

## Promoting Sustainable Energy Through Innovative Local Government Finance

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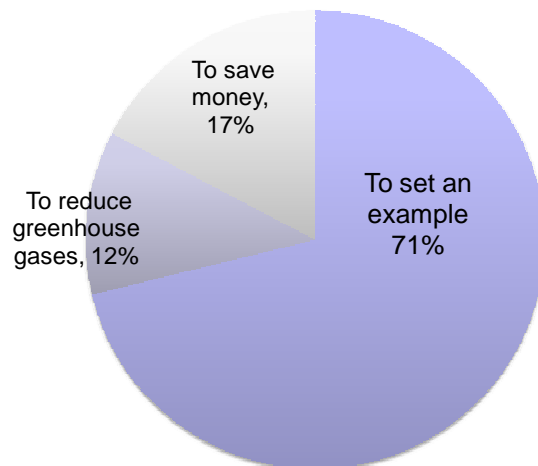


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***What did a group of recently elected officials have to say about reason for implementing local sustainability practices??***

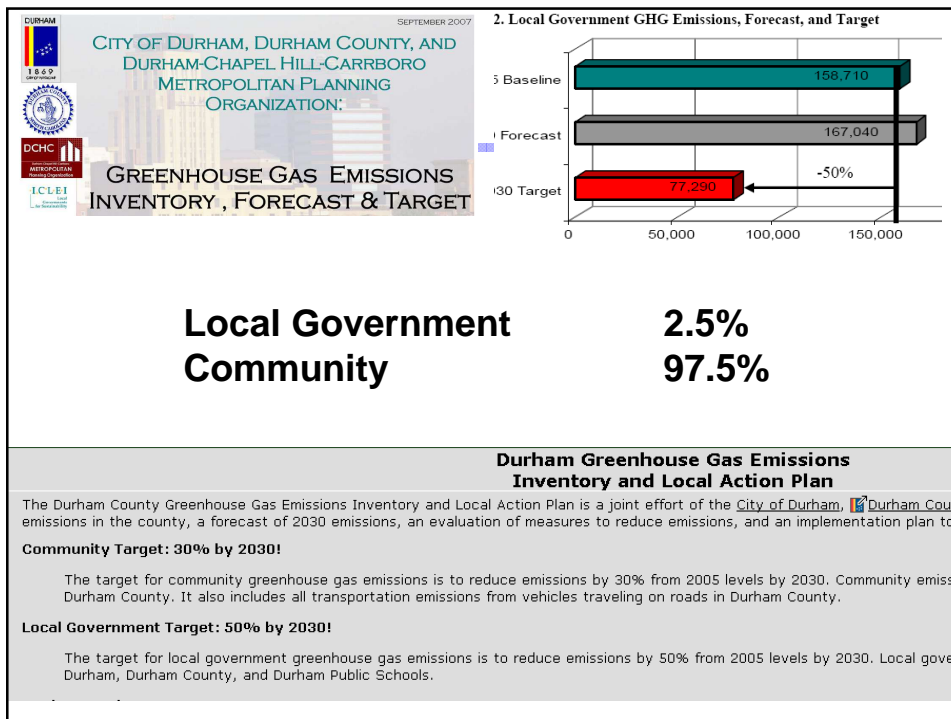
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Results of a recent poll of 50 newly elected officials

## Local Government Avenues for Promoting Sustainable Energy

- Land use control (how much, where, what...)
- Direct services (recycling, wastewater treatment, transportation...)
- Internal business practices (buildings, transportation, procurement..)
- Promotion of efforts within jurisdiction
  - Passive
  - Active
    - Finance



## Joe Biden to Solar Power USA With P.A.C.E. 'Recovery through Retrofit' Berkeley First Municipal Financing



Written by Susan Kraemer

23 Comments

Published on October 21st, 2009 in consumer technology, policy, solar energy

Vice President Joe Biden just revealed a plan to make Berkeley First available nationwide. Yesterday at his Middle Class Task Force meeting Biden proposed the way to make solar roofs easy for everyone to afford with virtually free solar panels. If you now pay your current electricity bill and own a home, that's literally all it takes to go solar under municipal tax assessment financing.



54 tweets

That's because his plan, detailed in [Recovery Through Retrofit](#) simply makes the very successful Berkeley First municipal tax assessment financing a Federal program, funded nationwide through the Recovery Act.

>>Find local group discounts on solar power for your home.

The plan from Biden's very practical Middle Class Task Force on Environmental Quality addresses and solves two issues:

1. That homeowners who might move in a few years don't retrofit with solar power. So this loan attaches to the home, not the borrower, and is passed along to the next buyers for 20 years till paid off.
2. That only a few rich cities can muster the bonds needed to offer the program. When I asked my Mayor why we were not joining with our neighbor Berkeley to offer Municipal Tax Assessment Financing, I was told "because we can't get the bond financing". Sonoma, San Francisco and these cities have followed in Berkeley's footsteps.

## Boulder County, CO Climate Smart

- Established: April 2009
- \$40 million bonding capacity
- \$7.5 million for 393 projects
- Avg project cost: \$7,000
- Projects include:
  - air sealing and ventilation, insulation, space heating and cooling, water heating, lighting retrofits, day lighting, windows, doors and skylights, solar hot water, solar PV, small wind and wood/pellet stoves



# What's it Look Like for Homeowners (in Boulder)



## Actual Costs Previous Rounds

Amount you apply for	Approximate Closing Costs*	Assessment Rate	Annual Assessment
\$5,000	\$632	5.2%	\$550
\$13,000	\$1,486	5.2%	\$1,350
\$10,000	\$1,594	6.68%	\$1,248

\* This amount includes 2009 interest, which was rolled into the principal amount.

Source: Presentation to Boulder Homeowners:  
<http://www.bouldercounty.org/bocc/cslp/homeenergy.pdf>

## Why Local Governments?

- Acquiring capital at competitive rates and terms
- Pooling/aggregating resources for public purposes
- Taking measured economic risks for public purposes
- Collecting taxes and fees

## Solar vs. Sewer

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### Home Solar

- Revenue sources/incentives
  - Sale of energy
  - **Sale of renewable energy credits/carbon credits**
  - State **tax** credits
  - Federal **tax** credits
- **Ownership of physical assets**
  - Residences, businesses, local government, utility, installer
- **Financing mechanisms**
  - Debt, Lease, roof rental, PACE...

### Sewer to the Home

- Revenue sources/incentives
  - Wastewater fees
  - Public funding programs
  - Tax exempt financing
  - BABS
- Ownership of physical assets
  - Most often local government
- Financing mechanisms
  - Debt retired through revenue

## PACE in North Carolina

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- NC Session Law 2009-525 (S 97)
  - A board or council...may make special assessments....for the purpose of financing the installation of distributed generation renewable energy sources or energy efficiency improvements that are permanently fixed to residential, commercial, industrial or other real property

# Resources

## SOG Environmental Finance Center

[www.efc.unc.edu](http://www.efc.unc.edu)

## Overview of national issues --

<http://www.pacenow.org/>

## New Publication on Local Government Financing Programs for Energy Projects on Private Property

<http://www.sog.unc.edu/pubs/electronicversions/pdfs/lfb41.pdf>

<http://www1.eere.energy.gov/wip/solutioncenter/default.html>

The screenshot shows a web browser window displaying the 'Solution Center' website. The page title is 'Solution Center - Technical Assistance for EECBG & SEP'. The main heading is 'Financing for Energy Efficiency and Renewable Energy'. The page content includes a description of the website's purpose for American Recovery and Reinvestment Act (ARRA) recipients, a list of financing programs, and a sidebar with 'Key Program Elements'.

**Key Program Elements:**

- Market Stimulus
- Transaction Points
- Eligible Measures
- Financing Terms
- Credit Enhancement
- Sources of Funds

**Types of Financing Programs:**

- **State and Municipal Revolving Loan Funds** — A state or municipal pool of funds that capitalize a loan fund managed by the state or municipal government; loan repayments recapitalize the fund to allow additional lending on an ongoing basis.
- **Third Party Loans** — A loan program administered by a third party (i.e., not the State or local government, usually a financial institution such as a bank), targeted at energy efficiency or renewable energy improvements.
- **Energy Savings Performance Contracting (ESPC)** — A financing technique that uses cost savings from reduced energy consumption and operational savings to repay the cost of installing energy conservation and renewable energy measures. The original capital used to finance the needed upgrades is typically secured from municipal leases, bonds, revolving loan programs, or could be from other mechanisms listed within this guide.
- **Property-Assessed Clean Energy (PACE)** — Allows clean energy improvements to be repaid via an assessment on the property tax bill; the repayment obligation and savings transfer with ownership.
- **On-Bill Repayment** — Clean energy improvements are repaid as part of the utility

## For More Information

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## Authorized Loan Programs In NC

	Revolving Loan Fund	Special Assessments
<b>Revenue Source(s)</b>	<ul style="list-style-type: none"> <li>• Energy Efficiency and Conservation Block Grant Funds</li> <li>• Unrestricted Revenues (includes sales tax revenue and (possibly) property tax revenue)</li> </ul>	<ul style="list-style-type: none"> <li>• Revenue Bonds (secured by assessment revenue)</li> <li>• Project Development Financing</li> <li>• General Revenues (which likely includes federal grant revenue)</li> </ul>
<b>Authorized Project(s)</b>	<ul style="list-style-type: none"> <li>• Installation of  <b>(1) Distributed Generation Renewable Energy Sources*</b> or  <b>(2) Energy Efficiency Improvements,</b>                      that are permanently fixed to residential, commercial, industrial, or other real property</li> </ul> <p><small>* Renewable Energy Source defined by statute</small></p>	<ul style="list-style-type: none"> <li>• Installation of  <b>(1) Distributed Generation Renewable Energy Sources</b> or  <b>(2) Energy Efficiency Improvements,</b>                      that are permanently fixed to residential, commercial, or other real property</li> </ul>

## Authorized Loan Programs In NC (continued)

	Revolving Loan Fund	Special Assessments
<b>Criteria for Eligibility</b>	<ul style="list-style-type: none"> <li>• Must be established by governing board</li> <li>• <i>Note that federal grants may specify certain eligibility requirements</i></li> </ul>	<ul style="list-style-type: none"> <li>• Must be established by governing board</li> <li>• <i>Note that federal grants may specify certain eligibility requirements</i></li> </ul>
<b>Procedures</b>	<ul style="list-style-type: none"> <li>• Must be established by governing board</li> </ul>	<ul style="list-style-type: none"> <li>• Detailed statutory procedural requirements</li> </ul>
<b>Debt Authorized</b>	<ul style="list-style-type: none"> <li>• No</li> </ul>	<ul style="list-style-type: none"> <li>• Revenue Bonds (secured by special assessment revenue)</li> <li>• General Obligation Debts (only voted debt)</li> </ul>
<b>Collection Remedies</b>	<ul style="list-style-type: none"> <li>• Unit may take security interest in real property that is benefitted by project</li> <li>• Security interest (lien) does not have special priority status</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment is automatically lien on underlying real property that is benefitted by project</li> <li>• Lien has special priority status</li> </ul>