

STATEMENT OF PROJECT OBJECTIVES
City of Knoxville, TN
Energy Efficiency and Conservation Block Grant Program

A. PROJECT OBJECTIVES

The purpose of this award is to implement the Recipient's Energy Efficiency & Conservation Strategy (EEC&S) in order to reduce fossil fuel emissions; reduce total energy use of the eligible entities; and improve energy efficiency in the building sector, the transportation sector, and other appropriate sectors, along with creating jobs.

B. PROJECT SCOPE

The scope for this award is the implementation of the EEC&S and all supporting documentation necessary for the proposed activities (Attached).

C. PROJECT MANAGEMENT AND REPORTING

Reports and deliverables will be provided in accordance with the Federal Assistance Reporting Checklist.

EECBG Activity Worksheet

Grantee: City of Knoxville Date: 06/25/2009
DUNS #: 42453530 Program Contact Email: eburns@cityofknoxville.org
Program Contact First Name: Erin Last Name: Burns
Project Title: Employment of Energy & Sustainability Program Manager
Activity: 1. Energy Efficiency and Conservation Strategy If Other: _____
Sector: Public If Other: _____
Proposed Number of Jobs Created: 1.00 Proposed Number of Jobs Retained: _____
Proposed Energy Saved and/or Renewable Energy Generated: Undetermined by EECBG Estimated Benefits Calculator
Proposed GHG Emissions Reduced (CO2 Equivalents): _____
Proposed Funds Leveraged: _____
Proposed EECBG Budget: 261,182.00
Projected Costs Within Budget: Administration: _____ Revolving Loans: _____ Subgrants: _____
Project Contact First Name: Erin Last Name: Burns Email: eburns@cityofknoxville.org
Metric Activity: Clean Energy Policy If Other: _____

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

This portion of EECBG funds will be used to hire an Energy & Sustainability Program Manager for the duration of the stimulus funding period. This person will be responsible for overseeing all other EECBG projects as well as helping to coordinate and expanding the ongoing efforts of the City of Knoxville Energy & Sustainability Task Force.

Currently, the City of Knoxville is in a transition in terms of responsibility for energy & sustainability-related (E&S) issues. The deputy director of Policy & Communications, who for the last two years has focused 50% of her time on E&S initiatives, has recently taken a job in another city. Because of budget challenges, the City has decided to not directly fill this position, leaving responsibility for coordination of E&S initiatives with a single staff person who is primarily responsible for management of the Solar America Cities Program. The onset of EECBG programs and funding will exhaust the capacity of the remaining staff person to manage all E&S initiatives effectively.

Employment of a new staff person dedicated entirely to management of EECBG programs and other city E&S initiatives will ensure that EECBG programs are implemented effectively and properly. In addition to overseeing EECBG programs, this employee will also coordinate the activities of the City's Energy & Sustainability Task Force, implement the city's Strategic Energy plan (see www.cityofknoxville.org/policy/energy/final_energyplan.pdf), build and maintain community partnerships to meet the city's energy objectives, and seek new opportunities and grants. This expenditure will help the City optimize the benefits of all existing and potential E&S-related resources.

The City plans to hire this person through a competitive job search process. Qualified candidates must demonstrate experience in project/program management, a strong technical understanding of energy and environmental issues, and an interest in improving the energy and sustainability of city government and the Knoxville community. The budget allocation for this initiative is equal to three years of salary (starting at \$65K) plus benefits (estimated at 30% of salary).

Pending date of receipt of EECBG funds (assuming September 1, 2009), we expect to begin the search for a qualified applicant for this position as early as July, with employment starting in September, 2009. Employment is only guaranteed for the 36 months EECBG funding period. The mayoral administration in office at the end of the EECBG funding term will determine whether to continue funding the position.

The numbers reported above were calculated using the following assumptions and/or sources:

Proposed EECBG Budget: \$65,000 Year 1 Salary, \$66,950 Year 2 Salary, \$68,959 Year 3 Salary, Benefits (30% of Salary)

Jobs Created: Value reflects the direct employment of one person under this program.
Annual Energy Savings: Undetermined by EECBG Estimated Benefits Calculator
GHG Emissions Reduced: Undetermined by EECBG Estimated Benefits Calculator

EECBG Activity Worksheet

Grantee: City of Knoxville Date: 06/25/2009
 DUNS #: 42453530 Program Contact Email: eburns@cityofknoxville.org
 Program Contact First Name: Erin Last Name: Burns
 Project Title: Green Building Incentive Program
 Activity: 4. Financial Incentive Program If Other: _____
 Sector: All Sectors If Other: _____
 Proposed Number of Jobs Created: 6.00 Proposed Number of Jobs Retained: _____
 Proposed Energy Saved and/or Renewable Energy Generated: 2,215,115 kWh
 Proposed GHG Emissions Reduced (CO2 Equivalents): 2,072.000
 Proposed Funds Leveraged: \$265,000.00
 Proposed EECBG Budget: 300,000.00
 Projected Costs Within Budget: Administration: \$30,000.00 Revolving Loans: _____ Subgrants: _____
 Project Contact First Name: Erin Last Name: Burns Email: eburns@cityofknoxville.org
 Metric Activity: Financial Incentives: E Efficiency & Covered Investments If Other: _____

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

This set of EECBG funds will be used to incentive the Knoxville community to build/retrofit certified energy efficient buildings and deploy solar technologies. This "Green Building Incentive" program is a way for the City of Knoxville to directly plug EECBG stimulus funds into building and renovation activity in the Knoxville community and is intended to strengthen the long-term success of the local energy efficiency and renewable energy market by catalyzing immediate demand.

The City plans to split the Green Building Incentive Program into two categories of incentives: "Energy Certification" incentives and "Solar Technology" incentives. It will be made clear to citizens up front that this program is a one-time deal made possible by ARRA stimulus funds, and the city does not intend at this time to continue funding the program once funds are exhausted.

Energy Certification Incentives: Pending proof of appropriate certification, properties located within the City of Knoxville will be eligible to receive an incentive for one of the following Energy Certifications: 1) EnergyStar certification for new, single-family or multi-family homes; 2) EarthCraft certification for single-family or multi-family homes; 3) LEED certification for single-family home; 4) EnergyStar certification for commercial or manufacturing buildings; and 5) LEED-New Construction or -Existing Building for commercial, industrial, or institutional buildings. Incentives will be tiered, at levels to be determined.

Solar Technology Incentives: Properties within the City of Knoxville are also eligible for incentives for solar photovoltaic and/or solar thermal technologies (limit one each per property). Energy efficiency is a pre-requisite for eligibility for these incentives. The applicant must show proof of one of the following to be considered eligible: 1) Participation in TVA/KUB's In-Home Energy Evaluation/Efficiency Retrofit program; 2) LEED, EnergyStar, or EarthCraft certification; 3) Performance of a comprehensive energy audit by a certified HERS (Home Energy Rating System) Auditor. Pending proof of eligibility, the applicant may be issued a Solar Technology Incentive on a reimbursable basis. Incentive levels TBD, but are envisioned in the range of \$1,000-\$3,000 per KW of installed capacity for PV arrays up to 5 KW; and \$1,000-\$2,000 for solar thermal systems, depending on size.

The City will administer this incentive program internally and will ensure that use of funds complies with all relevant ARRA and EECBG requirements. The program will be highly publicized, and the City will issue educational materials about energy conservation with any publicity about the incentive programs. In the case of the Solar Technology Incentives, education about efficiency and solar technologies may be administered through the Solar America Cities Program. Pending date of receipt of EECBG funds (assuming September 1, 2009), the City intends to launch the program in September, 2009 and offer incentives throughout the 36 month term of stimulus funding or until the money is gone, whichever is first. The City will assess how quickly funds are spent after the first 18 months of the program and adjust eligibility or incentive levels as appropriate.

The numbers reported above were calculated using the EECBG Estimated Benefits Calculator and the following assumptions and/or sources:

Funds Leveraged: We have not attempted to quantify leveraged funds for the Energy Certification Incentives. Funds leveraged for the Solar Technology Incentives portion assumes that \$105,000 is spent on PV, \$30,000 on thermal, incentives are offered at the high end of the ranges offered above, and each project maxes out the eligible incentive. Actual values may differ.

Jobs Created: Estimated using total funds (\$565,000), per Calculator

Annual Energy Savings: Reported annual savings in kWh, per Calculator

GHG Emissions Reduced: Reported annual reductions in metric tons CO₂e, per Calculator

If you are proposing more than one activity, save this file as many times as needed with successive page numbers. For example: "OH-CITY-Columbus-Project Activity page 1.pdf," "OH-CITY-Columbus-Project Activity page 2.pdf," and continue as needed.

EECBG Activity Worksheet

Grantee: City of Knoxville Date: 06/25/2009
 DUNS #: 42453530 Program Contact Email: eburns@cityofknoxville.org
 Program Contact First Name: Erin Last Name: Burns
 Project Title: Sub-grant to the Knoxville-Knox County Community Action Committee's Weatherization Program
 Activity: 5. Energy Efficiency Retrofits If Other: _____
 Sector: Residential If Other: _____
 Proposed Number of Jobs Created: 2.00 Proposed Number of Jobs Retained: _____
 Proposed Energy Saved and/or Renewable Energy Generated: 399,345 kWh
 Proposed GHG Emissions Reduced (CO2 Equivalents): 373.000
 Proposed Funds Leveraged: _____
 Proposed EECBG Budget: 200,000.00
 Projected Costs Within Budget: Administration: _____ Revolving Loans: _____ Subgrants: \$180,000.00
 Project Contact First Name: Erin Last Name: Burns Email: eburns@cityofknoxville.org
 Metric Activity: Building Retrofits If Other: _____

Project Summary: (limit summary to space provided)

This portion of EECBG funds will be used to supplement the Knoxville - Knox County Community Action Committee's (CAC) existing effort to weatherize low-income, owner-occupied homes within the Knoxville community. The Knoxville CAC has received stimulus funding through DOE's Weatherization program that will increase the number of households the program can service, the amount of funding allowed per household, and the scope of weatherization services offered. The City's EECBG funds will be issued as a subgrant to CAC to allow the organization to offer the improved Weatherization program to low-moderate income families that are currently ineligible. Use of EECBG funds under this project will allow the City of Knoxville to support the goal of CAC's Weatherization Program to provide energy-cost reducing services to those in the community who need them most.

Specifically, the City's EECBG funds will allow CAC to expand eligibility for the Whole House Weatherization Service for low-income customers under the following two methods/conditions:
 1) Offer owner-occupied households that were weatherized under a previous, more limited CAC weatherization program the option to expand the scope of CAC's improvements to the levels allowable under the current program (only available to households with incomes at 125% of poverty or less). Costs not-to-exceed \$10,000 per home; and
 2) Offer full weatherization services to owner-occupied households with incomes greater than 200% of poverty, but less than 80% mark of HUD income guidelines (currently ineligible for weatherization services) Costs not-to-exceed \$15,000 per home.

The Knoxville-Knox County CAC has been serving the community since 1964 and has an experienced staff fully capable of effectively implementing this program and managing the City's contribution. Provisions will be made within any official contract or resolution releasing this set of EECBG funds to CAC to ensure that the use of the funds meets all relevant ARRA and EECBG requirements, including adherence to Davis-Bacon and separation of ARRA funds from non-ARRA funds. For each property improved through the EECBG-funded program, CAC will collect and analyze pre- and post-improvement energy consumption data to assist the City in reporting on the impact of the program.

Pending date of receipt of EECBG funds (assuming September 1, 2009), the City of Knoxville will arrange for transfer of the funds to CAC in September, 2009. CAC is prepared to expend these funds within the 36 month term of stimulus funding. The contract with CAC will limit administrative expenditures to a max of 10%, with 90% or \$180,000 going directly into the installation of priority measures in eligible homes.

The numbers reported above were calculated using the EECBG Estimated Benefits Calculator and the following assumptions and/or sources:

- Jobs Created: Estimated using EECBG funds (\$200,000)
- Annual Energy Savings: Reported annual savings in kWh, per Calculator
- GHG Emissions Reduced: Reported annual reductions in metric tons CO2e, per Calculator

EECBG Activity Worksheet

Grantee: City of Knoxville Date: 06/25/2009
DUNS #: 42453530 Program Contact Email: eburns@cityofknoxville.org
Program Contact First Name: Erin Last Name: Burns
Project Title: Energy efficiency and renewable energy investments in City facilities via Ameresco Contract
Activity: 6. Buildings and Facilities If Other: _____
Sector: Public If Other: _____
Proposed Number of Jobs Created: 3.00 Proposed Number of Jobs Retained: _____
Proposed Energy Saved and/or Renewable Energy Generated: 522,179 kWh
Proposed GHG Emissions Reduced (CO2 Equivalents): 488.000
Proposed Funds Leveraged: _____
Proposed EECBG Budget: 261,518.00
Projected Costs Within Budget: Administration: \$5,000.00 Revolving Loans: _____ Subgrants: _____
Project Contact First Name: Erin Last Name: Burns Email: eburns@cityofknoxville.org
Metric Activity: Building Retrofits If Other: _____

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

This portion of EECBG funds will be invested in an existing energy services performance contract (ESPC) between the City of Knoxville and Ameresco. The money will go to pay down some of the upfront costs of the energy efficiency and renewable energy measures that will be included in the ESPC project. These EECBG funds will allow the City to benefit sooner from the energy savings of various energy conservation measures and/or include in the ESPC innovative measures that would not have been included otherwise.

The EECBG funding comes at an ideal time during this project: Ameresco is in the final days of an investment grade audit of energy and water consumption at over 100 city-owned buildings and facilities and will present a final list of suggested energy savings measures (ESMs) in July. Based on a preliminary list of ESMs, the estimated cost of pursuing all suggested ESMs totals more than \$33 million, with a guaranteed ROI of 17.57 years. After receiving the final list of suggested ESMs, the City will select those it wants to pursue during the second phase of the ESPC (implementation) and work with Ameresco to develop the details of how Phase II will be financed. The majority of the upfront costs of implementing the ESMs will be met by Ameresco, and the City will Ameresco back through the energy and water savings created by the ESMs.

The availability of EECBG funds will allow the City to pay some of the cost of specific ESM implementation up front, therefore reducing the ROI of the overall project and helping the City capture more of savings sooner. The EECBG funds in this project could be spent quickly and would be a part of a much larger investment that will continue beyond the stimulus funding period. The City will begin evaluating which ESMs to include in the second phase of the contract in July, 2009, with the expectation that implementation of selected ESMs will begin 2-3 months after the start of the second phase. The EECBG funds would be obligated within six months. The City will follow all requirements of EECBG fund use, including adherence to Davis-Bacon.

If the City elects to use EECBG funds to pay for solar PV systems, the electricity produced would feed directly into the city facility at which they are located. These solar panel systems would allow the City of Knoxville to participate in TVA's Generation Partners program and would also potentially be used as a community training opportunity under the Knoxville Solar America Cities Program. Any installation of solar technologies under this project would be independent of a separate EECBG project proposal to install a large solar PV array using a third party ownership model.

The numbers reported above were calculated using the EECBG Estimated Benefits Calculator and the following assumptions and/or sources:

Jobs Created: Estimated using EECBG funds (\$261,518)
Annual Energy Savings: Reported above in annual savings in kWh, per Calculator
GHG Emissions Reduced: Reported above in annual reductions in metric tons CO2e, per Calculator

EECBG Activity Worksheet

Grantee: City of Knoxville Date: 06/25/2009
 DUNS #: 42453530 Program Contact Email: eburns@cityofknoxville.org
 Program Contact First Name: Erin Last Name: Burns
 Project Title: Offer contractor training workshops on the ICC's Energy Conservation Code and EarthCraft
 Activity: 8. Codes and Inspections If Other: _____
 Sector: All Sectors If Other: _____
 Proposed Number of Jobs Created: _____ Proposed Number of Jobs Retained: _____
 Proposed Energy Saved and/or Renewable Energy Generated: 5489583 kWh
 Proposed GHG Emissions Reduced (CO2 Equivalents): 5,134.000
 Proposed Funds Leveraged: _____
 Proposed EECBG Budget: 40,000.00
 Projected Costs Within Budget: Administration: \$4,000.00 Revolving Loans: _____ Subgrants: _____
 Project Contact First Name: Erin Last Name: Burns Email: eburns@cityofknoxville.org
 Metric Activity: Workshops, Training, and Education If Other: _____

Project Summary: (limit summary to space provided)

This portion of EECBG funds will be used to provide workshops to train community contractors, builders, and developers to effectively build to the International Code Council's 2006 Energy Conservation Code and to EarthCraft Certification standards. Financing these workshops with EECBG funds will help minimize the cost of attendance, therefore encouraging increased participation. This set of training programs is a critical first step towards ensuring that new buildings and affordable housing in Knoxville are energy-efficient, healthy, and environmentally sustainable.

Energy Conservation Code Training: The City of Knoxville and Knox County adopted the ICC's Energy Conservation Code in 2007. It was the first time the City or the County had adopted an energy code, and therefore local contractors were generally unaware of how to build to the new standards. Due to this lack of experience and a lack of enforcement ability, most new buildings in Knoxville are not being built to the Energy Conservation Code. Training local builders and contractors on the standards within the Energy Code is a preliminary step towards effective full enforcement.

EarthCraft Training: The City of Knoxville's Community Development Department has recently committed to third-party certification of energy and water conservation measures for all low-income, owner-occupied new construction (Energy Star) and renovation (EarthCraft) projects. Although building contractors that regularly work on Community Development housing projects have become increasingly experienced in building to Energy Star standards, many are unfamiliar with EarthCraft certification (administered by the Atlanta non-profit, Southface). This set of training workshops will educate contractors that work with Community Development about the certification standards and techniques for achieving them. Community Development estimates that the average value energy savings for EarthCraft-certified homes will be \$1519 per home, per year. The benefits of training will multiply in the community as trained contractors work on other non-Community Development projects. City of Knoxville Community Development staff that regularly work on low-income home rehabilitation projects would be expected to attend as well.

The City of Knoxville expects to implement these training programs by contracting with qualified instructors or organizations to teach and/or organize the workshops. Selection of the person or entity to teach or organize the programs will follow standard City purchasing policy, with a competitive selection process being used where necessary.

Pending date of receipt of funds (assuming September 1, 2009), the City expects to begin offering these programs in Fall of 2009, with the intent to continue them on a periodic basis (as funding allows) for two years.

The numbers reported above were calculated using the EECBG Estimated Benefits Calculator and the following assumptions and/or sources:

Jobs Created: Estimated using EECBG funds (\$40,000)
 Annual Energy Savings: Reported annual savings in kWh, per Calculator
 GHG Emissions Reduced: Reported annual reductions in metric tons CO2e, per Calculator

EECBG Activity Worksheet

Grantee: City of Knoxville Date: 06/25/2009
 DUNS #: 42453530 Program Contact Email: eburns@cityofknoxville.org
 Program Contact First Name: Erin Last Name: Burns
 Project Title: Transition to Single-Stream, Curbside Recycling Program
 Activity: 10. Material Conservation Program If Other: _____
 Sector: Residential If Other: _____
 Proposed Number of Jobs Created: 27.00 Proposed Number of Jobs Retained: _____
 Proposed Energy Saved and/or Renewable Energy Generated: 3,031,119 kWh
 Proposed GHG Emissions Reduced (CO2 Equivalents): 10,507.008
 Proposed Funds Leveraged: \$1,800,000.00
 Proposed EECBG Budget: 700,000.00
 Projected Costs Within Budget: Administration: \$25,000.00 Revolving Loans: _____ Subgrants: _____
 Project Contact First Name: Erin Last Name: Burns Email: eburns@cityofknoxville.org
 Metric Activity: Other If Other: _____

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

This portion of EECBG funds will be used to pay for approximately 70% of the cost of purchasing 20,000 64-gallon recycling bins that are necessary for the transition to a city-wide curbside, single-stream recycling program and for materials associated with a communications campaign about the new program. The City has sought to expand waste collection service to include recycling for over a decade and seeks to take advantage of an existing opportunity to cost-effectively offer this service free of charge to residents. The major impediment to implementation is the one-time, up-front cost of purchasing and distributing recycling bins to participating households. EECBG funds will allow the City to surmount that barrier and launch a new recycling service in Knoxville, with the intent of significantly reducing the amount of waste sent to landfill by Knoxville residents.

In 2008, the City was selected to participate in The Climate Group and the American Bottling Association's "Model Cities" Initiative, which offered the City consulting services to help develop a city-wide recycling program. After an intensive study of the current waste collection program, survey of community members, and assessment of the potential for increased recycling, the consulting firm-- DSM Environmental-- suggested that the City transition to a recycling program using a successful method piloted by the City of Denver, CO in which curbside, single-stream recycling collection service is offered free of charge to every household that requests it.

The City intends to follow DSM's suggestion and use EECBG funds to purchase and distribute bins for up to 20,000 households to be used in a curbside, single-stream recycling program. The details of the recycling service will be vetted and determined through a public process, in conjunction with an overall assessment and revision of the current solid waste collection program. According to DSM, this model of recycling program is expected to increase the amount of waste diverted from landfills and associated GHG emissions, and reduce energy use by eliminating the need for community members to drive to drop-off recycling centers.

Pending date of receipt of EECBG funds (assuming September 1, 2009), the City expects to procure and distribute bins starting in January, 2010, with all 20,000 bins distributed to households no later than June 2011. The recycling program will continue indefinitely, independent of the EECBG funds.

The numbers reported above were calculated using the following assumptions and/or sources:

Per DSM Environmental Study:

Increased diversion of recyclable materials: 4000 tons per year.
 Reduce vehicle miles travelled (to/from recycling centers): 1.35 million miles (90% below current levels). According to the ICLEI Clean Air & Climate Protection software, this reduction in mileage would save approximately 68,281 gallons of gasoline and 14,497 gallons of diesel.

Funds Leveraged: The operating costs of implementing a curbside recycling program for 20,000 households is estimated at \$500,000 annually for 3 years for a total of \$1,500,000. Additionally, the remaining 30% of the cost of 20,000 bins is \$300,000, which will be paid for out of the City capital budget.

Jobs Created: Estimated using total program cost (EECBG funds + Leveraged funds of recycling program for three year), per EECBG Estimated Benefits Calculator.

Annual Energy Savings: Calculated using transportation reduction estimates by DSM Environmental and ICLEI Clean Air & Climate Protection Units Converter; Reported annual savings in kWh.

Significant life-cycle energy savings from materials recycling is also expected, but not quantified.

GHG Emissions Reduced: Calculated by DSM Environmental using recycling estimates and U.S. EPA's WARM Model and transportation reduction estimates; Reported annual savings in metric tons eCO2.

EECBG Activity Worksheet

Grantee: City of Knoxville Date: 06/25/2009
DUNS #: 42453530 Program Contact Email: eburns@cityofknoxville.org
Program Contact First Name: Erin Last Name: Burns
Project Title: Solar PV installation at Convention Center through Third-Party Financing
Activity: 13. Onsite Renewable Technology If Other: _____
Sector: Public If Other: _____
Proposed Number of Jobs Created: 8.83 Proposed Number of Jobs Retained: _____
Proposed Energy Saved and/or Renewable Energy Generated: 175,200 kWh
Proposed GHG Emissions Reduced (CO2 Equivalents): 164.000
Proposed Funds Leveraged: \$562,500.00
Proposed EECBG Budget: 250,000.00
Projected Costs Within Budget: Administration: \$25,000.00 Revolving Loans: _____ Subgrants: _____
Project Contact First Name: Erin Last Name: Burns Email: eburns@cityofknoxville.org
Metric Activity: Renewable Energy Market Development If Other: _____

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

This portion of EECBG funds will be used to catalyze the installation of a large, highly visible solar photovoltaic (PV) array on the top of the Knoxville Convention Center, a municipally-owned facility. The project will use a third-party ownership/financing model to leverage all available federal, state, and local incentives and rebate programs to maximize size while minimizing the cost to the City. The \$250,000 allocated under the EECBG program will be used to make a third party ownership model viable, despite low electricity prices and the unique electricity production and distribution structure in the service region of the Tennessee Valley Authority.

We plan to implement this program by issuing a competitive bid for a company or organization that can offer a third-party financing structure that results in as large as possible a system, leverages the maximum amount of outside funds, and requires no more than \$250,000 from the City.

Ideally, the project will result in a 100 KW solar array, which, depending on exact capacity, would produce about 120 MWh of electricity each year. This electricity will feed directly into the Knoxville Convention Center. By leveraging the resources of the Knoxville Solar America Cities Program (Knoxville was named a DOE Solar America City in 2008), the installation will be used as a workforce development opportunity.

Beyond the economic and environmental benefits of installing this system and producing renewable energy, this project will help promote increased deployment of solar technologies and achieve the goals of the Knoxville Solar America Cities Program. Third-party financing/ownership models for large scale solar PV projects have not been widely used in the Southeast (none have been used in Tennessee), and the City of Knoxville's successful demonstration of this financing model could significantly increase deployment of solar technologies in the state and region. More broadly, an installation of this size will be the largest in Knoxville and will greatly increase the visibility of solar technology in the city. Very appropriately, it will be most visible from the public viewing deck of The Sunsphere, the Knoxville icon of the 1982 World's Fair, "Energy Turns the World."

Pending date of receipt of EECBG funds (assuming September 1, 2009), the City expects to issue the competitive Request for Proposals for this project in September, select a company in November, and begin construction in December, 2009. The exact date of fund expenditure will be determined by the structure of the contract with the third-party, with EECBG funds being used to fund part of the up-front cost or being paid to the third-party at stages within the 36 month stimulus funding term. The City will ensure that the project complies with all ARRA and EECBG requirements, including adherence to Davis-Bacon and separation of ARRA funds from non-ARRA funds.

The numbers reported above were calculated using the following assumptions and/or sources:

Funds Leveraged: Estimated cost of 100 KW solar array, installed for \$7750/KW capacity, equals \$775,000; Funds leveraged equals total project cost minus EECBG contribution (\$550,000), and may include the 30% Federal Tax Credit, potential 40% Tennessee state grant (max of \$75,000), depreciation benefits, incentive/revenue from TVA's Generation Partners rebate program.
Jobs Created: Estimated using full program cost, including Administrative expenses and estimated funds leveraged (\$812,500), per EECBG Estimated Benefits Calculator
Renewable Energy Created: 175,200 kWh generation/ year, per EECBG Estimated Benefits Calculator
GHG Emissions Reduced: Assuming 100 KW capacity; reported in metric tons CO₂e, per EECBG Estimated Benefits Calculator