



# Tax Credit Bonds: Overview and Analysis

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## Summary

Almost all state and local governments sell bonds to finance public projects and certain qualified private activities. Most of the bonds issued are tax-exempt bonds because the interest payments are not included in the bondholder's (purchaser's) federal taxable income. In contrast, Tax Credit Bonds (TCBs) are a type of bond that offers the holder a federal tax credit instead of interest. This report explains the tax credit mechanism and describes the market for the bonds.

There are a variety of TCBs. Qualified zone academy bonds (QZABs), which were the first tax credit bonds, were introduced as part of the Taxpayer Relief Act of 1997 (P.L. 105-34) and were first available in 1998. Clean renewable energy bonds (CREBs) were created by the Energy Policy Act of 2005 (P.L. 109-58) and "new" CREBs by the Emergency Economic Stabilization Act of 2008 (EESA P.L. 110-343). Gulf tax credit bonds (GTCBs) were created by the Gulf Opportunity Zone Act of 2005 (P.L. 109-135). Authority to issue GTCBs has expired. Qualified forestry conservation bonds (QFCBs) were created by the Food, Conservation, and Energy Act of 2008 (P.L. 110-246). Qualified energy conservation bonds (QECBs) and Midwest Disaster Bonds (MWDBs) were created by the Emergency Economic Stabilization Act of 2008 (P.L. 110-343).

The American Recovery and Reinvestment Act of 2009 (P.L. 111-5, ARRA) included several bond provisions that use a tax credit mechanism. Specifically, ARRA created Qualified School Construction Bonds (QSCBs) and a new type of bond that allows issuers the option of receiving a federal payment instead of allowing a federal tax exemption on the interest payments. These new bonds, Build America Bonds (BABs) and Recovery Zone Economic Development Bonds (RZEDBs), are also unlike other tax credit bonds in that the interest rate on the bonds is a rate agreed to by the issuer and investor. In contrast, the Secretary of Treasury sets the credit rate for the other TCBs based on current market parameters. The authority to issue BABs and RZEDBs expires after 2010.

Each TCB, with the exception of BABs, is designated for a specific purpose or project. Issuers use the proceeds for public school construction and renovation; clean renewable energy projects; refinancing of outstanding government debt in regions affected by natural disasters; conservation of forest land; investment in energy conservation; and for economic development purposes.

All of the TCBs are temporary tax provisions. In the 111<sup>th</sup> Congress, P.L. 111-147 expanded the direct payment option beyond BABs to include issuers of new CREBs, QECBs, QZABs, and QSCBs. The QZAB and QSCB credit rate is set at 100% and the new CREB and QECB credit rate is set at 70% of the interest cost. In contrast, the BAB tax credit rate is 35%. The most recent version of H.R. 4213, which passed the House on May 28, 2010, would extend BABs through 2012, but reduce the credit rate to 32% in 2011 and 30% in 2012. The cost of the extension is estimated at just over \$4 billion over 10 years. On July 28, 2010, Representative Levin introduced H.R. 5893, which mirrors the BAB extension as provided for in the recent version of H.R. 4213. In addition, H.R. 5893 would expand RZEDBs with a modified allocation formula with an additional \$10 billion.

In the FY2011 budget, the Obama Administration has proposed extending the BAB program at a lower direct payment credit rate of 28%. The reduced credit rate is intended to minimize the cost to the Treasury.

This report will be updated as legislative events warrant.

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## Introduction

Almost all state and local governments sell bonds to finance public projects and certain qualified private activities. Most of the bonds issued are *tax-exempt* bonds because the interest payments are not included in the bondholder's (purchaser's) federal taxable income. Naturally, interest payments not included in taxable income escape federal income taxation. In contrast, interest payments from other types of bonds, such as corporate bonds, are included in a bondholder's taxable income. Because of the difference in taxability, state and local government tax-exempt bonds—often referred to as municipal bonds—offer a lower pre-tax interest rate than corporate bonds.<sup>1</sup>

Typically, the federal government provides a subsidy for projects that use tax-exempt financing because the interest cost for the issuer is reduced, though the subsidy is variable. For example, on August 7, 2008, the average high-grade taxable corporate bond rate was 5.70%, and the average high-grade municipal bond rate was 4.75%.<sup>2</sup> The recent turmoil in financial markets, however, had closed this spread to almost zero. In early December 2008, the municipal bond rate was actually higher than the taxable high-grade corporate bond rate and grew to 74 basis points (corporate bonds were 0.74% higher) by mid-December. This relationship has since reversed. On May 27, 2010, the municipal bond interest rate was 4.28% and the corporate bond rate 5.04% (highly rated AAA bonds).<sup>3</sup>

In contrast to tax-exempt bonds, most tax credit bonds (TCBs) allow the holder to claim a federal tax credit equal to a percentage of the bond's par value (face value) for a limited number of years. This tax credit percentage is set at the current yield on taxable bonds. Meanwhile, issuers of tax credit bonds typically pay no interest to bondholders. Thus, TCBs can deliver a larger federal subsidy to the issuer than do municipal bonds. When the credit is the full 100% credit, the subsidy to the issuer is the full taxable interest rate instead of the difference between the taxable rate and the lower tax-exempt rate.<sup>4</sup>

Currently, there are a variety of TCBs. **Table 1** below lists the existing TCBs and their authorization levels. A more detailed description of each type of bond is provided later in the report. Note that P.L. 110-246, enacted in June of 2008, created Section 54A of the tax code. This section contains many parameters common to all TCBs. This revision of the tax code was intended to “standardize” some of the TCB parameters.

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<sup>1</sup> For ease of exposition, the phrase “state and local tax-exempt bonds” is replaced by “municipal bonds” for the remainder of the report.

<sup>2</sup> Federal Reserve Board, Table H. 15, “Selected Interest Rates,” at <http://www.federalreserve.gov/releases/H15/data.htm#top>.

<sup>3</sup> Federal Reserve Board, Table H. 15, “Selected Interest Rates,” at <http://www.federalreserve.gov/releases/H15/data.htm#top>, visited June 4, 2010.

<sup>4</sup> See CRS Report RL30638, *Tax-Exempt Bonds: A Description of State and Local Government Debt*, by Steven Maguire.

Table I. Authorization Levels of Tax Credit Bonds

Code Section	Bond Program	Authorized Amount	Credit Amount	Expires After	Enacting Legislation
<b>Energy</b>					
54	CREBs I	\$1,200,000,000	100%	2009	P.L. 109-58
54C	New CREBs I	800,000,000	70%	2009	P.L. 110-343
54C	New CREBs II	1,600,000,000	70%	2009	P.L. 111-5
54D	QECBs I	800,000,000	70%	no expiration	P.L. 110-343
54D	QECBs II	2,400,000,000	70%	no expiration	P.L. 111-5
<b>General Government, Economic Development and Forest Conservation</b>					
54B	QFCBs	500,000,000	100%	2010	P.L. 110-246 <sup>a</sup>
54AA	BABs	no limit	35% <sup>b</sup>	2010	P.L. 111-5
1400N(l)	MWDBs	450,000,000	100%	2009	P.L. 110-343
1400U-2	RZEDBs	10,000,000,000	45% <sup>c</sup>	2010	P.L. 111-5
<b>School Construction</b>					
54E	QZABs I	4,400,000,000	100%	2008	P.L. 105-34
54E	QZABs II	2,800,000,000	100%	2010	P.L. 111-5
54F	QSCBs	22,000,000,000	100%	2010	P.L. 111-5

**Source:** CRS compilation.

- P.L. 110-246 is the 2008 “Farm Bill” which was originally signed by the President as P.L. 110-234 on May 22, 2008. Clerical errors in P.L. 110-234 required Congress to pass the revised “Farm Bill” enacted on June 18, 2008. P.L. 110-246 repealed P.L. 110-234.
- The underlying tax credit rate is market determined, not established by the Secretary of Treasury as with the other TCBs. The credit is 35% of the market-determined interest rate.
- The credit amount is determined in the same manner as BABs.

As **Table 1** indicates, the American Recovery and Reinvestment Act of 2009 (P.L. 111-5, ARRA) included several bond provisions that use a tax credit mechanism. Specifically, ARRA created Qualified School Construction Bonds (QSCBs). It also created a new type of bond that allows issuers the option of receiving a direct payment from the U.S. Treasury instead of tax-exempt interest payments or tax credits for investors. These new bonds, Build America Bonds (BABs) and Recovery Zone Economic Development Bonds (RZEDBs), are also unlike other tax credit bonds in that the interest rate on the bonds is a rate agreed to by the issuer and bond investor. In contrast, the Treasury Secretary sets the credit rate for the other TCBs based on current market conditions. In short, with BABs and RZEDBs, the two parties in the transaction establish the tax credit rate, not the Treasury Secretary. The resulting investor tax credit amount or issuer direct payment is equal to 35% of the interest payment for BABs and 45% for RZEDBs.<sup>5</sup>

<sup>5</sup> BABs and RZEDBs where the issuer chooses the direct payment option do not allow for the investor tax credit.

In the 111<sup>th</sup> Congress, P.L. 111-147 expanded the direct payment option beyond BABs to include issuers of new CREBs, QECBs, QZABs, and QSCBs. The QZAB and QSCB credit rate is set at 100% and the new CREB and QECB credit rate is set at 70% of the interest cost. In contrast, the BAB tax credit rate is 35%. The most recent version of H.R. 4213, which passed the House on May 28, 2010, would extend BABs through 2012, but reduce the credit rate to 32% in 2011 and 30% in 2012. The cost of the extension is estimated at just over \$4 billion over 10 years.

On July 28, 2010, Representative Levin introduced H.R. 5893, which mirrors the BAB extension as provided for in the recent version of H.R. 4213.<sup>6</sup> In addition, H.R. 5893 would expand RZEDBs with a modified allocation formula with an additional \$10 billion. The BAB extension would cost \$4.042 billion over 10 years and the RZEDBs expansion would cost \$2.375 billion over 10 years.

Before P.L. 111-147, state and local governments could issue Qualified Zone Academy Bonds (QZABs) and Qualified School Construction Bonds (QSCBs) to finance school renovation and construction as traditional tax credit bonds. In contrast to tax-exempt bonds, most tax credit bonds (TCBs) allow the investor to claim a federal tax credit equal to a percentage of the bond's par value (face value) for a limited number of years. This tax credit percentage is set at the yield on taxable bonds at the time of issuance. Issuers of tax credit bonds typically pay no interest to bondholders. Thus, TCBs can deliver a larger federal subsidy to the issuer than do traditional municipal bonds. The subsidy to the issuer is the full taxable interest rate instead of the difference between the taxable rate and the lower tax-exempt rate as with traditional tax-exempt bonds.

The government entity issuing the bond is obligated to repay only the principal of the bond. The federal government effectively makes "payments" to the investor through the tax credits. The tax credits delivered through the bonds are unlike typical tax credits because the credit is included in taxable income as if it were interest income. The tax credit bond rate is set with the intent of compensating for this taxability.

Each TCB (with the exception of BABs) is designated for a specific purpose or type of project. Issuers of QZABs are required to use the proceeds to finance public school partnership programs in economically distressed areas. CREBs are designated for clean renewable energy projects. MWDB proceeds are for the refinancing of outstanding government debt in regions affected by the Midwestern storms and floods in the spring and summer of 2008. QFCBs are intended to help non-profits or government entities purchase and conserve forest land. QECBs are for investment in capital projects that improve energy conservation. QSCBs are for school construction, BABs are for any governmental purpose, and RZEDBs are for economic development purposes.<sup>7</sup> This report will rely on acronyms to reference the numerous tax credit bonds. **Table 2** summarizes the acronyms for the bonds examined in this report.

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<sup>6</sup> The House Ways and Means Committee website includes a summary of the legislation including the Joint Committee on Taxation revenue estimates, <http://waysandmeans.house.gov/press/PRArticle.aspx?NewsID=11300>.

<sup>7</sup> For issuers choosing the direct payment option, the BABs must be used for capital expenditures.

**Table 2. Tax Credit Bond Acronyms**

Acronym	Type of Bond
BABs	Build America Bonds
CREBs	Clean Renewable Energy Bonds
MWDBs	Midwestern Disaster Bonds
QECBs	Qualified Energy Conservation Bonds
QFCBs	Qualified Forestry Conservation Bonds
QSCBs	Qualified School Construction Bonds
QZABs	Qualified Zone Academy Bonds
RZEDBs	Recovery Zone Economic Development Bonds
TCBs	Tax Credit Bonds

## The Details of Tax Credit Bonds

TCBs generally allow the bondholder to claim a tax credit equal to a specified credit rate as determined by the Secretary of the Treasury.<sup>8</sup> The rate of credit is intended to be set such that the bonds need not be sold at a discount (for a price less than the face value) or with interest costs to the issuer. The government entity selling the bond is obligated to repay only the principal of the bond. The federal government effectively makes “payments” to the bondholder through the tax credits. As noted earlier, BABs, RZEDBs, CREBs, QECBs, QZABs, and QSCBs are the exception. They allow the *issuer* to choose a direct payment instead and the credit rate is set by the counterparties in the bond transaction. The investor tax credits delivered through the bonds are unlike typical tax credits because the credit is included in taxable income as if it were interest income. The tax credit bond rate is set with the intent of compensating for the taxability. Title 26, Section 54A of the U.S. Code outlines the general structure of TCBs. Title 26, Section 54AA outlines the rules for BABs. Both structures are discussed below.

## The Mechanics of TCBs

The method for determining the credit is generally the same for all TCBs.<sup>9</sup> Since July 1999, the Secretary of the Treasury has established a national credit rate that is intended to allow issuers of TCBs to sell their bonds at par (face value) without additional interest expense. The rate calculation is

based on its [the Treasury Department’s] estimate of the yields on outstanding bonds from market sector selected by the Treasury Department in its discretion that have an investment grade rating between A and BBB for bonds of a similar maturity for the business day immediately preceding the sale date of the tax credit bonds.<sup>10</sup>

<sup>8</sup> BABs and RZEDBs are the exception. They allow the issuer to choose a direct payment instead and the credit rate is set by the counterparties in the bond transaction.

<sup>9</sup> See 26 U.S.C. 54A(b).

<sup>10</sup> U.S. Department of the Treasury, Internal Revenue Service, Internal Revenue Bulletin 2009-6, February 9, 2009, p. 449.

The credit rate published (by the U.S. Bureau for Public Debt) on the issue sale date is the bondholder's annual rate of credit.

For example, the annual tax credit rate for TCBs was 5.75% on April 23 (the term was 17 years).<sup>11</sup> The bonds sold on that day would allow the taxpayer to claim a federal tax credit equal to 5.75% multiplied by the face value of the bond. Thus, a \$100,000 bond issued on April 23, 2010, would yield an annual tax credit of \$5,750 for the bondholder, or \$1,437.50 per quarter for the term of the bond. However, unlike interest on municipal bonds, which does not create a taxable income stream, the credit amount is included in the bond holder's gross income.<sup>12</sup> The credit is limited to the bondholder's current tax liability; it is "non-refundable." Unused tax credits can be carried over to the succeeding tax year.

The credit is reduced for some TCBs. CREBs and QECBs allow for a credit equal to 70% of the full credit described above. Thus, for these bonds, the investor receives 70% of the annual tax credit described above or \$4,025 (\$1,006.25 per quarter). In contrast, BAB and RZEDB credits are 35% and 45%, respectively, of a market-determined taxable bond interest rate for the specific issuer. Unlike other TCBs, issuers of BABs, RZEDBs, QZABs, QSCBs, new CREBs, and QECBs, may elect to receive a direct payment in lieu of the investor receiving the tax credit.

### **Tax Credit Bonds vs. Other Bonds**

The credit rate for TCBs is set higher than the municipal bond rate to compensate for the credit's taxability noted earlier. Generally, to attract investors, the credit rate should yield a return greater than the prevailing municipal bond rate and at least equal to the after-tax rate for corporate bonds of similar maturity and risk.

Consider the following example where we assume an average 4.53% interest rate on municipal debt. Investors in the 15% income tax bracket would need a credit rate of at least 5.33% (4.53% divided by  $(1 - 0.15)$  is 5.33%) to choose TCBs over municipal bonds. Investors in the 35% bracket would require a credit rate on TCBs of 6.97% (4.53% divided by  $(1 - 0.35)$  is 6.97%). Generally, the TCB credit rate would have to exceed the after-tax return on municipal bonds and the after-tax return on taxable bonds of like term to maturity.

TCB issuers may also establish a bond reserve fund (or sinking fund) for the eventual repayment of the bond principal. Generally, IRS rules allow reserve funds to accumulate just enough to repay the bond principal.<sup>13</sup> The sinking fund provision for TCBs significantly reduces the interest cost to the issuer.

The summary below describes how a potential bond investor would begin to evaluate the attractiveness of a tax credit bond relative to two other bond investments. The choice between TCBs (offering a 100% credit) and traditional tax-exempt municipal bonds depends primarily on

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<sup>11</sup> Unlike other TCBs, CREBs have a range of possible maturities (term), but have the same credit rate as the other TCBs of like term.

<sup>12</sup> In special cases, some insurance companies may indirectly pay income tax on otherwise tax exempt debt. In addition, interest paid on private activity bonds may be subject to the alternative minimum tax.

<sup>13</sup> The U.S. Treasury publishes a maximum yield for these reserve funds along with the credit rate. The permitted sinking fund yield is equal to 110% of the long-term adjusted applicable federal rate (AFR), compounded semiannually. The permitted sinking fund yield is updated monthly. The June 2009 maximum yield was 4.66%.



the bondholder’s tax rate. Bondholders in the highest tax bracket find the tax credit relatively less attractive than do bondholders in the lower brackets. However, the tax credit is fixed at the same rate for all buyers. For TCBs that offer a reduced credit rate, such as CREBs and QECCBs, the issuer would augment the tax credit with an interest payment or discount pricing.

<b>Evaluating a Tax Credit Bond Investment</b>		
$t$	=	income tax rate of bond holder
$r^{TCB}$	=	pre-tax rate of TCB credit
$r^{muni}$	=	prevailing interest rate on high grade tax-exempt municipal bonds
$r^{tax}$	=	prevailing interest rate on high grade taxable bonds
Purchase a TCB if:		
$r^{TCB}$	>	$r^{muni} / (1-t)$
	or	
$r^{TCB}$	>	$r^{tax}$
To attract investors, the TCB tax credit rate must be greater than (a) alternative tax-exempt municipal bond interest rate divided by one minus the income tax rate, or (b) the prevailing taxable bond rate.		

The choice between a tax credit bond and a taxable corporate bond is not as dependent upon the bondholder’s tax bracket. At comparable levels of default risk, TCBs and taxable bonds are equally attractive to purchasers that anticipate tax liability. However, an investor without tax liability that holds a tax credit bond would be allowed to claim a credit for future tax liability or carry forward the credit. For these investors, “stripping” the tax credits from the bond and selling them to an entity with tax liability would be an option. This stripping technique is explained in the next section.

### **Tax Credit Bond Stripping**

The credits on TCBs are “strippable,” or the credits can be separated from the underlying bond.<sup>14</sup> Allowing the separation of the credit from the underlying bond improves the attractiveness and marketability of the TCBs to investors and financial intermediaries. Generally, a financial intermediary could buy the TCB, sell the principal to an investor looking for a longer term investment and sell the stream of credits to another investor seeking quarterly income. For example, assume a financial intermediary buys the \$100,000 TCB presented above. The intermediary sells the right to the principal portion (the \$100,000) of the TCB to a pension fund for \$90,000 and sells the stream of credits (\$1,980 every quarter for 15 years) to another investor for \$90,000. The stripping provision makes TCBs more competitive with traditional bonds.

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<sup>14</sup> 26 U.S.C. 54A(i).

## **The Term of TCBs**

The maximum term (the number of years for which the credit will be paid)

shall be the term which the Secretary estimates will result in the present value of the obligation to repay the principal on the bond being equal to 50% of the face amount of the bond.<sup>15</sup>

Specifically, the maximum term of the bonds is determined by the prevailing interest rate for municipal debt with a maturity of greater than 10 years. The maximum term on TCBs issued on April 23, 2010, was set at 17 years. Midwest Disaster Bonds (MWDBs) have a maximum term of two years, and the interest rate would reflect the shorter term. The Treasury publishes the credit rate and term daily.

## **Application of Davis-Bacon Labor Standards**

ARRA included a provision that requires some of the TCBs to abide by the labor standards as mandated under the Davis-Bacon Act of 1931. Generally, Davis-Bacon requires that contractors pay workers not less than the locally prevailing wage for comparable work. The following bonds are subject to the Davis-Bacon labor standard: new CREBs, QECEBs, QZABs, QSCBs, and RZEDBs.

## **Allocation and Purpose of Tax Credit Bonds**

The authority to issue TCBs is usually capped with a national limit or with a state-by-state cap. In addition, some of the TCBs include set asides for sub-state governments or other entities. What follows is a brief overview of how and to whom each bond program allocates the authority to issue the bonds.

## **Qualified Zone Academy Bonds**

The limit for QZAB debt was \$400 million annually from 1998 through 2008 and is \$1.4 billion for each of 2009 and 2010.<sup>16</sup> A limit is allocated to each state, the District of Columbia, and territory based upon their portion of the U.S. population below the poverty line. States are responsible for the allocation of the available credit to the local governments or qualified zone academies. Unused credit capacity can be carried forward for up to two years.

Individual public schools use QZABs, through their participating state and local governments, for school renovation (not including new construction), equipment, teacher training, and course materials. To qualify for the program, the school must also be a “Qualified Zone Academy.” A “Qualified Zone Academy” is any public school (or program within a public school) that provides and develops educational programs below the postsecondary level if

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<sup>15</sup> 26 U.S.C. 54A(d)(5)(B). The term of TCBs is found by calculating the following:  $\log(2)/\log(1+r)$ . The variable  $r$  is the “discount rate of the average annual interest rate of tax-exempt obligations having a term of 10 years or more which are issued during the month.”

<sup>16</sup> According to IRS Notice 2009-30, the \$1.4 billion is for each of 2009 and 2010.

such public school or program (as the case may be) is designed in cooperation with business to enhance the academic curriculum, increase graduation and employment rates, and prepare students for the rigors of college and the increasingly complex workforce....<sup>17</sup>

In addition, the academy must also be located in an empowerment zone or enterprise community. Alternatively, the academy also qualifies if it is reasonably expected that at least 35% of the students qualify for the free or reduced price school lunch program. At least 95% of the bond proceeds must be used for rehabilitating or repairing public school facilities, providing equipment, developing course materials, or training teachers and other school personnel.

## **Qualified School Construction Bonds**

These bonds have a national limit of \$11 billion in each of 2009 and 2010. An additional \$200 million in each of 2009 and 2010 is allocated to Indian schools. The bonds generally are allocated to states based on the state's share of Title 1 Basic Grants (Section 1124 of the Elementary and Secondary Education Act of 1965; 20 U.S.C. 6333, BG). The District of Columbia and the possessions of the U.S. are considered states for QSCBs. The possessions other than Puerto Rico (American Samoa, Commonwealth of the Northern Mariana Islands, Guam, and U.S. Virgin Islands), however, are allocated an amount on the basis of the possession's population with income below the poverty line as a portion of the entire U.S. population with income below the poverty line.

As noted above, 40% of the bond volume (\$4.4 billion) is dedicated to large LEAs. A "large" LEA is defined as one of the 100 largest based on the number of "children aged 5 through 17 from families living below the poverty level." Also, one of not more than an additional 25 LEAs can be chosen by the Secretary if the LEA is

in particular need of assistance, based on a low level of resources for school construction, high level of enrollment growth, or such other factors as the Secretary deems appropriate.<sup>18</sup>

Each large LEA, as defined above, would receive an allocation based on the LEA's share of the total Title I basic grants directed to large LEAs. The state allocation is reduced by the amount dedicated to any large LEAs in the state.

States are currently authorized to issue \$2.8 billion of QZABs and \$22 billion of QSCBs. QZAB allocations will be made through 2010 and may be carried forward up to two years. QSCB allocations will also be made through 2010 but can be carried forward indefinitely. On April 23, 2010, the credit rate on QZABs and QSCBs was 5.75% and the term 17 years. As noted earlier, issuers of QZABs and QSCBs can choose the direct payment option.

## **Clean Renewable Energy Bonds**

As authorized by P.L. 109-58, the original CREBs, which can be issued through 2009, have a national limit of \$1.2 billion of which a maximum of \$750 million can be granted to governmental bodies. In addition to governmental bodies, cooperative electric companies and a

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<sup>17</sup> 26 U.S.C. 54E(d)(1)(A). The private entity must donate an amount equivalent to 10% of the bond proceeds. Services of employees as volunteer mentors satisfies the 10% private partnership requirement.

<sup>18</sup> 26 U.S.C. 54F(d)(2)(E)(ii). The Secretary did not exercise this option for 2009.

“clean renewable energy bond lender” can issue the bonds. A clean renewable energy bond lender is defined in the tax code as

a lender which is a cooperative which is owned by, or has outstanding loans to, 100 or more electric companies and is in existence on February 1, 2002, and shall include any affiliated entity which is controlled by such lender.<sup>19</sup>

The CREB lender would lend to co-ops or governmental bodies. The Secretary of Treasury reviews applications and selects projects “as the Secretary deems appropriate.”<sup>20</sup> Thus, CREBs are not allocated by formula and there are no state minimums. The Internal Revenue Service, through IRS Notice 2005-98, described the allocation strategy of the Secretary.<sup>21</sup> The smallest dollar amount projects are considered first and the allocations continue for ever larger dollar amount projects until the entire allocation is consumed.

The term and credit rate for CREBs are determined in the same manner as the other TCBs. These original CREBs offer a 100% credit.

CREBs are available to finance qualified energy production projects which include (1) wind facilities, (2) closed-loop bio-mass facilities, (3) open-loop bio-mass facilities, (4) geothermal or solar energy facilities, (5) small irrigation power facilities, (6) landfill gas facilities, (7) trash combustion facilities, (8) refined coal production facilities, and (9) certain hydropower facilities.

### **New Clean Renewable Energy Bonds**

As authorized in P.L. 110-343, the *new* CREBs have a national limit of \$2.4 billion to be issued before December 31, 2009. In contrast to the original CREBs, as noted in **Table 1**, the credit rate on new CREBs is 70% of the credit rate offered on the original CREBs. Not more than one-third of new CREBs may be allocated to any of the following: (1) public power providers, (2) governmental bodies, or (3) projects of cooperative electric companies. For public power providers, the Secretary determines the qualified projects which “are appropriate for receiving an allocation.” Each will receive a share of the allocation based on the ratio of the projected cost of the project relative to all other qualified projects receiving an allocation.<sup>22</sup> Governmental bodies and co-ops receive an allocation in an amount the “Secretary determines appropriate.”<sup>23</sup> As with original CREBs, there is not a state-by-state minimum or formula allocation mechanism. As noted earlier, issuers of new CREBs can choose the direct payment option.

### **Qualified Energy Conservation Bonds**

QECBs were first created under P.L. 110-343 with a national limit of \$800 million. The program was expanded with an additional \$2.4 billion under P.L. 111-5 for a total available authority of \$3.2 billion. Similar to the new CREBs, these tax credit bonds offer a credit rate that is 70% of

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<sup>19</sup> 26 U.S.C. 54(j)(2).

<sup>20</sup> 26 U.S.C. 54(f)(2).

<sup>21</sup> U.S. Department of Treasury, Internal Revenue Service, Internal Revenue Bulletin 2005-52, December 27, 2005, p. 1213.

<sup>22</sup> 26 U.S.C. 54C(c)(3)(A).

<sup>23</sup> 26 U.S.C. 54C(c)(3)(B).

the credit rate offered on old CREBs and other TCBs. The authority to allocate QECCBs does not expire.

QECCBs are allocated to states based on the state's share of total U.S. population. The District of Columbia and the possessions of the U.S. are considered states for QECCBs. Large local governments, defined as any municipality or county with population of greater than 100,000, are eligible for a direct allocation. Counties that contain a large city can be eligible if its population less the large city population is still greater than 100,000.

These bonds are to be used for capital expenditures for the purposes of (1) reducing energy consumption in publicly owned buildings by at least 20%; (2) implementing green community programs; (3) rural development involving the production of electricity from renewable energy resources; or (4) programs listed above for CREBs. Also included are expenditures on research facilities and research grants, to support research in (1) development of cellulosic ethanol or other nonfossil fuels; (2) technologies for the capture and sequestration of carbon dioxide produced through the use of fossil fuels; (3) increasing the efficiency of existing technologies for producing nonfossil fuels; (4) automobile battery technologies and other technologies to reduce fossil fuel consumption in transportation; and (5) technologies to reduce energy use in buildings. Energy saving mass commuting facilities and demonstration projects are also included in the list of qualified purposes.

As noted earlier, issuers of QECCBs can choose the direct payment option.

### **Forestry Conservation Bonds**

QFCBs are limited to \$500 million to be allocated before May 22, 2010 (24 months after enactment of P.L. 110-246), in a manner “... as the Secretary determines appropriate.”<sup>24</sup> Once the bonds are issued, the proceeds must be spent within three years. A unique feature of QFCBs is the allowance for an allocation amount to be used to offset any taxes due the federal government. Any allocation amount used to settle outstanding federal tax debts cannot be used for bond issuance. A qualified issuer is a “State or any political subdivision or instrumentality thereof or a 501(c)(3) organization.”<sup>25</sup>

For purposes of the QFCB program, a qualified forestry conservation purpose must meet the following criteria:<sup>26</sup>

- (1) Some portion of the land acquired must be adjacent to United States Forest Service Land.
- (2) At least half of the land acquired must be transferred to the United States Forest Service at no net cost to the United States and not more than half of the land acquired may either remain with or be conveyed to a State.

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<sup>24</sup> 26 U.S.C. 54B(d)(1).

<sup>25</sup> 26 U.S.C. 54B(f).

<sup>26</sup> 26 U.S.C. 54B(e).

(3) All of the land must be subject to a native fish habitat conservation plan approved by the United States Fish and Wildlife Service.

(4) The amount of acreage acquired must be at least 40,000 acres.

## **Midwest Disaster Bonds**

MWDBs are designated for areas impacted by the severe storms and flooding in the Midwest that occurred between May 1, 2008, and August 1, 2008. Each affected area can issue an amount based on the population of the affected area. States with over 2 million affected residents are authorized to issue up to \$100 million and those with less than 2 million and more than 1 million can issue \$50 million. States with an affected population under 1 million are not eligible to issue MWDBs. Based on IRS guidance, Illinois, Missouri, and Nebraska can issue up to \$50 million each. Indiana, Iowa, and Wisconsin can issue up to \$100 million.<sup>27</sup> These bonds can be issued in calendar year 2009 only and unlike the other TCBs, have a maximum term of two years. The credit rate on the bonds would reflect the relatively short term of the bonds.

The bonds are intended for states to use to help those sub-state jurisdictions which are under fiscal stress. Specifically, the proceeds from MWDBs are to be used to pay the principal and interest on any outstanding state bonds or the bonds of any affected political subdivision within the state. The proceeds can also be loaned to a jurisdiction for the same purpose. The provision requires the issuer to issue an equal amount of general obligations for the same purpose, akin to a matching requirement.

## **Build America Bonds**

BABs are not targeted in their designation as are other TCBs. The volume of BABs is not limited and the purpose is constrained only by the requirement that “the interest on such obligation would (but for this section) be excludible from gross income under section 103.”<sup>28</sup> Thus, BABs can be issued for any purpose that would have been eligible for traditional tax-exempt bond financing other than private activity bonds. The bonds must be issued before January 1, 2011. Because BABs are an a unique type of TCB, additional analysis follows below.

### ***BAB Mechanics***

Unlike the other TCBs, the BAB credit amount is 35% of the interest rate established between the buyer and issuer of the bond, not the Secretary of Treasury. The issuer and investor agree on terms either as a result of a competitive bid process or through a negotiated sale. For example, if the negotiated taxable interest rate is 8%, on \$10,000 of bond principal, then the credit is \$280 (8% times \$10,000 times 35%). The issuer has the option of receiving a direct payment from the Treasury equal to the credit amount or allowing the investor to claim the credit. The issuer would choose the direct payment option if the net interest cost was less than traditional tax-exempt debt of like terms. The interest cost to the issuer choosing the direct payment is \$800 less the \$280, or

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<sup>27</sup> Internal Revenue Service, Internal Revenue Bulletin 2008-50, Notice 2008-109, p. 1285.

<sup>28</sup> 26 U.S.C. 54AA(d)(1)(A). BAB proceeds that use the direct payment options are to be used only for capital expenditures.

\$520. If the tax-exempt rate is greater than 5.20% (requiring a payment of greater than \$520), then the direct payment BAB is a better option for the issuer.<sup>29</sup>

As long as the marginal tax rate that clears the municipal bond market is lower than the credit rate on BABs of 35%, then municipal issuers would likely choose the BAB option. However, if the market clearing marginal tax rate rises, the alternative to BABs, traditional tax-exempt bonds, would be more attractive to issuers and investors alike.<sup>30</sup> Increases in statutory marginal tax rates would likely induce such an outcome, reducing the attractiveness of BABs relative to traditional tax-exempt bonds.

A U.S. Treasury Department report on BABs estimated that through March of 2010, the bonds had saved municipal issuers roughly \$12 billion in interest costs.<sup>31</sup>

### ***BABs: The New Taxable Bond Option***

The BAB, in cases where the issuer claims the direct payment, is modeled after the “taxable bond option,” which was first considered in the late 1960s. In 1976, the following was posited by the then President of the Federal Reserve Bank in Boston, Frank E. Morris:

The taxable bond option is a tool to improve the efficiency of our financial markets and, at the same time, to reduce substantially the element of inequity in our income tax system which stems from tax exemption [on municipal bonds]. It will reduce the interest costs on municipal borrowings, but the benefits will accrue proportionally as much to cities with strong credit ratings as to those with serious financial problems.<sup>32</sup>

The taxable bond option has been well received by issuers and investors. The Securities Industry Financial Markets Association (SIFMA) reports that through April of 2010, almost \$107 billion in BABs have been offered.<sup>33</sup>

### **Recovery Zone Economic Development Bonds**

RZEDBs are a special type of BAB. Instead of the 35% credit, RZEDBs offer a 45% credit and are targeted to economically distressed areas. Specifically, these bonds are for any area designated by the issuer (1) as having significant poverty, unemployment, rate of home foreclosures, or general distress; (2) economically distressed by reason of the closure or realignment of a military installation pursuant to the Defense Base Closure and Realignment Act of 1990; or is (3) an

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<sup>29</sup> Note that if the credit is claimed by the issuer, the transfer to the issuer is an outlay of the federal government, not a tax credit. This simple example does not consider issuance and underwriter fees.

<sup>30</sup> Researchers have determined that the federal government subsidy for BABs “...disadvantages individual U.S. taxpayers, who are the main holders of municipal bonds, and benefits new entrants in the municipal bond market.” New entrants would include international investors and pension funds. See Ang, Andrew, Vineer Bhansali, and Yuhan Xing, “Build America Bonds,” *National Bureau of Economic Research, Working Paper 16008*, May 2010.

<sup>31</sup> U.S. Treasury Department, “Treasury Analysis of Build America Bonds and Issuer Net Borrowing Costs,” April 2, 2010.

<sup>32</sup> Morris, Frank E., “The Taxable Bond Option,” *National Tax Journal*, vol. 29, no. 3, September 1976, p. 356.

<sup>33</sup> See <http://www.sifma.org/research/research.aspx?ID=12476>.

empowerment zone or renewal community.<sup>34</sup> The purpose of the bonds is, as the name implies, economic development. Specifically, the bonds are to be used for

- (1) capital expenditures paid or incurred with respect to property located in such zone [recovery zone],
- (2) expenditures for public infrastructure and construction of public facilities, and
- (3) expenditures for job training and educational programs.<sup>35</sup>

The volume limit for RZEDBs is \$10 billion and is allocated to states (including DC and the possessions) based on the state's employment decline in 2008. All states that experienced an employment decline in 2008 receive an allocation that bears the same ratio as the state's share of the total employment decline in those states. However, all states and U.S. territories, regardless of employment changes, are guaranteed a minimum of 0.90% of the \$10 billion.

The most recent version of H.R. 4213, which passed the House on May 28, 2010, includes an extension of RZEDBs through 2011 with an additional \$10 billion. In contrast to the first round of RZEDBs, the proposed extension would allocate bond authority based on each state's share of total unemployment. As with the first round, each state and territory is guaranteed a minimum of 0.90% of the \$10 billion (or \$90 million). The recently introduced H.R. 5893 would similarly expand RZEDBs and would use the same allocation procedure.

Large municipalities and counties are also guaranteed a share of the state allocations based on the jurisdiction's share of the aggregate employment decline in the state. A large jurisdiction is defined as one with a population of greater than 100,000. For counties with large municipalities receiving an allocation, the county population is reduced by the municipal population for purposes of the 100,000 threshold.

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<sup>34</sup> 26 U.S.C. 1400U-1(b).

<sup>35</sup> 26 U.S.C. 1400U-2(c).