



TODAY'S WEBINAR TOPIC

Using Qualified Energy Conservation Bonds for Residential Retrofits

Speakers:



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Lawrence Berkley National Laboratory



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Director of Energy Sustainability
St. Louis County, MO



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Beginning August 4, Climate Communities' weekly training webinars will be limited to **members only**.

Contact Andrew Seth at andy@climatecommunities.us for membership details.

July 14, 2011

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Upcoming Webinars

Jul. 21: CLEAN Programs: Making Clean Local Energy Accessible Now

Jul. 28: Fort Worth, TX on Utilizing Performance Contracting to Reduce Energy Consumption and Save Money

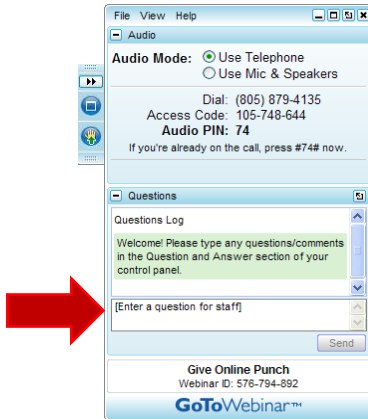
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Aug. 4: DOT TIGER III Grant Program (\$527 million)

Aug. 11: HUD Sustainable Communities Challenge Grant Program (up to \$30 million)



Asking questions



At any point during the presentation, you can type your question into the question text box and click send. All questions will be read aloud and answered at the end of the presentations, as long as time permits.



Qualified Energy Conservation Bonds (QECBs): Financing Energy Efficiency Improvements

Mark Zimring

Lawrence Berkeley National Laboratory (LBNL)

Climate Communities Webcast

July 14, 2011



LBL's Energy Efficiency Work



- Areas of Research
 - Driving Demand for EE
 - Commercial, Public and Residential EE Financing
 - Interaction of ARRA & Ratepayer Funds
 - Post-ARRA EE Program Sustainability
 - ESCO Industry & Market Trends
 - Technical Assistance to Recovery Act Grantees

Download LBNL Energy Efficiency Publications Here:

<http://eetd.lbl.gov/ea/emp/ee-pubs.html>

QECB Overview



- \$3.2 billion of issuance capacity. Federally-subsidized debt instruments for state, local and tribal governments to fund 'qualified energy conservation projects'. Only ~15% issued to date.
- Extremely attractive terms for issuers. ~2% net interest over ~15 years typical.



The Federal QECB Subsidy



- 2010 legislation enabled issuer choice of tax credit or cash pay subsidy. All issues to-date have utilized cash pay subsidy.
- Cash subsidy is currently up to 3.56%
- Example: Net Interest Cost
 - 5.50%----Taxable interest rate paid to investor
 - 3.56%----Minus Direct Subsidy (5.00% QTCR x 70% subsidy)
 - 1.94%----Net Interest Cost**

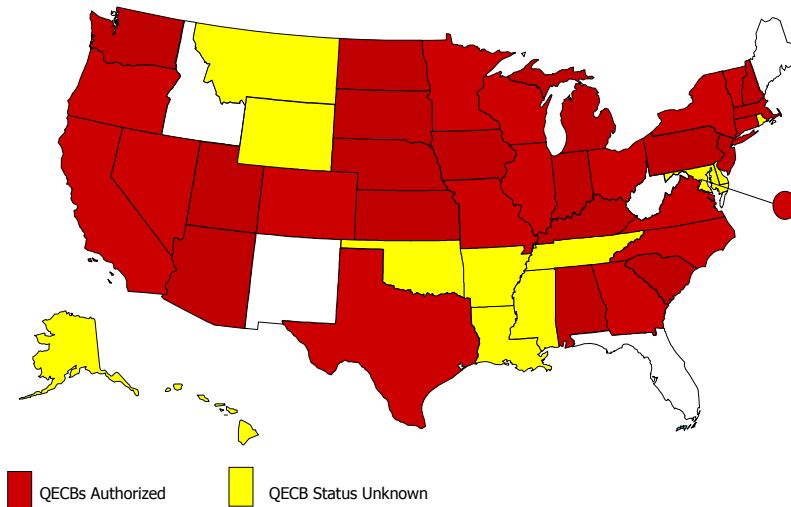
How Were QECBs Allocated?



- The U.S. Treasury allocated QECB issuance capacity to States based on population. State issuance or capacity sub-allocation typically requires an executive order or enabling legislation which has been a political hurdle in some states.
- Each State was tasked with sub-allocating a portion of this issuance capacity to municipalities with populations >100,000. In many states a significant allocation has remained with the state.
- If municipalities do not intend to issue QECBs, they may reallocate issuance capacity back to the State. It is important to note that issuance capacity DOES NOT EXPIRE.



QECB Authorization Status



Qualified Uses of QECB Funds



- Qualified projects are defined broadly and include:
 - Energy efficiency capital expenditures in public buildings that reduce energy consumption by at least 20%
 - Renewable energy production
 - Various energy-related research and development
 - Streetlighting upgrades
 - Efficiency/energy reduction measures for mass transit
 - Green communities programs



Green Communities Programs



- At least 70% of QECB proceeds must be used for public activities. No more than 30% can be used for private business activity or private loan purposes.
- **Green Communities Programs.** Commercial and residential energy efficiency upgrade financing programs qualify as having a 'public purpose' and are exempt from this 30% limitation.



Green Communities Program Examples



- **Boulder County, CO.** Used QECBs to fund ~\$2mm of Commercial PACE assessments in 2010.
- **New York State.** NYSERDA planning ~\$25mm QECB issuance to take out residential loan pool.
- **Saint Louis County, MO.** Launched a \$10 million residential energy efficiency loan program in May 2011 with proceeds from QECB issuance.

QECB Challenges



- **Low QECB volume allocations.** Often too small to attract investors or have reasonable issuance costs.
- **A bond issuance takes several months to structure, market, price and close.** Requires significant investment of time and financial resources and limited to using 2% of proceeds to cover issuance costs.
- **QECBs might strain bond issuance limits for some issuers.**
- **Regulatory uncertainty.** General lack of guidance on complying with regulations (example: 20% savings in public buildings).



Additional Resources & Contact



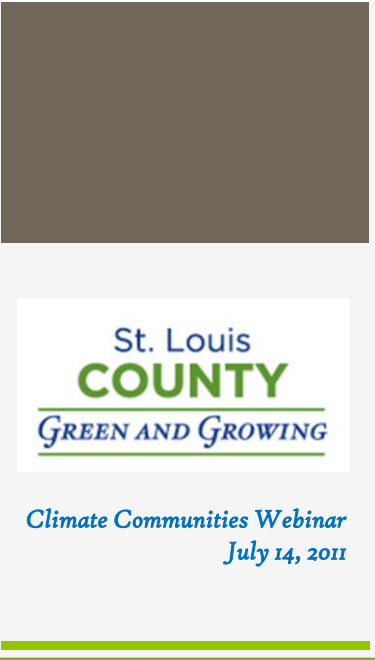
DOE Solutions Center QECB Page (QECB Primer, FAQs, Webcast):
<http://www1.eere.energy.gov/wip/solutioncenter/financialproducts/qecb.html>

LBNL Policy Brief: Using QECBs to Fund Residential Energy Efficiency Loan Programs:
http://eetd.lbl.gov/EAP/EMP/reports/ee-policybrief_062011.pdf

Second DOE QECB Webcast:
<http://www1.eere.energy.gov/wip/solutioncenter/media/Qualified%20Energy%20Conservation%20Bonds-QECBs-Updates%20From%20the%20Field%20Slides.pptx>

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<https://spreadsheets.google.com/a/lbl.gov/spreadsheet/viewform?formkey=dGIFSIU1NFIUNzQ1TIBHSzY2VGZuN1E6MQ>

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Climate Communities Webinar
July 14, 2011

Energy Efficiency & Conservation Block Grant

\$8.4 Million

- Increase energy efficiency
- Reduce energy consumption & costs
- Reduce greenhouse gas emissions
- Create jobs



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PACE is the Answer!



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DOE Alternative to PACE...

- Loan Loss Reserve (LLR)
- Revolving Loan Fund



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County Alternative to PACE...

- \$592,000 of EECBG Funds
- Access to \$10.3 Million Qualified Energy Conservation Bonds (QECBs)
- AAA Bond Rating



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Qualified Energy Conservation Bonds (QECBs)

- Debt instrument to fund energy conservation projects
- Direct Subsidy bonds – 70% cash rebate from U.S. Treasury to subsidize net interest payments
- Missouri received access to \$61,329,000 in QECBs and allocated \$10,307,031 to St. Louis County

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QECBs continued...

U.S. DEPARTMENT OF ENERGY Energy Efficiency & Renewable Energy

QECB Qualified Issuer and Qualified Purpose

QECB	Description
Qualified Issuer	<ul style="list-style-type: none"> • States • Local governments • Entities empowered to issue bonds on behalf of States and local governments
Qualified Conservation Purpose	<p><u>QECBs fund capital expenditures for the following conservation purposes:</u></p> <ol style="list-style-type: none"> 1. Reducing energy consumption in publicly-owned buildings by at least 20% 2. Implementing green community programs (including loans, grants or other repayment mechanisms) 3. Rural development involving the production of electricity from renewable energy resources 4. Any qualified facility 5. Research facilities, research grants and supporting research in <ol style="list-style-type: none"> a) Development of cellulose ethanol or other nonfossil fuels b) Capture and sequestration of carbon dioxide produced by fossil fuels c) Increasing the efficiency of existing technologies for producing nonfossil fuels d) Automobile battery technology or other fossil-fuel reduction technology in transportation e) Technologies to reduce energy use in buildings 6. Mass commuting and related facilities that reduce energy consumption and pollution

2. Implementing green community programs (including loans, grants or other repayment mechanisms)

- While qualified conservation purposes only include capital expenditures, there are exceptions for QECBs used to finance green community programs.
- If the bonds provide funding for loans, grants or other repayment mechanisms for capital expenditures to issue green community programs, they are not treated as private activity bonds.

Slide 17

<http://www.eere.energy.gov/>

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Questions from the “Higher Ups”



- Why not get a Home Equity Loan?
- Doesn't it look bad for us to be helping people who already make six figures?
- Is there really a demand for this?
- What is the County's Liability?

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Home Equity Loan



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Financing Options...

Available Residential Energy Upgrade Financing Programs		
Program	Eligibility Requirements	Participant Benefits
Weatherization Assistance Program (WAP)	Household Income \leq 200% of Federal Poverty Guidelines	Free installation of basic energy efficiency improvements
CDBG - Home Improvement Program	Income \leq 80% Area Median Income	5-Year forgivable loans to make necessary home improvements
Residential Energy Efficiency Loan Program	FICO \geq 660 and Debt-to-Income Ratio \leq 45%	<4% financing

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Public Demand



- Experience of Other Programs
- Local Support for PACE
- Experience of Energize Missouri Homes Program



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County Liability ???



- Default Rates
- Default Rates
- Default Rates

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April 2011...

- County Executive Introduces Bills for the Sale of Bonds and Professional Services Contract
- Council Approves Professional Services Contract
- Council Approves Sale of QECBs
- Hit the Bond Market!!!



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April 19, 2011

- A Great Day to be in the Bond Market!
- Sale Generated Four Bidders – BMO Capital Underwrote the Bonds
- County's Effective Borrowing Rate <1%
- Bond Closing Date Set for May 18, 2011



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ST. LOUIS COUNTY SAVES™

Sustainable and Verifiable Energy Savings

- **LOAN**
Unsecured, personal loan for owner-occupied, single-family homes; \$2,500 - \$15,000
- **ELIGIBILITY**
FICO scores ≥ 660 ; Debt-to-income ratio $<45\%$
- **RATE**
3.5%; APR will vary based on 3% loan origination fee and term
- **TERM**
Flexible up to 10 years

**May 24, 2011
Program
Launched!!!**

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Two Weeks From Launch...

- 66 Approved Loan Applications
- Assume 7,500 average loan size
- \$500,000 in approved loans!!!



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SHPO...

WHICH ONE IS HISTORIC???



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Where we are today...

- 35 Approved Scopes
- Over \$290,000 in Proposed Loans
- Completions are Rolling In!!!



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Questions?

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*We do not inherit the earth
from our ancestors,
we borrow it from our children.*

– Native American Proverb

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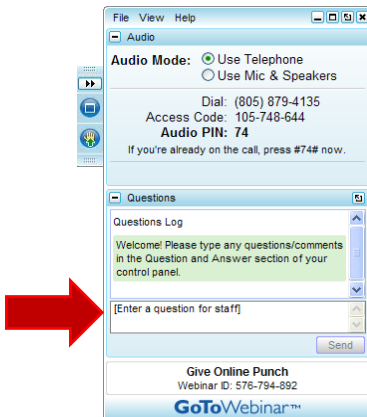


Questions?

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- Participate in weekly webinars, national conferences, & other events
- Share best practices with local governments across America
- Build relationships with key federal decision-makers
- Get strategic guidance on grant opportunities
- Access archived recordings and presentation materials

Email andy@climatecommunities.us for membership details.