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Relationships That Drive Results

CDFA – Intro Energy Finance Course

Bond Financing Mechanisms for Public and Private Energy Projects

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Overview

- Differentiating Between Governmental and Non-governmental Energy Projects
- Tax advantaged Bond Financing Mechanisms
  - Tax-exempt Bonds
  - Taxable, Tax Credit and Direct Pay Subsidy Bonds
- Combining Bonds with Other Subsidies

General Characteristics

	Tax-Exempt	New CREBs & QECBs
Governmental Issuer	√	√, with exceptions for New CREBs
Governmental Ownership	Not required for private activity bonds	Not required for all New CREBs and certain QECBs
Allocation-Volume Cap	√, except not for governmental tax-exempt or 501(c)(3)	√
IRS Filings	At closing	At closing, and to claim tax credit or direct payment
Subsidy	Tax-exempt interest, and private activity bonds are subject to AMT	Taxable interest with tax credit or direct payment
Types of Transactions	New money, current and advance refundings, except no-advance refundings for certain private activity bonds	New money only; and certain refinancings of bridge loans

Governmental Projects

- Types of governmental tax-exempt transactions:
  - Pre-pay transactions: proceeds of bonds are used to pre-purchase gas or electricity from the generator
  - Output facilities: proceeds of bonds are used for capital expenditures for such facilities
- Pre-pay transactions:
  - Bond proceeds are used to purchase electricity or natural gas in advance of delivery
  - Purchase is made by or for a governmental utility for use in the utility's service area
- QECBs and New CREBs: for governmental projects, there are fewer restrictions (see below)

Governmental Projects (cont.)

- Output facilities (e.g., generating, distribution and transmission facilities)
  - $15 million limitation: generally, not more than $15 million of a bond issue for an output facility may be used for a private business use
  - Private business use is use directly or indirectly in a trade or business that is carried on by any person other than a governmental unit. Governmental use is any use other than a private business use.
  - Purchase pursuant to a contract by a non-governmental person of available output of an output facility may be taken into account under the private business tests
  - There are numerous special allocation rules

Non-governmental Projects

- Tax-exempt private activity bonds: solid waste, local furnishing of electricity or gas, local district heating or cooling, environmental enhancements of hyrdroelectric generation, green building and qualified 501(c)(3)
- Tax Credit bonds: new clean renewable energy bonds and qualified energy conservation bonds

Private Activity Bonds

- Solid waste: new treasury regulations eliminate “no value” test and allow for energy conversion projects subject to limitations
  - Limitations: first useful product rule or useful energy
- Local furnishing of electricity or gas: 1997 “in operation” rule is limiting
- Local district heating or cooling: limited to pipelines and networks providing hot water, chilled water or steam
- Environmental enhancements of hyrdroelectric generation: fish ladders and related fish protective improvements
- Green building: expires on October 1, 2012; projects must reduce traditional electricity consumption and SO2 emissions, expand solar PV and use fuel cell energy
- Qualified 501(c)(3): project must be owned by the 501(c)(3) entity

Eligibility for New CREBs and QECBs - Basics

- New CREBs
  - Projects: wind, solar, geothermal, closed and open loop biomass, landfill gas, trash combustion and hydro, *plus* functionally related and subordinate facilities
  - Borrowers: governmental and tribal bodies, mutual and cooperative electric companies and public power providers ("PPPs")
    - PPPs are state utilities providing electric services
  - Issuers: qualified borrowers, certain "CREB lenders" (*e.g.,* CoBank and NRUCFC) and certain not-for-profit electric utilities
- QECBs
  - Projects: qualified conservation purposes (see next slide)
  - Borrowers: qualified issuers and non-governmental entities subject to limitations
    - No more than 30% of the allocation may be used for non-governmental QECBs except for green community programs
    - If the QECB is a private activity bond, a QCP must be for capital expenditures
  - Issuers: same as tax-exempt bond issuers
- Common Rules: the subsidy (credit) is lesser of interest coupon or 70% of credit rate and each is subject to Davis-Bacon Act's prevailing wages

QECBs – Qualified Conservation Purposes

Capital Expenditures for:	Research	Other
➢ Reducing energy consumption in publicly-owned buildings by at least 20% ➢ Implementing green community programs, includes "the use of loans, grants, or other repayment mechanisms to implement such programs" ➢ Rural development involving production of electricity from renewable energy resources ➢ New clean renewable energy bonds projects	Expenditures for research facilities and research grants to support research in: ➢ Technologies for the capture & sequestration of carbon dioxide produced through the use of fossil fuels ➢ Cellulosic ethanol & non-fossil fuel development ➢ Increasing in efficiency of existing technologies for producing non-fossil fuels ➢ Automobile battery tech-nologies & other technologies to reduce fossil fuel consump-tion in transportation ➢ Technologies to reduce energy use in buildings	➢ Mass commuting facilities to reduce energy consumption ➢ Demonstration projects including commercialization of green building technology, agricultural biofuel conversion, advanced battery manu-facturing technologies, technologies to reduce peak use of electricity or technologies for the capture & sequestration of carbon dioxide emitted from combusting fossil fuels to produce electricity ➢ Public education campaigns to promote energy efficiency

QECBs – QCP Recent IRS Guidance

- 20 percent energy reduction in publicly-owned buildings
  - Financed improvement may be a unit of a publicly owned building
  - Units: single or multiple buildings, a system component (i.e., HVAC, water, lighting or plug load) or any such building and system
- Green community programs
  - Purpose is to promote energy conservation, energy efficiency or environmental conservation initiatives
  - Relates to property is available for general public use *or* involves loan or grant program that is broadly available

New CREB and QECB Allocation Information

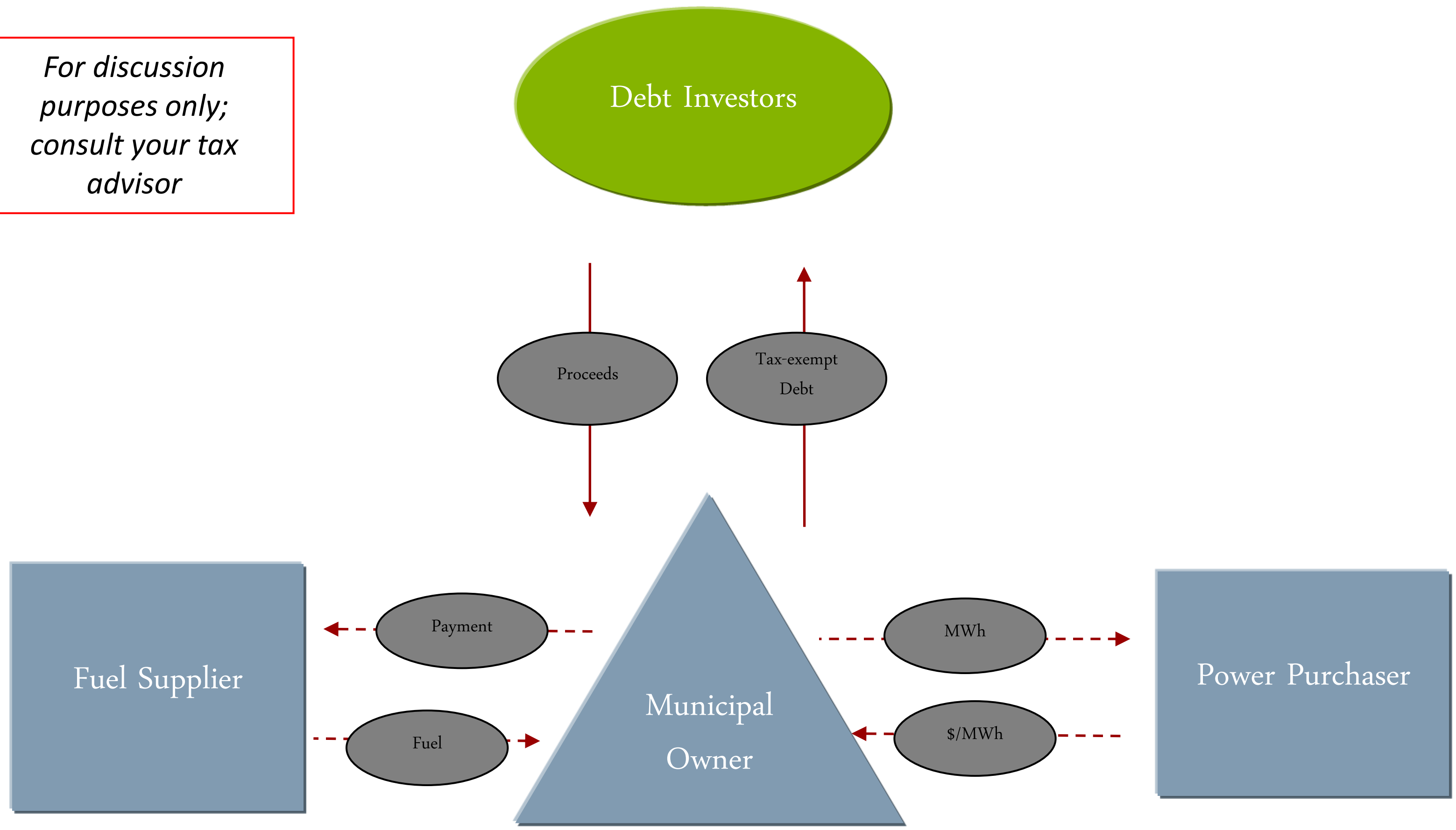
Attributes	New CREBs	QECBs
Authorized Amount	$2.4b	$3.2b
Allocation Process	1/3 each to (i) public power providers, (ii) governmental bodies, and (iii) cooperative electric companies	Allocated to the States in proportion to U.S. Population. Sub-allocated by States to large local governments (at least 100k population) in proportion to State population, with the balance allocated at discretion of the State
Expiration and Reallocation of Allocation	Must issue within three (3) years of award date or it reverts to the IRS Awards expire on October 27, 2012 Original awards were smallest to largest for PPP and governmental and pro-rata for coops Per Notice 2009-33, the IRS plans to establish a program for relinquished or reverted allocation	No expiration date for allocation States' rules vary on allocation QECB allocation may be waived by LLG At least 70% of allocation to be used for governmental projects

Combining Subsidies

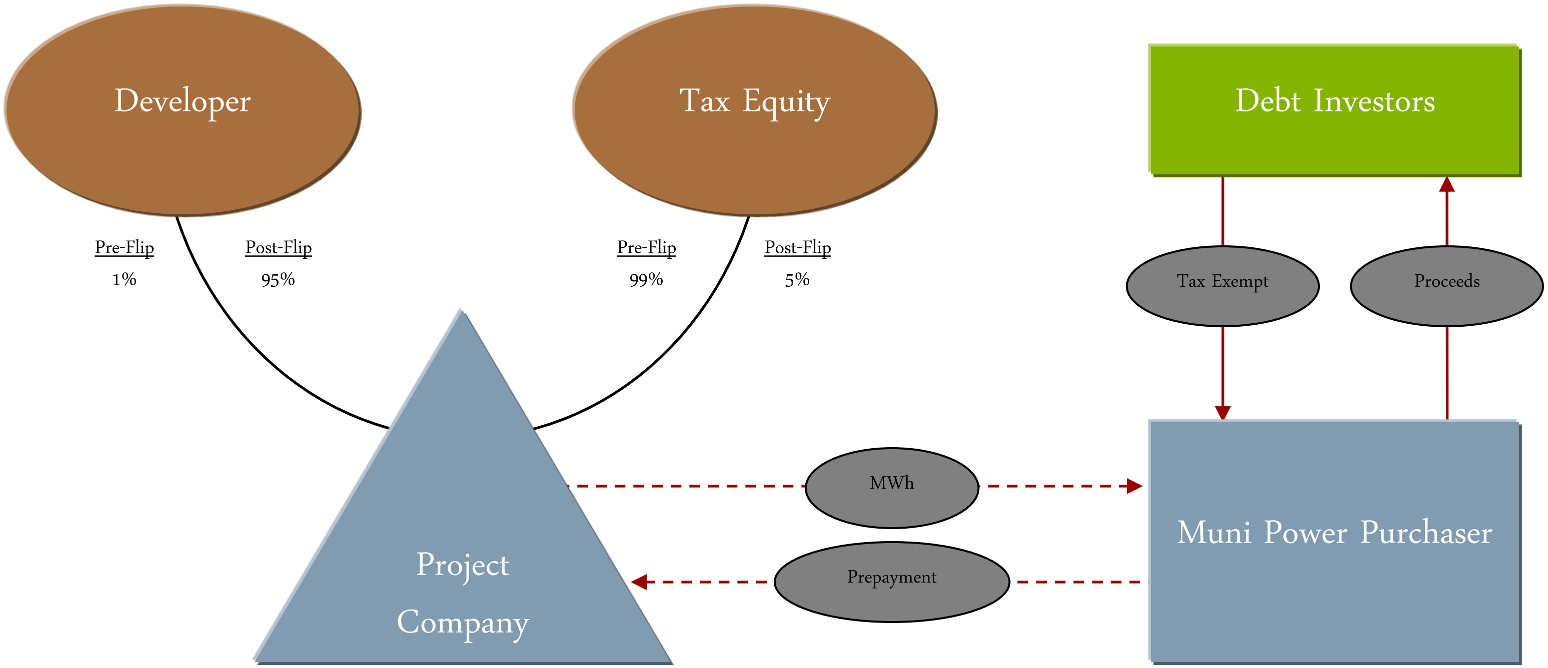
- What are the governmental interests?
  - Use of power and control of facility
  - Reliable power supply at reliable rates
  - Is there tax equity?
- What are the tax equity investor interests?
  - Maximizing tax incentives and rate of return: bonds, credits, grants and depreciation
  - Reducing structural risk
  - Ease of exit upon reaching target IRR

Traditional Municipal Structure

For discussion purposes only; consult your tax advisor



Pre-Paid Power Purchase Agreement – "Flip"



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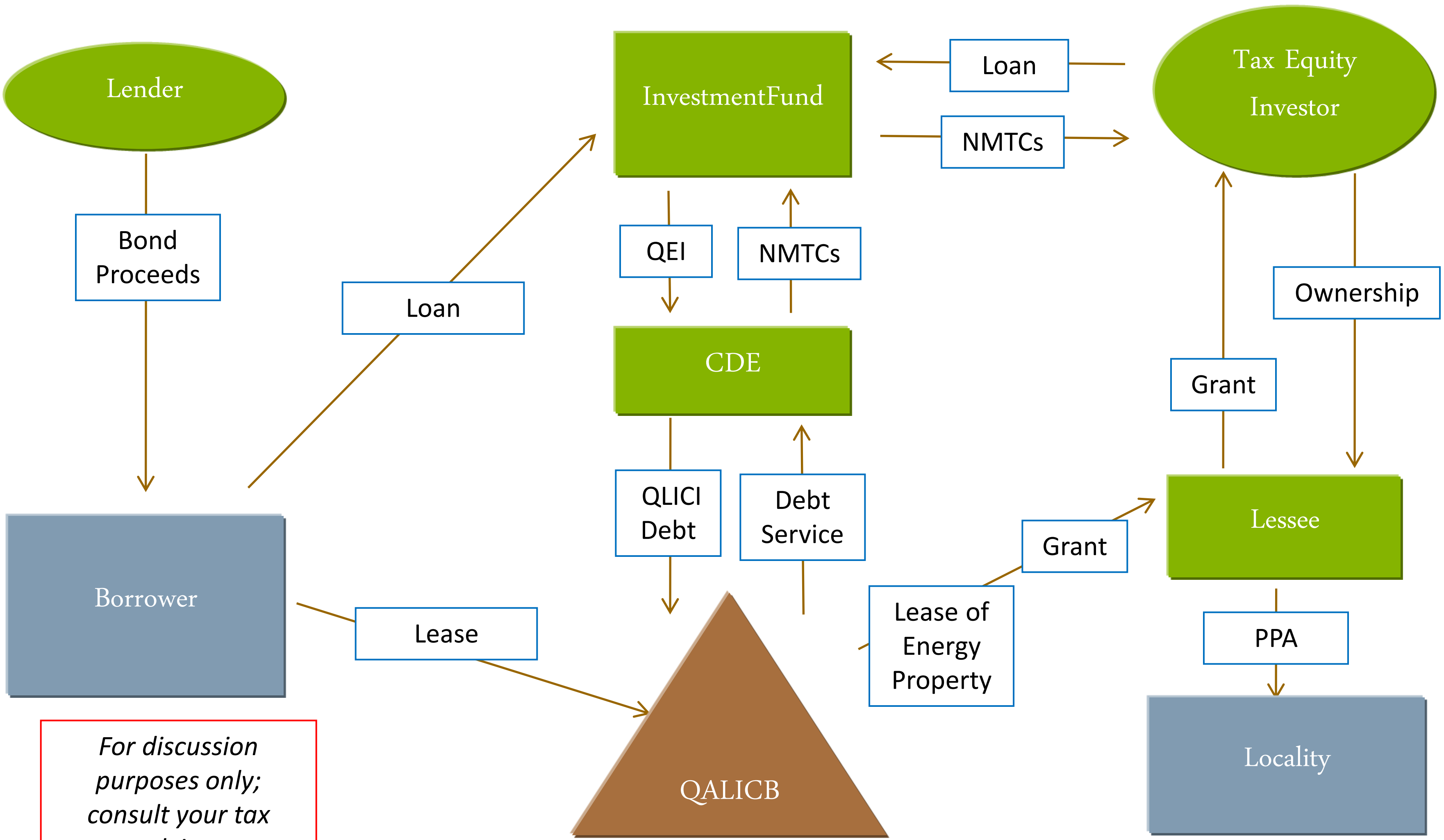
QECBs, NMTCs (Leveraged) and 1603 Grant



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Market Environment – Mixed Signals

- Global and domestic increases in renewable investment
- Closing the gap with nuclear and fossil fuels
- Federal and state budget constraints and tax reform
- Continued expiration, rollback and repeal of incentives
- Uncertainty of federal RPS or carbon policy
- Lender selectivity is at a premium

Before Proceeding, Ask Yourself …

- What type of energy project is being undertaken?
- What is the purpose of the project?
- Is the technology proven?
- What is the credit of the obligor and its counterparties?
- What role does the government want to play and what risks will it take (*i.e.*, is there political will and community support)?
- What are the sources of financing?
- Will the project cash flow without subsidies?
- Is the transaction structure simple relative to the size of transaction and the experience of the transaction parties?
- Do you have the right team?

Questions and Contact Information

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