

Date of Meeting: December 1, 2009

**BOARD OF SUPERVISORS  
BUSINESS MEETING  
INFORMATION ITEM**

**Item #2**

**SUBJECT:** County Energy Strategy as Proposed  
Energy Efficiency and Conservation Block Grant (EECBG)

**ELECTION DISTRICT:** Countywide

**STAFF CONTACT(s):** Diane O'Grady, County Administration  
Najib Salehi, Office of Construction and Waste Management

---

**BACKGROUND:**

Loudoun County is one of the communities eligible for a formula-based grant under the Department of Energy's (DOE) Energy Efficiency and Conservation Block Grant (EECBG) program which was funded as part of the federal economic stimulus package. Loudoun County's allocated award is calculated to be \$2,215,600 based on published sources.

The goals of the EECBG program, as published in the Department of Energy's Funding Opportunity Announcement, are to assist grant recipients in creating and implementing strategies to:

- reduce fossil fuel emissions in a manner that is environmentally sustainable and, to the maximum extent practicable, maximizes benefits for local and regional communities;
- reduce the total energy use of the eligible entities; and
- improve energy efficiency in the building sector, the transportation sector, and other appropriate sectors.

Grant recipients can develop various initiatives and projects that address one or more of these purposes, and each activity is not required to meet all of the stated purposes. DOE is encouraging recipients to develop new and innovative approaches within the framework of the legislation and the guidance to serve these purposes. Funds are to be used in a cost-effective manner that is of maximum benefit to the population of the community and in a manner that will yield continuous benefits over time in terms of energy and emission reductions. Grant funds must be used within 36 months. Recipients are required to obligate/commit all funds within eighteen (18) months from the effective date of the award.

### Requirements for an Energy Efficiency and Conservation Strategy

DOE required EECBG applicants with an allocation greater than \$2 million to submit an Energy Efficiency and Conservation Strategy for approval. To assist local governments who do not currently have an Energy Plan or Energy Efficiency and Conservation Strategy (EECS), DOE allowed eligible entities to request an initial award of \$250,000 in order to engage a technical consultant to assist in developing an EECS and associated activities.

Applicants that requested the initial award are required to submit their EECS no later than one-hundred twenty (120) days after the effective date of the initial award. The EECS, according to DOE, should be a comprehensive strategy that covers several key items:

- Jurisdictional area covered by plan and governing body
- Plan implementation partners and any leveraged funds from private or other public sources
- Baseline energy use and GHG emissions inventory and forecast
- Goals/objectives for total energy use and emissions reductions, and energy efficiency increase (goals can be qualitative)
- Actions/plans/strategies and implementation schedule to meet goals
  - Actions and strategies included in the plan can be eligible activities for use of funds under EECBG as well as activities that are ineligible; comprehensive planning is encouraged.
  - Applicants are encouraged, in particular, to include the potential impact of anticipated leveraged funds from private as well as other public sources.
- Expected outcomes and benefits of plan:
  - Jobs created and/or retained
  - Energy saved
  - Renewable energy capacity
  - GHG emissions reduced
  - Funds leveraged

### Development of the proposed County Energy Strategy (CES)

The County engaged the services of NVRC and the principal consultant, Peter Garforth in July to begin working with staff to prepare our submittal. The NVRC consulting team collected data from the utility companies, Loudoun Water and Loudoun Public Schools; reviewed County visionary and planning documents; talked with key County department heads and staff members; and solicited initial input from Loudoun County business leaders. NVRC and county staff also began investigating potential “scale projects” which might offer opportunities to address both the energy supply and demand within a single project to create greater efficiencies. These “scale projects” also met the goal of DOE to develop new and innovative approaches.

The preliminary findings from this research were provided in the “Draft Preliminary Findings” document dated September 2, 2009 and presented at the Energy and Environment Committee Meeting on September 9, 2009. These findings represented a mid-point update for Committee and Board Member review of the data collected to date, including the County’s energy and greenhouse gas baseline. The consultant also presented these preliminary findings, along with suggested County

reduction goals and EECBG projects, at a series of six public input sessions held on September 14, 15 and 16 to solicit input from the various community stakeholders, including meetings with a group of Loudoun business leaders. With this input, the Consulting team refined the recommendations contained in the attached County Energy Strategy (CES), Attachment #1. The CES also contains a list of potential projects, Attachment #2, which were developed jointly with County staff for consideration by the Board for funding with this grant. These projects were selected to provide long and short term benefits to the County as well as to the community. The Appendices for the CES are not included with this item, but are available from County staff upon request.

### Intent of the County Energy Strategy

The CES is a long term energy conservation strategy not a policy adaptation. It should be considered a beginning point of an evolving strategy that is subject to change due to the availability of new technologies, modifications to federal and state ordinances, new legislations, or other unpredictable events. Its' forward-looking approach assumes it will continue to be refined through the County's standard planning, review, implementation and Board approval process. It will require active engagement by the County in the coming years to seek and support favorable legislation; embrace upcoming changes in building codes; participate in discussions underway now on a national level toward evolving energy performance labeling, such as is currently used for appliances, and is being discussed by DOE to apply to buildings in coming years; and participation in regional efforts that maximize the use of funding and corresponding benefits.

The proposed CES will not only provide the County with a clear roadmap in regards to energy conservation, but also provide the following benefits:

- A county-wide greenhouse gas inventory, which will serve as a benchmark to track the County's progress and measure results.
- Enables the County to be better prepared for other energy-related grant opportunities from DOE or EPA, or to participate in region-wide activities or grant opportunities which may become available in the future.

Surrounding counties such as Fairfax County and Arlington County have leveraged previously adopted programs as the basis for their EECBG grant applications. Fairfax County benefited from its extensive Environmental Improvement Plan adopted by the Board of Supervisors on October 2008 and adoption of the "Cool Counties" initiative adopted in July 2007 which calls for an 80 percent reduction in carbon emissions by 2050; and Arlington County used its AIRE (Arlington Initiative to Reduce Emission) strategy which began in 2007 for their EECBG application. Several counties are following the lead of Loudoun County in developing a county-wide approach, either in compiling a community-wide greenhouse gas inventory or developing a comprehensive strategy.

### Relationship to Other Strategies

In addition to meeting the EECBG requirements, the CES is designed to engage Loudoun County business and residents in efforts to address energy and the environment throughout the county, one

of the strategic goals outlined by this Board at their July 23, 2008 Strategic Planning Worksession, and a major goal of the Energy and Environment Committee as set forth by the Board when creating this standing committee in January 2009. It leverages existing actions taken by the Board and other regional, federal initiatives already underway including:

- The County's adopted goal to reduce the County's energy consumption by 15% by 2012, a goal recommended by the Metropolitan Regional Council of Governments (MWCOC), and approved by our Board at their May 5, 2009 Business Meeting.
- The Loudoun County Green Business Challenge Program which was approved by the Board in September 2009 and encourages local businesses to take concrete steps to become more energy efficient. A kick-off in partnership with the Loudoun Chamber of Commerce was held on Thursday, November 19, 2009.
- The Dept of Energy's Weatherization Program for low-income families, funded by the Federal Recovery Act, which provides free retrofit services to low income families to help reduce energy costs.
- The Dept of Energy and Environmental Protection Agency pilot program entitled, "Home Performance with Energy Star", which is being launched in early 2010 in Loudoun County, which is designed to create jobs in home energy auditing and retrofitting; to train workers in these skills; and to reduce home energy consumption. Sponsors are looking to the four pilot counties to help promote the program and educate residents on the benefits of retrofitting.
- The federal and state financial incentives for energy improvements and installation of renewable technologies for homes and business, which include rebates for implementing specific home or commercial building improvements, or installing renewable energy sources such as solar or geothermal.

#### Process for Board Review

At the December 1, 2009 Board meeting, Peter Garforth and NVRC will present and explain the proposed County Energy Strategy. In addition, staff will review the projects which are recommended for submission to DOE in January. On December 15<sup>th</sup>, the Board will be presented an action item to adopt the County Energy Strategy and decide upon the projects it wishes to submit for funding. The Board may require more time for its deliberation, however, Board action must take place no later than the first business meeting in January for staff to prepare the final EECBG submittal to the Department of Energy by January 18, 2010.

Attachments: #1 - Final Draft Loudoun County Energy Strategy, dated November 22, 2009  
#2 - Section 2.2 of the CES, Projects recommended for consideration for funding