

COUNCIL ACTION FORM

SUBJECT: ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT APPLICATION

BACKGROUND:

The City of Ames is eligible to receive \$544,000 in funding through the federal Energy Efficiency and Conservation Block Grant (EECBG) program. According to the US Department of Energy (DOE), this program has a goal of deploying “the cheapest, cleanest, and most reliable energy technologies we have – energy efficiency and conservation – across the country.” It is intended to develop, promote, implement, and manage energy efficiency and conservation projects and programs designed to:

- Reduce fossil fuel emissions;
- Reduce the total energy use of the eligible entities;
- Improve energy efficiency in the transportation, building, and other appropriate sectors; and
- Create and retain jobs.

Federal guidelines indicate that an Energy Efficiency and Conservation Strategy (EECS) must be prepared describing the set of activities that will be undertaken with EECBG program funds. Activities and plans beyond the scope of the EECS may also be referenced as deemed appropriate. With that guidance, and based upon Council’s direction on June 9th and Council’s previous actions related to energy conservation, it is proposed that the EECS be stated as follows:

On May 5, 2007 the Ames City Council set a goal to make Ames a more environmentally-sustainable community, and on June 6, 2007 the City Council approved the US Mayors Climate Protection Agreement. On October 28, 2008, the City Council adopted the Cool Cities Initiative - Carbon Footprint Reduction Goal that includes the following information:

- The baseline carbon foot print was set at 13,366 T. of CO₂ for City operations, as was reported in June, 2008.
- The US Mayors standard cool city agreement calls for a 7% reduction of carbon dioxide by 2012. After reviewing projects and opportunities to reduce CO₂ from City operations, the City Council set a more aggressive carbon reduction goal of 15% by 2014.
- Progress on attainment of this goal will be judged by reductions in carbon footprint related to three sectors – buildings, fleet, and street/traffic lights.
- This goal does not yet include the City’s four major utilities, Electric Production, Water Treatment, Waste Water Treatment, and Resource Recovery, since

energy consumption at these plants is reflective of community-wide usage and is not entirely under the City's control. However, plans and projects for these utilities will be designed and implemented for energy reduction. On June 10, 2008 the City Council also adopted a goal to meet 10% of the City's electrical demand through renewable energy (beyond the Resource Recovery Plant, and not specifically only wind energy) by 2015, 15% by 2018, and 20% by 2021. The operations of CyRide, the municipal transit system, may also be moved into this group as it implements programs that increase ridership to reduce commuting in private vehicles.

- Further, an internal campaign was begun in April, 2009 with a slogan of "Make Green Your Daily Routine." This campaign is being developed and implemented to educate and motivate City employees to implement energy reduction strategies on City buildings, fleets, and facilities.
- On June 9, 2009, the City Council directed staff to prepare an Energy Efficiency and Conservation Strategy (EECS) that incorporates the following four areas:
 - Street and parking lot lighting demonstration projects
 - Energy-efficiency improvements to one City building, with extension to multiple buildings if funding allows
 - Energy efficiency education
 - Small hybrid vehicles

The City's proposed use of EECSBG funding is to accomplish projects shown in the table below. Actual funding allocated to the respective areas will be determined by City Council after the grant is received and the highest priority alternatives are studied and evaluated.

INITIATIVE	DESCRIPTION	POSSIBLE PROJECTS (with estimated costs)
STREET LIGHTING & PARKING LOT LIGHTING DEMONSTRATION PROJECTS	<ul style="list-style-type: none"> • Replace mercury vapor street lights with LED or inductive lighting along an arterial street corridor • Replace existing public parking lot lighting with LED or inductive lighting 	<ul style="list-style-type: none"> • South 16th St. between South Duff and University Blvd. (\$31,500) • City Hall east and west parking lots (\$18,000) • Mortensen Rd. from State Ave. west to Middle School, including bike path (\$125,000) • SE 16th St. between South Duff and Dayton Ave. (\$200,000)
MAJOR ENERGY EFFICIENCY IMPROVEMENTS TO CITY FACILITIES	Create at least one "showcase City facility" by installing energy efficient lighting systems, heating/cooling systems (such as ground source heat pumps), solar power generation, wind energy, and/or other energy-	Possible projects: <ul style="list-style-type: none"> • Complete energy efficiency re-make of Animal Control facility (\$100,000) • Replace City hall heat pumps with ground source heat pumps (up to \$540,000)

INITIATIVE	DESCRIPTION	POSSIBLE PROJECTS (with estimated costs)
	saving improvements at existing City facilities	<ul style="list-style-type: none"> • Building LED lighting • Install solar energy units at Ames/ISU Ice Arena
ENERGY CONSERVATION EDUCATION	Expand community education efforts to educate and persuade citizens to reduce fossil fuel use and energy emissions.	<ul style="list-style-type: none"> • Collaborate with Ames Community School District in conservation education for students • Purchase a “solar tent” from Iowa Thin Film Technologies, Inc. for use at public events • Enhance Electric Services’ Demand Side Management (DSM) programs • Offer outdoor water audits to encourage energy savings through water conservation
HYBRID VEHICLES	Replace additional City vehicles with hybrid vehicles	<ul style="list-style-type: none"> • Sedans - \$23,000 each • Other City vehicles – \$30,000-250,000 each

Should the City’s initial application not be approved or should projects shown above not be acceptable, the DOE will inform the City of the specific issues that need to be addressed in order to satisfy the requirements of the program. The City may then revise and resubmit our proposed strategy as many times as necessary for approval. Once the City’s strategy is approved, it may also be amended under a yet-to-be-determined process.

The deadline for submission of this application is June 25, 2009.

ALTERNATIVES:

1. Authorize submission of a grant application for \$544,000 in EECBG funding, including the Energy Efficiency and Conservation Strategy shown above.
2. Direct staff to submit a EECBG grant application with a modified Energy Efficiency and Conservation Strategy.
3. Do not authorize submission of an EECBG grant application, thus foregoing this grant opportunity.

MANAGER'S RECOMMENDED ALTERNATIVE:

The Energy Efficiency and Conservation Strategy stated above represents staff's efforts to capture Council's intent for use of EECBG funds as discussed on June 9. Such a strategy must be filed with the federal government by June 25 in order to qualify for these funds.

Assuming the strategy adequately captures Council's intent, it is the recommendation of the City Manager that Council adopt Alternative #1 above.