

CLEAN ENERGY FINANCE GUIDE, THIRD EDITION

DECEMBER 9, 2010

Chapter 2.

Possible Bonding Options for Energy Efficiency and Renewable Energy Financing Programs

CLEAN ENERGY FINANCE GUIDE, THIRD EDITION**Chapter 2.****Possible Bonding Options for Energy Efficiency and Renewable Energy Financing Programs**

Chapter 1 described a number of sources of capital to support clean energy financing programs. This chapter expands on Chapter 1 by focusing specifically on bonding options. The first section begins with an introduction to traditional tax-exempt and taxable bonds, and then describes in more detail a suite of new bonding tools that came about as a result of the American Recovery and Reinvestment Act of 2009 (ARRA). The second section of this chapter focuses more specifically on Qualified Energy Conservation Bonds (QECBs) as a specialized mechanism to fund clean energy projects.

SECTION I**A. Existing Public Bonding Options*****Tax-Exempt Bonds***

Traditionally, state and local governments, as well as certain other nonprofit organizations such as universities and hospitals, have had the ability to issue debt for capital expenditures in the form of bonds. Bonds are debt instruments issued by a state or local government (or another eligible entity or instrumentality) that are either sold in the public market, placed with investors by an investment banking firm, or purchased directly by a bank. If the bonds are issued for a specified public purpose, the bond purchasers do not have to pay federal income tax on the interest income received from those bonds, as long as certain tax rules are met. Such bonds are referred to as tax-exempt bonds. Interest on the bond may also be exempt from state and local income taxes. As a result, tax-exempt bonds historically carry an interest rate to the borrower that is lower than comparable taxable debt.

Tax-exempt bonds could be used by a government entity to fund the capital expenditures for energy efficiency improvements in public buildings, but could not, in most cases, be used to fund privately owned energy efficiency upgrades on private residences or businesses.

Private Activity Bonds

Although tax-exempt bonds typically may not be issued for the benefit of private parties (i.e., the proceeds may not be loaned to private parties or used for a private purpose), there are limited exemptions to this rule. Exemptions include various “exempt facilities” that may be owned by private parties, including solid waste disposal and recycling facilities undertaking a public function, even if privately owned. Such bonds are referred to as private activity bonds, or PABs. In addition to the traditional categories of PABs, the Recovery Act created other types of bonds including Recovery Zone Facility Bonds and Qualified Energy Conservation Bonds. They and other similar instruments are similar to tax-exempt bonds and may be used for the benefit of private parties under certain conditions. Examples of those types of bonds are described in more detail in Section B below.

Taxable Bonds

The same entities that may issue tax-exempt bonds for capital expenditures for public purposes may also issue taxable debt for private purposes. For example, a municipality could issue bonds to provide funds that are then lent to private individuals to fund energy efficiency improvements to private property. In

such a case, the bond purchasers would be subject to the payment of federal income tax on the interest income received from those bonds.

B. New Bonding Tools

The Recovery Act provided for a variety of new and expanded public financing options that offer greater flexibility for recipients of ARRA funds in leveraging grant funds and obtaining additional capital for financing energy efficiency or renewable energy than was possible prior to the passage of ARRA. The following table provides an overview of whether the proceeds of each bond may be used for private purposes or to fund projects owned by private individuals. The allocation process and deadlines related to each type of bond selected are listed along with additional details on each bonding tool. Although some of the options summarized below are scheduled to either expire or be fully allocated shortly unless extended or expanded by Congress, the tools are useful to understand because successful programs are often extended, expanded, or copied in future legislation.

Table 2.1 Summary of Bonding Tools Available for Financing Energy Projects

Type of Bond	Private Use Allowed?	Allocation Process	Expiration Date
<i>Tools Still Current</i>			
Qualified Energy Conservation Bonds	Yes, up to 30% of allocation. No limit for "Green Community Programs"	\$3.2 billion allocated by population to states and large localities (100,000+)	No expiration date
New Clean Renewable Energy Bonds	No	\$1.6 billion allocated to governmental bodies, municipal utilities, and cooperative electric companies	Valid for 3 years after allocation received
<i>Tools Expired or Soon to Expire</i>			
Build America Bonds	No	No state or national limit	Dec. 31, 2010
Recovery Zone Facility Bonds	Yes, must be located in Recovery Zones	\$15 billion national cap allocated within states at county level based on job losses from Dec. 2007–Dec. 2008	Dec. 31, 2010
Recovery Zone Economic Development Bonds	No, must be located in Recovery Zones	\$10 billion national cap allocated within states at county level based on job losses from Dec. 2007–Dec. 2008	Dec. 31, 2010

The following types of bonds may be available to finance energy efficiency and renewable energy projects sponsored by Energy Efficiency and Conservation Block Grant (EECBG) Program and State Energy Program (SEP) recipients.

1. Build America Bonds

- a. Build America Bonds are a new type of bond whereby issuers may elect for governmental bonds to be issued as taxable bonds, with the bondholder to receive a federal income tax credit equal to 35% of interest payable, each year for the life of the bonds. (See also Recovery Zone Economic Development Bonds below). This type of bond is known as a tax credit bond.
 - (i) Build America Bonds may be issued only in 2009 and 2010.
 - (ii) The bond interest and credit are treated as taxable interest for federal income tax purposes (similar to other tax credit bond provisions). However, as a “transitional measure,” ARRA requires states to treat the bond interest and credit as exempt from federal income tax for purposes of state income tax (thus excluding the interest from state taxable income in states that use the definition of federal taxable income as their base, subject to adjustments for add-back of bond interest from outside the state).
 - (iii) Private activity bonds, including 501(c)(3) bonds, are not eligible for the Build America Bond provisions.
- b. **Issuer Credit Election.** The issuer may make a second election to have the credit paid to it rather than to a bondholder.
 - (i) The credit will be paid to an electing issuer as a “refundable credit” regardless of the fact that the issuer does not pay tax.
 - (ii) Other than amounts in a reasonable required reserve fund, proceeds of bonds for which the refundable credit is elected must be used for capital expenditures (i.e., no use of proceeds for operating deficits).
 - (iii) The refundable credit will be payable for the life of the bonds.
- c. **Application to Energy Financing Programs.** Build America Bonds could provide funding for projects to be owned by a public entity, but may not finance improvements owned by or for the direct benefit of private parties.

2. Qualified Energy Conservation Bonds

- a. Qualified energy conservation bonds (QECBs) are tax credit bonds the proceeds of which are used for “qualified conservation purposes,” with a broad definition including capital expenditures, research grants, and demonstration projects that implement or develop “green” energy technology that reduces greenhouse gas emissions. (See Section II below for more on QECBs.)
 - (i) The tax credit for QECBs is 70% of the amount deemed necessary to market the QECBs at par value.
 - (ii) QECBs were initially created in 2008 with a one-time \$800 million national limitation. ARRA increased that amount to a total of \$3.2 billion limitation, allocable among the states by the U.S. Department of the Treasury (U.S. Treasury) on the basis of population.
 - (iii) Up to 30% of a state’s QECB allocation may be used for private activity bonds (PABs). ARRA states that QECBs will not be treated as PABs if the bond proceeds are used for capital expenditures to implement “green community programs” aimed at reducing energy consumption in private buildings. In other words, 100% of a QECB allocation may be used for green community programs, even if the beneficiaries of those programs are private parties.

(iv) H.R. 2847, passed in March 2010, entitles the bond issuer to make an irrevocable election to receive a direct payment from the U.S. Treasury rather than allowing the tax credit to accrue to the bondholder. The direct payment comes in the form of a refundable tax credit to the issuer in lieu of a tax credit to the bondholder.

- b. **Application to Energy Financing Programs.** QECBs may provide funding for projects to be owned by a public entity and, subject to the limits stated above, may also be used for similar projects owned by or for the direct benefit of private parties.

3. New CREBs

- a. New clean renewable energy bonds (New CREBs) are tax credit bonds the proceeds of which are used for capital expenditures incurred by governmental bodies, public power providers, or cooperative electric companies for a “qualified renewable energy facility.”
- (i) Qualified renewable energy facilities include those that generate electricity from the following resources: wind, closed-loop biomass, open-loop biomass, geothermal, small irrigation, hydropower, landfill gas, marine renewable, and trash combustion facilities.
- (ii) CREBs have been authorized since 2005. New CREBs replaced CREBs in 2008; the 2008 legislation reduced the amount of the credit to 70% of the amount deemed necessary to enable the New CREBs to be marketed at par.
- (iii) ARRA provides for a one-time \$1.6 billion additional limitation, allocable by the U.S. Treasury as one-third to state, local, and tribal governments, one-third to public power providers, and one-third to electric cooperatives. The IRS is not currently accepting applications for allocations, having essentially allocated the full amount of New CREBs. If allocations are unused, they may become available in the future.
- (iv) Similar to the option described above for QECBs, after March 18, 2010, issuers of New CREBs may elect to receive a direct payment from the U.S. Treasury equivalent to and in lieu of the nonrefundable tax credit that would otherwise be provided to the bondholder.
- b. **Application to Energy Financing Programs.** New CREBs could provide funding for projects to be owned by a public entity, municipal utility, or cooperative electric company, but may not finance improvements owned by or for the direct benefit of private parties.

4. Recovery Zone Facility Bonds

- a. Only a state, tribal, or local government—or an economic or industrial development authority authorized by a state or local government unit to issue bonds—can issue a tax-exempt Recovery Zone Facility Bond. Neither a bank nor a borrower can issue debt on its own and qualify it as tax-exempt debt.
- (i) Recovery Zone Facility Bonds (RZFBs) may be issued only in 2009 and 2010.
- (ii) The governmental issuer typically loans the proceeds of the bonds to a business, passing on the lower interest rate. Tax-exempt bonds may be issued for 120% of the average useful life of the capital investment, and it may also be possible to issue tax-exempt bonds to finance nearly 100% of the transaction.
- (iii) Retail, commercial, industrial, manufacturing, and agricultural businesses qualify. Certain business activities are not qualified to use Recovery Zone Facility Bond financing, including businesses that rent residential rental property (defined as a project where 80% or more of the

- gross rental income is derived from the rental of dwelling units), country clubs, massage parlors, hot tub facilities, suntan facilities, golf courses, racetracks, or gambling facilities.
- (iv) Bond proceeds can be used to construct a building, renovate an existing building or equipment, acquire new equipment or a new building not yet placed in service by another taxpayer, and acquire used equipment not previously used in the Zone. However, bond proceeds can be used to acquire an existing building only if an amount equal to 100% of the adjusted basis of the property or \$5,000, whichever is greater, is spent to recondition or rehabilitate the building within a 2-year period. Until further guidance from the Internal Revenue Service (IRS), proceeds cannot be used to acquire land.
 - (v) All projects must be located in a designated recovery zone. Recovery zones include (a) any area designated by an issuer as having significant poverty, unemployment, home foreclosures, or general distress; (b) existing empowerment zones or renewal communities; and (c) areas designated by an issuer as distressed by reason of the closure or realignment of a military installation pursuant to the Defense Base Closure and Realignment Act of 1990. Many localities have designated entire jurisdictions (counties, etc.) as recovery zones.
- b. **Application to Energy Financing Programs.** Recovery Zone Facility Bonds may provide funding for projects to be owned by a public entity or may also be used for similar projects owned by or for the direct benefit of private parties.

5. Recovery Zone Economic Development Bonds

- a. Recovery zone economic development bonds (RZEDBs) are a special class of Build America Bonds discussed above, but the credit amount is 45% of bond interest.
 - (i) RZEDB proceeds, other than those in a reasonably required reserve fund, must be issued for promoting development or other economic activity in a recovery zone through capital expenditures, expenditures for public infrastructure and construction of public facilities, and job training and educational programs.
 - (ii) “Recovery zones” include (a) any area designated by an issuer as having significant poverty, unemployment, home foreclosures, or general distress; (b) existing empowerment zones or renewal communities; and (c) areas designated by an issuer as distressed by reason of the closure or realignment of a military installation pursuant to the Defense Base Closure and Realignment Act of 1990.
 - (iii) Private activity bonds, including 501(c)(3) bonds, are not eligible for the Recovery Zone Economic Development Bond provisions.
- b. **Application to Energy Financing Programs.** Recovery Zone Economic Development Bonds could provide funding for projects to be owned by a public entity, but may not finance improvements owned by or for the direct benefit of private parties.

C. Possible Combination of Bonding Tools and Federal Grant Funds

It is possible to combine several of the tools listed above with federal grant funds such as EECBG or SEP funds. For example, a solar project in Salt Lake County, Utah, is currently planning to issue qualified energy conservation bonds to be combined with EECBG funds and other U.S. Department of Energy (DOE) grant funds as a loan to a private solar developer. The private developer will contribute additional equity to complete the project. After the tax credit period has expired, Salt Lake County could exercise an option to purchase the equipment at a substantial discount compared with the original construction cost

just a few years earlier, and the low-cost debt will help reduce the cost for power the County pays to the private project developer. The QECB proceeds may be loaned to the private developer because only 30% of the County's allocation is being used for this purpose, and up to 30% of the QECB allocation may be used for a PAB as long as the bond proceeds are used for a qualifying purpose (solar power projects qualify).

Proceeds from QECBs could also be used in conjunction with EECBG funds or other state or federal grant funds to provide financing for either public or private energy efficiency retrofit programs. Private energy efficiency programs designed as green community programs under the QECB guidelines would not be subject to the 30% PAB limitation. Because of the small number of QECBs issued, however, complying with the program guidelines can be challenging, and competent bond counsel and other financial advisors should be consulted.

Additional Information

IRS Releases Guidance on ARRA Bond Provisions
www.irs.gov/taxexemptbond/article/0,,id=206034,00.html

SECTION II

Frequently Asked Questions on Qualified Energy Conservation Bonds (QECBs)

The answers to these Frequently Asked Questions (FAQs) are for informational purposes only and do not represent formal guidance or approval from the U.S. Department of the Treasury.

A. The Basics

1. What are qualified energy conservation bonds (QECBs)?
2. What is a qualified issuer?
3. Why are QECBs attractive?
4. Where did QECBs come from?
5. How are QECBs allocated?
6. What is a qualified energy conservation project?
7. Who decides what constitutes a qualified project?
8. What is a green community program?
9. Why does the green community designation matter?
10. What are some of the challenges to issuing QECBs?

B. QECB Rates and Terms

11. How does the direct payment cash subsidy work?
12. What is the qualified tax credit rate (QTCR)?
13. What is the longest allowable maturity for QECBs?
14. How can QECBs be secured?
15. Can building energy efficiency savings be used to secure QECBs?
16. How can QECBs be structured?
17. Which is better, a tax-exempt bond with a tax credit subsidy paid to the investor or a taxable bond with a cash subsidy paid to the issuer?
18. What interest rate can issuers generally expect to pay on QECBs?
19. What is the minimum QECB issuance size that is attractive to investors?

20. How can ARRA funds be used to support a QECB issuance?
21. Can ARRA funds be combined with QECB bond proceeds for use in specific projects?
22. Can QECBs be pooled and how might pooling affect interest rates or other bond terms?
23. How many QECBs have been issued as of fall 2010, and where?
24. Which websites provide DOE Guidance on QECBs?

C. Additional Rules and Regulations

25. Do Davis-Bacon Act prevailing wage requirements or NEPA requirements apply to QECB-financed projects?
26. What are the limitations on using QECBs to support private-sector clean energy activity?
27. Is there a limit on the amount of bond proceeds that can be used to pay QECB issuance costs?
28. Is there any risk that the federal government will stop appropriating the QECB subsidy in future budgets?
29. When does QECB issuance capacity expire?
30. How long do issuers have to spend bond proceeds after QECBs are issued?
31. Where can I find more information on QECBs?

A. The Basics

1. What are qualified energy conservation bonds (QECBs)?

QECBs are debt instruments; they are not grants. “Qualified issuers” can issue QECBs to fund “qualified energy conservation projects.” The bonds may be structured as either a “tax credit” bond in which the bondholder receives a tax credit as a part of its return together with taxable interest, or a “direct payment subsidy option” in which the bondholder receives taxable interest and the issuer receives a direct subsidy (Direct Payment) from the U.S. Treasury for a portion of the interest paid to the bondholder. Virtually all QECBs are expected to be issued using the direct payment subsidy due to the relative benefits of these options and the lack of investor appetite for tax credit bonds. For that reason, only the direct payment subsidy option (Direct Pay QECBs) will be described in detail below.

2. What is a qualified issuer?

A qualified issuer is a state, local, or tribal government that has been allocated the right to issue QECBs by the federal government. Local governments include municipalities and unincorporated counties. Under the federal tax rules, certain authorities may issue the QECBs on behalf of state, local, and tribal governments.

3. Why are QECBs attractive?

QECBs reduce borrowing costs for qualified issuers. Simply put, QECBs are among the cheapest public financing tools. The Direct Pay QECBs are directly subsidized by the U.S. Treasury, allowing issuers to raise funds at very low interest rates. The subsidy comes in the form of a cash payment, treated for federal income tax purposes as a refund of taxes, with which issuers recoup part of the interest they pay on the QECBs.

4. Where did QECBs come from?

QECBs were established by The Energy Improvement and Extension Act of 2008 (EIEA). EIEA authorized the issuance of \$800 million in the principal amount of QECBs. ARRA expanded the issuance capacity from \$800 million to \$3.2 billion. QECBs were initially structured as tax credit bonds. In 2010,

the Hiring Incentives to Restore Employment Act (HIRE) introduced the option to recoup part of the interest issuers pay on QECBs through a direct subsidy from the U.S. Treasury rather than a tax credit to the bondholder.

5. How are QECBs allocated?

The U.S. Treasury allocated \$3.2 billion of QECB issuance capacity to states based on population. Each state is required to allocate issuance capacity to municipalities with populations above 100,000 based on the municipality's percentage of total state population (based on 2008 population figures). For example, if a municipality has 150,000 residents and the state has 1.5 million residents, the state must allocate 10% of its QECB issuance capacity to the municipality. If the municipality does not intend to issue QECBs, it may reallocate its issuance capacity back to the state. Procedures for the reallocation back to the state (and deadlines for doing so) vary by state.

6. What is a qualified energy conservation project?

The EIEA permits QECBs to fund capital expenditures for the following conservation purposes:

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. Developing rural capacity, specifically involving the production of electricity from renewable energy resources.
4. Improving any "qualified facility," including for example, solar, wind energy, geothermal and biomass facilities.
5. Supporting research facilities, research grants, and research in the—
 - a. Development of cellulosic ethanol or other nonfossil fuels
 - b. Capture and sequestration of carbon dioxide (CO₂) produced by fossil fuels
 - c. Expanded 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. Implementing mass commuting and related facilities that reduce energy consumption and pollution.
7. Designing/running demonstration projects to promote the commercialization of—
 - a. Green building technology
 - b. Conversion of agricultural waste to fuel
 - c. Advanced battery manufacturing technologies
 - d. Technologies to reduce peak use of electricity
 - e. Technologies for the capture and sequestration of carbon dioxide produced from making electricity.
8. Launching public education campaigns to promote energy efficiency.

7. Who decides what constitutes a qualified project?

QECBs will be issued with an opinion of bond counsel that the bonds qualify as QECBs and that the issuer will receive the Direct Payment. The opinion will be conditioned on the issuer (and conduit borrower, if applicable) meeting the requirements for qualification throughout the term of the QECBs. The IRS may conduct an audit at any time the bonds are outstanding (plus 3 years) to determine whether a project constitutes a Qualified Energy Conservation Project.

8. What is a green community program?

A green community program is an undefined statutory term. The Conference Report to ARRA includes the following statement regarding Congressional intent about the broad intended scope of this term:

"Also, the provision clarifies that capital expenditures to implement green community programs include grants, loans, and other repayment mechanisms to implement such programs. For example, this expansion will enable States to issue these tax credit bonds to finance retrofits of existing private buildings through loans and/or grants to individual homeowners or businesses, or through other repayment mechanisms.... Retrofits can include heating, cooling, lighting, water-saving, storm water-reducing, or other efficiency measures" (February 12, 2009 *Congressional Record* – HOUSE H1473)

9. Why does the green community program designation matter?

A maximum of 30% of QECB allocations may be used for private business activity or private loan purposes. However, green community programs, which can finance retrofits on private and public property, are designated as "public activities." As such, there is no limit to the percent of QECB funds that may be allocated to qualifying green community programs.

10. What are some of the challenges to issuing QECBs?

Potential challenges to issuing QECBs include the following:

- Low QECB volume allocations to local governments may be insufficient to whet investor appetite.
- Taxable investors have not typically invested in municipal bonds, and they may be unfamiliar with municipal credits. Other municipal taxable bonds, such as Build America Bonds, which became available in 2009, have helped address this challenge by familiarizing the taxable investor base with municipal securities.
- QECB bond issuances may take several months to structure, market, price, and close.
- QECBs may strain state or local debt limits for some issuers (government entities).

B. QECB Rates and Terms

11. How does the direct payment cash subsidy work?

The U.S. Treasury pays the QECB issuer the lesser of (a) the taxable interest rate of the bonds or (b) 70% of the qualified tax credit rate (QTCR) as of the bond sale date. That Direct Payment is paid directly to issuers contemporaneously with the scheduled debt service payments to the bondholders if the issuer properly files for the Direct Payment. The Direct Payment reduces the NET interest rate that issuers pay to the investors. (See example below.)

For example, assume the interest rate to holders is 5.50% and the QTCR is 5.00%:

- 5.50% – Taxable interest rate paid by the bond issuer to the investor (taxable interest rate)
- 3.50% – Cash subsidy from U.S. Treasury (70% of 5.0% QTCR) to the issuer (Direct Payment)
- 2.00% – NET interest rate paid by issuer to investor (taxable interest rate minus cash subsidy)

12. What is the qualified tax credit rate (QTCR)?

The QTCR is set daily by the U.S. Treasury and can be found at <https://www.treasurydirect.gov/GA-SL/SLGS/selectQTCDDate.htm>

13. What is the longest allowable maturity for QECBs?

The U.S. Treasury sets the maximum maturity on a monthly basis. The current allowable maturity can be found at <https://www.treasurydirect.gov/GA-SL/SLGS/selectQTCDDate.htm>

Issuers can choose to issue bonds of any maturity *up to* the maximum maturity. The rate is set so that the present value of principal payments equals 50% of the original principal amount.

14. How can QECBs be secured?

The tax rules do not determine how QECBs will be secured. As debt of a municipal issuer, QECBs would generally be secured in one of three ways: revenues, a general obligation from the issuer, or with collateral.

- **Revenues:** Revenue bonds are secured by a specific revenue stream (of the government issuer)—to the extent the revenue stream is not sufficient to pay back the principal and interest on a bond, the issuer is not liable for the shortfall. Revenues could include loan payments from a private business if the QECBs were issued within the permitted 30% of private activity bonds.
- **General Obligation:** A general obligation bond is backed by the full faith and credit of the government issuer.
- **Collateral:** A bond secured with collateral, typically either specific equipment or property(ies), provides investors with the right to ownership of that collateral should the bond principal and interest not be paid.

Recent experiences with the QECBs that have been issued so far—in Boulder, Colorado; Rochester, New York; Utah County, Utah, and Tucson, Arizona—demonstrate that, if the QECB is initially secured by revenues or by collateral, investors might also require a “backstop” general obligation from the issuer.

In some cases, bondholders may require a debt service reserve fund. No QECB bond proceeds can be used (directly or indirectly) to fund a debt service reserve fund.

15. Can building energy efficiency savings be used to secure QECBs?

While energy efficiency savings may be used to repay QECBs, investors have not traditionally accepted these savings as bond security, on their own. Investors have, however, accepted energy efficiency savings backed by a performance guarantee (typically from an Energy Service Company or ESCO), although investors may still require the “backstop” general obligation from the issuer as described above.

16. How can QECCBs be structured?

QECCBs can generally be structured in three ways—as bullet bonds, serial bonds, or term bonds.

- Issuers of bullet bonds pay only the interest during the life of the bond and pay back all of the principal at maturity.
- Serial bonds are structured so that a portion of the bond matures at regular intervals, thus both interest and principal are paid back during the life of the bond.
- Term bonds are a combination of bullet bonds and serial bonds. The issuer has scheduled principal payments but provides for mandatory sinking fund redemptions, generally by lot, of a specified amount leading up to the term maturity. In any of these structures, the issuer can negotiate call provisions. Call provisions give the bond issuer the right to purchase (or call) part or all of a bond issue at specified times. Whether call provisions are included in a bond's structure is a matter of negotiation between the bond issuer and the investor.

Government issuers of bonds are allowed to establish a principal sinking fund to support a bullet or term bond. A principal sinking fund is a fund into which the issuer deposits money that will eventually be used to pay the principal of a bond issuance. Typically, the issuer makes regular payments into the sinking fund and uses the balance to pay off bond principal either at maturity or at times specified during issuer/investor negotiations that occur prior to bond issuance. Under the federal tax rules, there are limits on the amount of the deposits that can be placed into the sinking fund for a QECCB and the investment yield on the sinking fund.

On a related note, it is not clear whether issuers get any credit for the value of the direct pay subsidy. Credit agencies, for example, do not take the direct pay subsidies into account when determining the likelihood of repayment, even though the direct pay subsidy payments can go directly to repay the bond funds. In other words, using the example above in FAQ 11, credit agencies currently would treat the bonds as if the interest rate were the 5.5% taxable rate instead of the 2% net interest rate paid by the issuer.

17. Which is better, a tax-exempt bond with a tax credit subsidy paid to the investor or a taxable bond with a cash subsidy paid to the issuer?

In theory, a tax-exempt bond and tax credit bond with a direct cash subsidy provide the same ultimate benefit to state, local, and tribal governments—they both reduce borrowing costs. However, the tax credit bond subsidy was intended to provide an even greater subsidy and to open up the market for municipal debt. There are advantages and disadvantages to issuing taxable bonds like QECCBs.

- **Advantage:** Taxable bond issuers have access to the much larger taxable bond market instead of being forced to market bonds solely to tax-exempt municipal investors (i.e., those who may benefit from interest income that is exempt from federal income tax. Such a group excludes pension funds, nonprofit foundations, and foreign investors that do not benefit from exempt income.).
- **Disadvantage:** Taxable bond investors are less familiar with public credits than are their counterparts, the tax-exempt bond investors. As noted earlier, Build America Bonds have increased investor understanding of public credits; however, demand for these securities is still limited by low investor awareness. Similarly, the original version of the tax credit bonds, which provided investors with a credit against federal income tax liability, was also expected to attract the taxable investor.

A key motivation in 2010 for allowing issuers to structure QECBs as direct cash subsidy bonds was that, given the economic downturn, few investors had taxable income against which to apply the tax credits.

18. What interest rate can issuers generally expect to pay on QECBs?

Interest rates will vary based on the credit strength of the issuer and on the security offered for the QECB (i.e., revenues, general obligation, or collateral), market conditions, and bond terms (length, call provisions, etc). Typical net interest rates for the limited number of Direct Pay QECBs issued thus far, however, have been at or below 2%.

19. What is the minimum QECB issuance size that is attractive to investors?

There is no rule of thumb for a minimum QECB issuance size that investors will accept although larger bond issuances typically garner more attractive interest rates. State, local, and tribal governments should contact bond underwriters or financial advisors for more information on current market conditions.

20. How can ARRA funds be used to support a QECB issuance?

ARRA monies can be used to support QECB issuances by funding a debt-service reserve fund, a capitalized interest fund, and/or a principal sinking fund. Those funds can reduce risk to the issuer, the investor, or both—and, in so doing, can reduce the bond interest rate. A *debt service reserve fund* is used to repay principal and interest in the event that the issuer is unable to pay (or, to the extent a bond is not supported by a general obligation, in the event that revenues or collateral value are insufficient). A *capitalized interest fund* is used to make bond interest payments during construction and stabilization of the project. A *principal sinking fund* is used to make bond principal payments. Earnings on amounts held as a debt service reserve fund, even if funded by ARRA funds or other equity of an issuer, are subject to rebate to the U.S. Treasury unless the reserve fund meets the special sinking fund limitations described herein.

When grantees use ARRA funds to support the issuance of QECBs, those funds are subject to the same obligation, drawdown, and federal identity requirements as loan loss reserve funds and revolving loan funds. The following websites offer DOE Guidance on using ARRA funds to support QECBs:

EECBG Guidance

www1.eere.energy.gov/wip/pdfs/final_eecbg_guidance_qecbs_crebs.pdf

SEP Guidance

www1.eere.energy.gov/wip/pdfs/final_sep_guidance_qecbs_crebs.pdf

21. Can ARRA funds be combined with QECB bond proceeds for use in specific projects?

As long as the specific conditions of the ARRA funds are satisfied and the project is a qualified energy conservation project, grantees may combine QECB bond proceeds with other ARRA funds to support specific projects. For example, in some cases, funds can be combined to be either loaned or granted to private project developers to implement energy efficiency or renewable energy projects. By making these funds available to private developers at low cost, the grantees may benefit indirectly from various tax and other financial incentives as a result of lower overall project costs.

22. Can QECBs be pooled, and how might pooling affect interest rates or other bond terms?

The answer to this question depends on two factors. The first is whether, under state law, localities can issue bonds on behalf of other localities. Some states explicitly allow this, for example, through interlocal

government agreements. If the issuance is large enough, even with separate issuances, localities may benefit from economies of scale through informal bundling of the transaction.

The second factor is whether, under QECB regulations, a jurisdiction is permitted to issue QECBs, the proceeds from which are used in another jurisdiction. QECB rules allow funds to be issued for another jurisdiction *if* the proceeds are used for qualifying purposes in both the jurisdiction of the issuer and the jurisdiction of the entity authorized to allocate volume cap. In practice, this means that in most cases, the only way to issue a single bond for multiple jurisdictions (beneficiaries) and meet the QECB guidelines is for a state to issue the QECBs on behalf of multiple localities or on behalf of the state and multiple localities.

If the state does not have sufficient allocation to do so and the locality has already received its allocation, the locality could transfer its allocation back to the state, which could then issue the bonds for multiple jurisdictions (see IRS Notice 2009-29 section 3.05).

23. How many QECBs have been issued as of fall 2010, and where?

As of fall 2010, QECBs have been issued in Boulder, Colorado; Rochester, New York; Utah County, Utah; and Tucson, Arizona. Additional issuances are in the planning stages around the country, including in Salt Lake County, Utah.

24. Which websites provide DOE Guidance on QECBs?

EECBG Guidance

www1.eere.energy.gov/wip/pdfs/final_eecbg_guidance_qecbs_crebs.pdf

SEP Guidance

www1.eere.energy.gov/wip/pdfs/final_sep_guidance_qecbs_crebs.pdf

C. Additional Rules and Regulations

25. Do Davis-Bacon Act prevailing wage requirements or NEPA requirements apply to QECB-financed projects?

Davis-Bacon prevailing wage requirements *do not* apply to issuer employees *but do* apply to contracts entered into for construction, repair, or alteration.

Issuing a QECB does not in itself trigger NEPA. All other NEPA rules that establish what does and does not require a NEPA assessment still apply, however.

26. What are the limitations on using QECBs to support private-sector clean energy activity?

A maximum of 30% of QECB allocations may be used for private activity purposes. Green community programs, however, are not subject to that restriction because they are treated as public purpose programs (see FAQ 8).

27. Is there a limit on the amount of bond proceeds that can be used to pay QECB issuance costs?

A maximum of 2% of the proceeds of a QECB can be used to pay for bond issuance costs. Issuers must find other sources of funding such as general budget funds or other energy-related budgets for issuance

costs in excess of 2%. Issuance costs include the underwriter's discount and various counsel and trustee fees.

28. Is there any risk that the federal government will stop appropriating the QECB subsidy in future budgets?

The Direct Payments are not appropriations. The statute was written to treat the Direct Payment as a refund of taxes and, therefore, not an appropriation item. Billions of dollars in Build America Bonds have been issued to date—indicating that state, local, and tribal government issuers are, in general, very comfortable with the risk. A more likely concern for grantees is the IRS audit described earlier to determine whether a project constitutes a Qualified Energy Conservation Project. Should that audit determine a project is not qualified, issuers may be forced to repay previous direct cash subsidy payments (originally from the U.S. Treasury) and forgo future payments.

29. When does QECB issuance capacity expire?

There is no federal “expiration date” after which QECBs may no longer be issued. They can be issued as long as there is an available allocation.

30. How long do issuers have to spend bond proceeds after QECBs are issued?

Bond issuers must have a binding commitment with a third party to spend at least 10% of the bond proceeds within 6 months of bond issuance. All bond proceeds must generally be spent within 3 years or used to redeem bonds at the end of that 3-year period. The U.S. Treasury has the authority to extend the 3-year spending deadline “for reasonable cause” if the expenditures will continue to proceed “with due diligence.” But the issuer must submit a private letter ruling request to the U.S. Treasury for an extension.

31. Where can I find more information on QECBs?

DOE QECB Webinar

www1.eere.energy.gov/wip/solutioncenter/webcasts/default.html

DOE QECB/CREB Primer

www1.eere.energy.gov/wip/pdfs/qecb_crebe_primer.pdf

DOE QECB/EECBG Guidance

www1.eere.energy.gov/wip/pdfs/final_eecbg_guidance_qecbs_crebs.pdf

DOE QECB/SEP Guidance

www1.eere.energy.gov/wip/pdfs/final_sep_guidance_qecbs_crebs.pdf

IRS Notice 2009-29 on QECB Allocations

www.irs.gov/pub/irs-drop/n-09-29.pdf

IRS Notice 2010-35 on Direct Pay QECBs

www.irs.gov/pub/irs-drop/n-10-35.pdf

To request technical assistance on QECBs, please visit <https://tac.eecleanenergy.org/>

PAGE INTENTIONALLY BLANK