other: \_\_\_\_\_  
 Proposed Number of Jobs Created: 6.00 Proposed Number of Jobs Retained: 1.00  
 Proposed Energy Saved and/or Renewable Energy Generated: 16.2 GWh of electricity generated per year  
 Proposed GHG Emissions Reduced (CO2 Equivalents): 5,298.000  
 Proposed Funds Leveraged: \$471,452.00  
 Proposed EECBG Budget: 174,407.00  
 Projected Costs Within Budget: Administration: \$15,800.00 Revolving Loans: \$0.00 Subgrants: \$0.00  
 Project Contact First Name: Joseph Last Name: Oldham Email: joseph.oldham@fresno.gov  
 Metric Activity: Renewable Energy Market Development If Other: \_\_\_\_\_

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

The Sustainable Fresno Center will assist all City departments and especially the General Services Department, the Departments of Public Utilities and Public Works, Fresno Area Express (transit systems), Airports, and Planning and Development with all planning, partnerships, financing, permitting, implementation, administration, learning, and dissemination of learning and benefits from renewable energy. Acting as a project research, development, coordination and management center for renewable energy deployment in the Fresno Metropolitan Area, Sustainable Fresno will not only assist City departments involved in renewable energy, but help public agencies, businesses, labor, and community interests achieve economically competitive and regionally complementary project designs, funding, implementation, management, marketing, documentation and reporting. The purpose of this program area would be broad-based and integrated deployment that achieves and leverages local and regional renewable energy resources and goals. This activity will build on the successes already achieved in Fresno in the implementation of large scale solar PV installations at the Fresno Yosemite International Airport (2.1 MW), California State University Fresno (1 MW), and the City of Fresno Municipal Service Center (686 KW).

This funding is listed as eligible activity #8 in Sec 544 of EISA, and will account for 4% of the total EECBG funding. The EECBG funding is budgeted to account for 27% of this activity's total budget.

This activity has two primary goals:

- To install three solar systems of 1 MW or greater per year over three years on public buildings.
- To have City building generate energy comparable to 50% of its ongoing energy consumption.

The initial sites that are planned for deployment of the solar power systems are three (3) city-owned parking facilities, ten (10) fire stations, and up to five (5) police stations. Additional sites are under evaluation.

The City's energy efficiency efforts will make the goal of generating 50% of its ongoing energy use easier to attain. The bulk of the funding for this activity is planned to be achieved through winning competitive grant programs as well as through assessment district mechanisms described in Activity 4.