

NASEO Briefing Report: **Qualified Energy Conservation Bonds**

An Assessment of the
Challenges, Needs, and Outcomes of
QECBs at the State and Local Levels



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Executive Summary

Qualified energy conservation bonds (QECBs) present a timely opportunity for state and local governments to finance energy efficiency and renewable energy projects and programs. In 2009, Congress increased funding for QECBs to **\$3.2 billion**.¹ As of March 2012, only approximately **\$624 million** or **19.5%** have been issued, leaving over **\$2.5 billion** available for state and local governments to use for projects that can modernize aging infrastructure while promoting economic development and job creation.

In the fall of 2011, the National Association of State Energy Officials (NASEO)² State Energy Financing Committee recognized a potential risk that could impact state and local governments' access to QECBs. As federal funding for energy efficiency and renewable energy comes under heavy scrutiny, this underutilized financing mechanism may face the risk of deauthorization, which would deny state and local governments much-needed longer-term funding to sustain their energy programs.

In response to this need identified by NASEO's Financing Committee, NASEO and its partner, the Energy Programs Consortium (EPC), initiated an effort to better understand the needs and challenges to using QECBs at the state and local level. NASEO and EPC found that at least 101 projects financed with QECBs were completed in 23 states for a total of **\$624 million**. As of February 2012, states reported an additional 41 projects in the pipeline, for an estimated total of **\$140.5 million** pending in issuances.

The majority of these issuances were administered by the state, indicating that aggregating and administering allocations at the state level may achieve certain economies of scale that can help overcome some barriers at the local level. At the same time, state and local governments also cited the need for additional federal guidance to reduce uncertainty and risk in project development. It is critical for state and local governments to work together on deploying QECBs. The State Energy Offices have indicated a strong interest in helping at both the state and local levels.

1 QECBs were first established by the Energy Improvement and Extension Act of 2008, which established QECB issuance capacity at \$800 million. The American Recovery and Reinvestment Act then expanded that capacity to \$3.2 billion.

2 NASEO is the only non-profit organization whose membership includes the governor-designated energy officials from each state and territory. NASEO works to improve the effectiveness and quality of state energy programs and policies, provide policy input and analysis, share successes among the states, and to be a repository of information on issues of particular concern to the states and their citizens.

Background

Qualified energy conservation bonds (QECBs) present a timely opportunity for state and local governments to finance energy efficiency and renewable energy projects and programs. In 2009, Congress increased funding for QECBs to **\$3.2 billion**. At present, only **\$624 million** or **19.5%** have been issued, leaving over **\$2.5 billion** available for state and local governments to use for projects that can modernize aging infrastructure while promoting economic development and job creation.

Because the authority to issue QECBs does not presently sunset and the bonds are highly flexible across energy efficiency and renewable energy projects and programs, QECBs present a unique way for state and local governments to finance projects and programs that meet their distinct needs. Under the authorizing legislation, each state receives a formula allocation, which they then have to allocate to local governments in their state with populations of at least 100,000. QECBs can be issued for any “qualified conservation purpose” as defined by statute.³

Specifically, state and local entities can use QECBs for:⁴

- A) Capital expenditures incurred for reducing energy consumption in publicly-owned buildings by at least **20 percent**, implementing green community programs, rural development regarding electricity production, or any qualified facility.
- B) Expenditures regarding research facilities and grants, supporting research in ethanol or other nonfossil fuels, technologies for the capture and sequestration of carbon dioxide produced through the use of fossil fuels, increasing the efficiency of existing technologies, automobile battery technologies and other technologies to reduce fossil fuel consumption, or technologies to reduce energy use in buildings.
- C) Mass commuting facilities and related facilities that reduce consumption of energy, including expenditures to reduce pollution from vehicles used for mass commuting.
- D) Demonstration projects designed to promote the commercialization of green building technologies, conversion of agricultural waste for use in the production of fuel, advanced battery manufacturing technologies, technologies to reduce peak use of electricity, or technologies for the capture and sequestration of carbon dioxide.
- E) Public education campaigns to promote energy efficiency.

For more detailed information on the specifics of what QECBs are and how to use them, please refer to [EPC's Memorandum](#) on the NASEO State Energy Financing Resources page.

3 Pub.L. 110-343. 122 Stat. 1365 (2008).

4 For more details, please refer to Pub.L. 110-343. 122 Stat. 1365 (2008).



For a number of state and local governments, QECB-financed projects have achieved dramatic results. In Las Vegas, Nevada, the city used a portion of its \$5.9 million allocation to replace 6,600 street lights with LEDs. The project was so successful that the city has developed a proposal to replace an additional 37,000 streetlights for \$18 million, financed through a regular municipal bond. St. Louis County, Missouri issued \$10 million in QECBs, leveraging \$592,000 of Energy Efficiency and Conservation Block Grant (EECBG) funding, to capitalize a residential green community loan program. With this \$10 million loan pool, St. Louis County anticipates providing financing to about 1,400 home energy upgrades, or over 5 times the number of improvements they could have achieved with just their EECBG funds.⁵

Despite these successes, in the fall of 2011, NASEO's State Energy Financing Committee recognized a potential risk that could impact state and local governments' continued access to QECBs. As federal funding for energy efficiency and renewable energy comes under heavy scrutiny, this underutilized financing mechanism may face the risk of deauthorization, which would deny state and local governments much-needed longer-term funding to sustain their energy programs.

In response to this need identified by NASEO's Financing Committee, NASEO and its partner, the Energy Programs Consortium (EPC), initiated an effort to better understand the needs and challenges to using QECBs at the state and local level.

Goals and Objectives

The main goal of the joint NASEO-EPC effort is to aid state and local governments to responsibly and effectively use QECBs for energy efficiency and renewable energy projects and programs and maintain federal funding for QECBs.

To accomplish that goal, NASEO and EPC built on EPC's existing work in this area to:

- Systematically catalogue QECB activities, attitudes, and perceptions at the state and local levels to validate and assess the perceived barriers.
- Identify successful state and local strategies to share with other state and local governments.
- Develop and conduct targeted technical assistance and outreach to state and local governments to accelerate the use of QECBs.

Methodology

Using EPC's research as a starting point,⁶ NASEO and EPC conducted a comprehensive outreach effort to all states and territories. NASEO and EPC's efforts focused on verifying information that EPC had gathered from public issuance documents and information received from Wells Fargo, finding new information on privately-placed issuances for which public records are unavailable, and determining the scale of issuances and projects under development.

In December 2011 and January 2012, NASEO and EPC reached out to all 56 State and Territory Energy Offices to gather this information and to understand their roles in utilizing QECCBs in their state. In states where the State Energy Office is not the designated state agency administrator for QECCBs, NASEO and EPC followed-up with other state contacts as appropriate. Additionally, NASEO and EPC corresponded with a number of local governments. As a final step in this process, NASEO and EPC conducted one-on-one interviews with over a dozen state and local governments to gain better insight on barriers or delays related to allocating and issuing QECCBs in that state, as well as understanding how a state overcame such barriers or delays.⁷

Through this effort, NASEO and EPC systematically collected information from state and local governments in such areas as allocations and issuance amounts, issuance dates, whether bonds were publicly or privately placed, and the use of these bonds.

Project Results

NASEO and EPC found that at least 101 projects financed with QECCBs were completed in 23 states for a total of **\$624 million**. As of February 2012, states reported an additional 41 projects in the pipeline, for an estimated total of **\$140.5 million** pending in issuances.

Of the completed issuances, 35 projects for **\$172.9 million** came from local government suballocations, and 66 projects for **\$451 million** came from state-administered allocations, as seen in Figures 1 and 2. This indicates that state involvement can benefit the increased use of QECCBs.

6 [EPC QECCB Memorandum](#), February 6, 2012.

7 For a full list of interviews, please see the References section.

Figure 1: Number of Projects (by percentage)

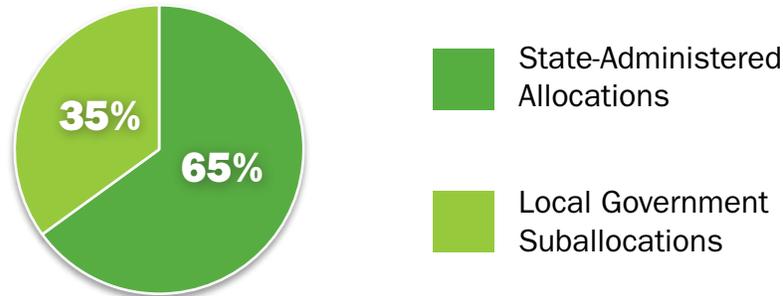
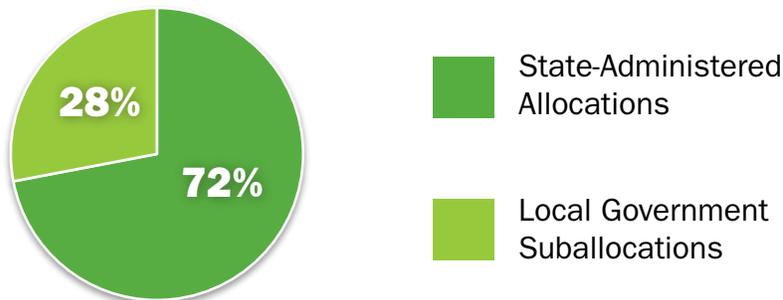


Figure 2: Amount of Funding (by percentage)



State and Local Barriers and Opportunities

For state and local governments, a number of challenges contribute to the underutilization of QECBs. First, suballocations to local governments may be too small to issue cost-effectively; frequently, the project development and transaction costs offset the benefit of the federal subsidy. This is especially pronounced in states with many local communities of populations over 100,000 and where the state's QECB pie had to be sliced into many pieces.

Second, debt aversion in a weak economy at the state and local levels is another commonly cited challenge. For those localities who may be pursuing projects funded by public bonds, other public priorities may sometimes supersede energy efficiency and renewable energy projects.

Lastly, there is a pervasive lack of familiarity with this new bonding mechanism. State energy offices may be unfamiliar with administering and issuing bonds, and traditional state bonding authorities may lack expertise in developing energy projects and may be uncertain how to measure **20%** energy savings to meet the QECB requirements. These knowledge gaps can be even more pronounced at small local governments.

In each of these areas, aggregating bond volume and centralizing administration at the state level may help alleviate certain challenges. Local governments do have the option to waive their allocations back to the state. In states where many local governments exercised this option, the state allocation pool expands, which allows the state to either develop a larger state issuance or to reallocate QECBs in greater, more cost-effective amounts to local entities for larger projects. In this way, the state can help achieve economies of scale and overcome higher transaction costs. Based on NASEO and EPC's research, **72%** of issuances to date resulted from state aggregation and administration.

With this approach, state governments can also shift resources from local governments who either cannot (because of bond volume caps) or choose not to issue QECBs (due to debt aversion or other priorities) to other local governments who can benefit. Finally, streamlining QECB administration at the state level can also facilitate information-sharing and access to expertise to help local governments move more quickly over the learning curve.

National Barriers and Opportunities⁸

Currently, vague language in the legislation and uncertainty surrounding the definition of “green communities,” a recognized methodology for assessing the 20% energy savings requirement, and an accepted process for local governments to waive their allocations back to the state are preventing state and local governments from moving more quickly on QECBs. To seek resolution on these issues, a coalition led by the Clean Economy Development Center (CEDC) and comprised of NASEO, EPC, and other stakeholders has been developing recommendations to the White House Council on Environmental Quality and U.S. Treasury to address these three specific challenges.⁹

⁸ For a fuller discussion of state, local, and national barriers, please refer to NASEO's [Summary of Barriers for Increasing QECB Activity](#).
⁹ CEDC, NASEO, and EPC submitted a [petition to the White House](#) requesting more guidance on the “green communities” definition and methodology for meeting the 20% energy savings requirement on January 12, 2012. Since then, additional requests have been made to U.S. Treasury requesting guidance on a process for local government allocation waivers to the state.

Conclusion

In summary, while QECBs have demonstrated the potential to make considerable impact, due to the barriers noted above, current activity has remained at modest levels. To unlock the full opportunity, more dedicated efforts are needed to familiarize and support state and local governments in using QECBs, aid states to operate an optimal program that administer pools of QECB allocations that are large enough to overcome inherent transaction costs to issuances, and press for clear federal guidance.

About NASEO's State Energy Financing Committee

[The State Energy Financing Committee](#) was established to help State and Territory Energy Offices overcome challenges in financing program design and implementation. The committee provides peer-to-peer exchange by sharing state experiences, approaches, and model documents; coordinates with U.S. Department of Energy and other federal technical assistance efforts; and facilitates private sector financing strategies in collaboration with the states. Jeff Pitkin, Treasurer, New York State Energy Research and Development Authority (NYSERDA), serves as chair of the committee.

Additional Resources

[QECCB - State Financing Energy Resources](#)

NASEO created the State Financing Energy Resources as a collection of documents, including QECCBs and samples used by states and territories for financing projects.

[State Financing Energy Resources](#)

This collection of documents and samples used by states and territories for financing projects includes information on loan loss reserves, property assessed clean energy, revolving loan funds, and other resources.

[State Energy Loan Fund \(SELF\) Database](#)

NASEO created the SELF database as a resource for reviewing and analyzing various State and Territory Energy Office revolving loan programs. The database contains loan statistics on funding source, size, and focus.

About the Energy Programs Consortium

The Energy Programs Consortium is a joint venture of the National Association of State Community Services Programs (NASCCSP), representing the state weatherization and community service programs directors; National Association of State Energy Officials (NASEO), representing the state energy directors; National Association of State Regulatory Utility Commissioners (NARUC), representing the state public service commissioners; and National Energy Assistance Directors' Association (NEADA), representing the state directors of the Low-Income Home Energy Assistance Program. The purpose of EPC is to foster coordination and cooperation among state and federal agencies in the areas of energy policy and program development.

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