

A RESOLUTION SPECIFYING FOLLOW-UP TO STAFF UPDATE ON ENERGY
PLANNING/SUSTAINABILITY EFFORTS

Resolution No. 27/2009-10

WHEREAS, the Carrboro Board of Aldermen seeks to ensure that its existing and proposed policies and actions are appropriate and beneficial, and;

WHEREAS, Town staff have provided an update on opportunities to pursue funding from the ARRA of 2009, and;

WHEREAS, a 2008 bill that extends the State's renewable energy income tax credit to taxpayers who donate funds to local government to be used to acquire renewable energy property, and;

WHEREAS, with the completion of the Greenhouse Gas Emissions Inventory with Orange County, Chapel Hill, and Hillsborough, the Town is ready to obtain community feedback to guide the selection of a reduction target and actions.

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen that the Aldermen accept the staff update on this matter and directs staff to

- 1) Continue with plans to submit an EECBG application for funds to support an energy revolving loan, and;
- 2) Direct staff to explore creation of a priority list of renewable energy projects on Town property and a process that would allow acceptance of taxpayer contributions for those projects that would be eligible for tax credits under the NC Renewable Energy Income Tax Credit, and;
- 3) Implement the climate action planning activities planned for October 24th.



TOWN OF CARRBORO

NORTH CAROLINA

TRANSMITTAL PLANNING DEPARTMENT

DELIVERED VIA: HAND MAIL FAX EMAIL

To: Mayor and Board of Aldermen
Steve Stewart, Town Manager

From: Randy Dodd, Environmental Planner

Cc: Roy Williford, Planning Director
Patricia McGuire, Planning Administrator
James Harris, Economic and Community Development Director
Matt Efird, Assistant to the Town Manager
Chris Sherman, Assistant to the Public Works Director

Date: October 20, 2009

Subject: Energy Efficiency and Conservation Block Grant and potential energy fund

Introduction

The purpose of this memo is to provide an overview in consideration of the potential submittal of an Energy Efficiency and Conservation Block Grant (EECBG). The establishment of a local energy fund is recommended as a focus of a potential EECBG application.

Background

Under the ARRA, the North Carolina State Energy Office is managing approximately \$21M designated for Energy Efficiency and Conservation Block Grants. These funds are allocated separately to "entitlement" cities; "non-entitlement cities and counties; and public school districts, community colleges and other local public authorities. Carrboro is classified as a "non-entitlement" community; under this category, the state will provide local governments subgrants (totaling ~\$7M) to implement energy efficiency measures and renewable system installations in their communities. All building types --- governmental, residential, nonprofit, retail, commercial and industrial --- will be eligible to participate. The state will issue competitive solicitations

(requests for proposals) for the 90 counties and 526 municipalities that will not receive direct entitlements, but are eligible to receive assistance under this program. Funding areas include:

- Retrofit existing facilities to improve energy efficiency;
- Design and operation of energy efficiency and conservation programs for buildings and facilities within the jurisdiction of the entity;
- Identification of the most effective methods for achieving maximum participation and efficiency rates;
- Public education;
- Measurement and verification protocols;
- Identification of energy efficient technologies;
- Development, implementation and installation of renewable energy technologies on or in any eligible entity;
- Onsite renewable energy technology that generates electricity from renewable resources including solar energy, wind energy, fuel cells and biomass.

Relevant fact sheets, presentations, sample plans, checklists, and spreadsheets are available at <http://www.energync.net/>. Initial information indicates that proposals will be reviewed based on multiple criteria including (but not limited to) the ability to demonstrate energy improvements and economic stimulus, as well as the establishment of programs and collaborative efforts and not simply stand alone projects.

Possible ARRA Projects and Relationship to Funding Criteria

In consideration of a potential submittal, Town staff have: reviewed SEO information, including attendance at a workshop dedicated to EECBG in Raleigh; met with Orange County and Hillsborough staff to discuss a potential joint submittal; and reviewed various initiatives being pursued by other communities and organizations. Some pertinent findings and recommendations for potential activities under an EECBG submittal are shown in Table 1. (Note that the two items under “Prerequisites” are required as part of an EECBG submittal.)

While all of the activities listed in Table 1 have merit, in consideration of the limited funding and the need to consider all grant review criteria, including establishment of a sustaining initiative, establishment of an energy fund is recommended as the highest priority activity. It is furthermore recommended that consideration be given to setting up a fund that allows for donations from local individuals and businesses, who in turn can benefit from changes in State Legislation in 2008 extending State income tax credits for renewable energy installations (see separate staff memo).

Table 1: Potential Activities for EECBG submittal

Potential Activity under EECBG	Economic Stimulus Value	Notes
PREREQUISITES		
Create Energy Plan	NA	SEO will provide local governments with technical support
Energy Audit (Town Buildings)	NA	Audit Energy use/billing evaluation? completed in 2008 through Waste Reduction Partners. Additional information

Potential Activity under EECBG	Economic Stimulus Value	Notes
		may be required by SEO.
ECONOMIC STIMULUS/ PRIVATE RESIDENTIAL		
Participate in 14x stimulus program. This is a national level initiative focused on financial stimulus coordinated with residential energy improvements.	Very high	http://www.architecture2030.org/ Details at http://www.architecture2030.org/14x_stimulus/EECS_attachmentB1.pdf . Specific implementation steps at http://www.architecture2030.org/14x_stimulus/14x_implementation.html
Work with County to establish Energy Financing District (EFD) program	Very High	EFD's have been set up in Berkeley, CA, Palm Desert, CA, Boulder, CO, and Babylon, NY (see Appendix for additional information)
Weatherization?	High	Reference approach in energy strategy? Coordinated with JOCA?
TOWN BUILDINGS		
Continue with actions to follow up on Waste Reduction Partners audit	Low	Upgrade light fixtures; install sensors
Install solar hot water at downtown fire station	Low	Could work with 3 rd party financier to realize quicker payback, and/or as part of local fund. NC Solar Center recommends as best renewable project for Town property, has estimated \$25k cost based on general information, and offers detailed onsite assessment for \$700.
Other renewable energy installations on Town property	Low	Could work with 3 rd party financier who can benefit from tax incentives, and/or as part of energy fund. Town has applied for PV installations as part of Duke Renewable Energy Portfolio plan.
Detailed building energy assessments and 1-2 year implementation	Low	Estimate provided by Southern Energy for detailed building assessment of \$15k and \$25k implementation per building for high payback initial projects
Commit to 1 or more existing buildings being Energy Star certified	Low	Energy Star certification requires energy performance of 20% better than average for building type
TRANSPORTATION		
Plug in stations for plug in hybrid vehicles	Low	Costs depend on how many stations. See http://projectgetready.com/ . Home Level 2 Station: \$750 Work Level 2 Station: \$3000 with two ports Public Level 2 Station: \$7000
Streetlight retrofits	Low	Would require coordination with Duke Energy.
ENERGY FUND		
Establish energy fund	Low/medium	Could model fund or components after fund set up in Ann Arbor.
Accept donations that allow donor to take State tax credit for renewable energy installed on local government property	Medium/high	See staff memo for details. Steps: i. Publicize ii. Accept donations (used as grant match) iii. Administer State tax credit accounting

Fiscal and Staff Impact

There is no immediate fiscal or staff impact associated with this agenda item. Assuming the Town proceeds with an EECBG application, the award does not require (but does encourage) a local match, although it will require staff time to submit the application and implement the requirements. It is not possible to quantify a preliminary estimate of the \$ or hours required for submittal and implementation, pending the details of the submittal.

Recommendations

Staff recommends that Town pursue an EECBG application and set up a new self sustaining Energy Fund.

Appendix 1: Examples of Local Government Financing Innovations

Ann Arbor Energy Fund

Ann Arbors Municipal Energy Fund was established in 1998 to be a self-sustaining source of funds for investment in energy-efficient retrofits at city facilities, so the City could continually reduce its operating costs over time. The City operates 60 facilities and spends \$4.5 million per year on energy (out of an annual budget of \$288 million in 2005). The Fund is administered by the City's Energy Office under the supervision of a three-person board, which must approve all projects. The Fund has invested in street light improvements, parking garage lighting, a boiler, two electric vehicles, and photovoltaic cells.

The Energy Fund demonstrates that energy efficiency can pay for itself in the long term. By providing the difficult up-front costs and then capturing 80% of the resulting savings, the Fund not only motivates facility managers to move forward with energy efficient projects, but has built in sustainability requiring no additional annual appropriations. The Energy Fund projects not only save facilities/departments operating dollars, but also improve the comfort and appearance of City facilities.

Recommended information about the Ann Arbor Energy Fund is available at

http://www.ci.annarbor.mi.us/government/publicservices/systems_planning/energy/Pages/EnergyFund.aspx

(note that this includes a link for lessons helpful to other municipalities)

One of the cornerstones is that the city adopted the rule that any facility that utilizes the fund for energy improvements will pay back 80% of the energy savings for five years starting the first year after the energy saving measures were installed. Establishing a five-year payment plan allows projects that have a shorter payback (three years or less) to help support projects that have a longer payback (over five years).

Guide to Energy Efficiency & Renewable Energy Financing Districts for Local Governments

The City of Berkeley and the Renewable and Appropriate Energy Laboratory at the University of California, Berkeley, have released a guide for local governments on energy efficiency and renewable energy financing districts. This report is designed for local government officials, local government decision makers, state policy makers, and civil society groups interested in establishing an Energy Financing District (EFD) program in their region. The guide provides case studies of the experience from trailblazing communities such as Berkeley and Palm Desert in California; Boulder County, Colorado; and Babylon, New York. The guide describes the process of setting up an EFD program, including administrative, legal, and financial issues.

EFDs were first proposed by the City of Berkeley, California, in 2007 and have received increasing attention as a mechanism for financing residential or commercial clean energy projects, including energy efficiency, solar photovoltaic, or solar thermal systems. EFDs enable local governments to raise money by issuing bonds to fund these clean energy projects. For local governments, an EFD provides an opportunity to address climate change locally, to support residents' environmentally friendly building improvements at low cost to government, and to strengthen the local economy in energy efficiency retrofitting and solar installation. Because the loans are secured by property liens, an EFD program provides virtually no risk to the local government's general fund. Energy Financing Districts offer many advantages to homeowners, including a long repayment period, potentially lower interest rate, tax-deductible interest payments, and an easier application process than applying for a second mortgage or home equity line. Unlike most other financing options, the repayment obligation transfers when the property is sold, allowing homeowners to invest in improvements that will pay back over a longer timeframe than the owner intends to remain in the house.

For more information and to download the report, please visit <http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=44262>

The guide may also be accessed at:
<http://rael.berkeley.edu/files/berkeleysolar/HowTo.pdf>



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**To: Mayor and Board of Aldermen
Steve Stewart, Town Manager**

From: Randy Dodd, Environmental Planner

**Cc: Roy Williford, Planning Director
Patricia McGuire, Planning Administrator**

Date: October 14, 2009

Subject: North Carolina League of Municipalities Green Challenge

Background and Summary

The North Carolina League of Municipalities (NCLM) has finalized criteria for intermediate and advanced status under its Green Challenge program. The NCLM will be recognizing municipalities who submit qualifying information at the annual conference October 25-27. (Municipalities can submit information at any time; however public recognition occurs at the annual conference.) Town staff have reviewed the program, submitted information to the NCLM, and the Town has achieved "advanced" status under the challenge.

Information

At the NCLM 2008 Annual Conference, the NCLM honored nearly 80 cities and towns (including Carrboro) that achieved Level One of the Green Challenge. The NCLM has encouraged Level One municipalities to evaluate activities for qualification for Intermediate or Advanced Level recognition. The Green Challenge Guide (available at <http://www.nclm.org/documents/greenchallengeguide.pdf>) describes over 20 "green" activities that municipalities can receive credit for, and there is an opportunity to receive credit for other innovative or special accomplishments. Town staff have reviewed the activities and compiled information in Table 1 that outlines the Town's consideration of receiving credit (points) for current and potential activities. The Town submitted qualifying activities for the items listed in bold, and may submit for other challenge items in the future after further review. The NCLM notified the Town of acceptance as an "Advanced" community on October 5th.

Table 1: NCLM Green Challenge Assessment (items submitted to qualify in bold)

Item	Comments/Examples of Qualifying Activities	Page # NCLM Guide
Purchase electricity from renewable sources or install renewable technology	Town is purchasing 20 blocks of renewable energy per month (100 kwh per block) from NC Green Power at \$4/block.	4
Water/wastewater facilities participate in NCDENR Environmental Stewardship Initiative	For OWASA consideration	5
Dark sky policy; energy efficient outdoor lighting	Provisions in Section 15-243 of LUO	5
Energy manager position or management team	Would need to establish position or management team	6
LEED for new facilities policy	Board has not supported a policy	7
Build a facility to LEED or comparable standard	New fire station has been certified by architect as equivalent to LEED silver	8
Internal recycling program	Town buildings are equipped with recycling facilities	9
30 %post consumer recycled content in office paper	Cost is \$0.60 (2%) more per case (5000 sheets; 35% recycled content)	9
Environmentally preferable procurement program	Would need to establish program	10
Community wide recycling program	Orange County has a leading program	10
Green Fleet Policy	Town has purchasing and operational provisions that qualify	11
Anti-idling policy for fleet	Town departments pursue anti-idling policies	12
Transit oriented/mixed use land use planning	Provisions in several articles of LUO	12
Land conservation	Provisions in several articles of LUO; Adams tract; rural buffer; greenways	13
Tree preservation and planting	Tree City; ordinance; Appearance Commission as Tree Board	14
Employee benefits for alternative commuting	Would need to establish/document program	15
Alternative work schedule/telecommuting policy	Would need to adopt/document policy	16
Employee education program	Would need to establish/document program	16
Establish advisory board	Town has established Environmental Advisory Board	17
Community education program	Would need to establish/document program	17
Innovations	e.g., Fare free transit; GGI; sidewalks and greenways; solid waste management. Town submitted 12 innovations	18

Staff Recommendation

It is recommended that the Town continue to work with the NCLM to review and pursue “green” activities that are consistent with established Town policies, plans, and initiatives. Pursuing these activities and receiving this recognition from the NCLM has benefits not only to “nature”, but also to community and economic development (e.g., recruiting businesses, establishment as a great place to live), communication to the community at large about green efforts the Town is pursuing, and as a qualification for various funding/grant applications.