

NC State University
North Carolina **Solar Center**

North Carolina Sustainable Energy Conference

Government Incentives


Brian Lips, NC Solar Center
April 20, 2010

Energy Innovation for a Sustainable Economy

NC State University
North Carolina **Solar Center**

The DSIRE Project

Database of State Incentives for Renewables & Efficiency



www.dsireusa.org

- Created in 1995
- Managed by NC Solar Center in partnership with IREC
- Funded by U.S. DOE
- > 2,000 RE & EE financial incentives & regulatory policies
- Federal, State, Local, Utility
- 200,000 unique visitors/month

Energy Innovation for a Sustainable Economy

A Tale of Two Bills



- The Energy Improvement and Extension Act of 2008 (The Bailout Bill)
- The American Recovery and Reinvestment Act of 2009 (The Stimulus Bill)

Energy Innovation for a Sustainable Economy




The Bailout Bill

- Extended the Investment Tax Credit (ITC) to 12/31/2016
- Allows ITC to offset Alternative Minimum Tax
- Extends eligibility to utilities
- Included small wind (< 100kW) for first time (Up to \$4,000 --- cap removed by Stimulus Bill)
- Included geothermal heat pumps (up to \$2,000 --- cap removed by Stimulus Bill)
- Removed the \$2,000 cap for residential PV
- Extended most energy efficiency tax credits for another year
- Extended expiration date for the Production Tax Credit (PTC) and expanded it to include other renewables
- Authorized the issuance of qualified energy conservation bonds
- Allocated \$800 million for new Clean Renewable Energy Bonds (CREBs)

Energy Innovation for a Sustainable Economy

NC State University
North Carolina **SolarCenter**

The Stimulus Bill



- Allows for cash grants in lieu of ITC and PTC
- Removes provisions that make subsidized energy financing reduce the ITC and PTC
- Gives DOE \$6 billion to issue loan guarantees for renewable energy projects
- Removes cap for residential solar water heating, geothermal heat pumps, small wind
- Allows PTC-eligible technology to claim ITC or equivalent cash grant
- Makes new tax credit for renewable energy manufacturing facilities
- Extends and expands tax credit for energy efficient home improvements
- Extends bonus depreciation for 2009
- Expanded the allowable energy conservation bond volume from \$800 million to \$3.2 billion
- Allocated an additional \$1.6 billion for CREBs.

Energy Innovation for a Sustainable Economy

NC State University
North Carolina **SolarCenter**

CREBs & QECBs

- May be issued by electric cooperatives, government entities (states, cities, counties, territories, Indian tribal governments or any political subdivision thereof)
- Bonds are issued, theoretically, with a 0% interest rate. The borrower pays back only the principal of the bond, and the bondholder receives federal tax credits in lieu of the traditional bond interest.
- Allocation for new CREBs: \$2.4 Billion
- Allocation for QECBs: \$3.2 Billion
- HR 2847 of March 2010 allows for direct payments to bond holders from Treasury in lieu of tax credit

Energy Innovation for a Sustainable Economy

QECCBs in NC

- QECCB Allocation for NC: \$95,677,000
- Sub-allocations to cities and counties with a population of 100,000 or more
- North Carolina Federal Tax Reform Allocation Committee holds QECCBs
- The Secretary of the Department of Commerce, the Executive Assistant to the Governor for Budget Management, and the Treasurer of the State of North Carolina

Energy Innovation for a Sustainable Economy

Energy Efficiency and Conservation Block Grant (EECCB) Program

- \$3.2 billion in direct appropriations to state and local governments from the federal government
- NC received a total of \$58,303,400
 - State Government received \$20,925,300
 - City, county and tribal governments received \$37,378,100

Energy Innovation for a Sustainable Economy

EECBG Authorized Uses


- Development of an energy efficiency and conservation strategy
- Building energy audits and retrofits, including weatherization
- Financial incentive programs for energy efficiency such as energy savings performance contracting, on-bill financing, and revolving loan funds
- Transportation programs to conserve energy
- Building code development, implementation, and inspections
- Installation of distributed energy technologies including combined heat and power and district heating and cooling systems
- Material conservation programs including source reduction, recycling, and recycled content procurement programs
- Reduction and capture of greenhouse gas emissions generated by landfills or similar waste-related sources
- Installation of energy efficient traffic signals and street lighting
- Installation of renewable energy technologies on government buildings
- Any other appropriate activity that meets the purposes of the program and is approved by DOE

Energy Innovation for a Sustainable Economy

NC – Local Option for Revolving Loan Programs

- Authorized by HB 1389 of 2009
- Local governments can use general funds or EECBG funds to create loan programs
- Maximum 8% interest rate, 15 year loan term

Energy Innovation for a Sustainable Economy




NC State University
North Carolina **SolarCenter**

Property Assessed Clean Energy (PACE) Financing

- Allows home and business owners to borrow money from local government and repay the loan through increased property taxes.
- Energy efficiency and renewable energy projects are eligible
- Authorized by HB 1770 and SB 97 of 2009
- No NC cities have established programs yet.

Energy Innovation for a Sustainable Economy



NC State University
North Carolina **SolarCenter**

NC Renewable Energy Tax Credit

- 35% of system cost – PV, solar thermal, wind, biomass, geothermal heat pumps
- \$2.5 million cap for non-residential installations
- Residential cap varies by technology

Energy Innovation for a Sustainable Economy

Non-Profit and Government Eligibility?

- ***SB 3 of 2007*** amended North Carolina's renewable energy tax credit statute to allow a taxpayer who donates money to a tax-exempt nonprofit to help fund a renewable energy project to claim a tax credit. The donor can claim a share of the credit -- proportional to the project costs donated -- that the nonprofit could claim if the organization were subject to tax. ***HB 2436 of 2008*** applied this same mechanism to donations made to units of state and local governments.

Energy Innovation for a Sustainable Economy

Questions & Comments

Brian Lips
NC Solar Center
919-515-3954
brian_lips@ncsu.edu

Energy Innovation for a Sustainable Economy