

# Renewable Energy Grants and Incentives for Higher Education Institutions

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## Our firm at a glance

- > Largest US member of Baker Tilly International, the 8th largest worldwide accounting and business services network
- > 16th largest accounting firm in the US  
(*Accounting Today's* “2011 Top 100 Firms”)
- > Offices throughout the Midwest and East Coast
  - Chicago, Detroit, Minneapolis, New York, Washington D.C., Wisconsin
- > More than 1,300 professionals
- > 169 Partners and 518 CPAs
- > Established in 1931 — more than 75 years of focusing on clients

## We serve our clients through our industry teams

### Utilities

- > **Nationwide energy practice:** More than 30-years experience and nearly 300 utility clients across the country – our Energy and Utilities Group is focused just on utilities

### Developers

- > **More than 6,500 MW of renewable energy projects in development:** Focus on creative development and financial solutions to get projects to the finish line in a way that maximizes client value and minimizes risk

### Manufacturers

- > **Seventy-five years serving manufacturers:** We serve more than 2,000 manufacturers with more than 200 in the Food and Beverage industry

### State/Local Government and Higher Education/Research Institutions

- > **Work closely with municipalities and other non profits:** Experience with municipal/government leaders allows us to understand diverse perspectives. We work with more than 150 higher education and research institutions across the United States.

# Baker Tilly presenters



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## Mike Land

Director with Baker Tilly Virchow Krause, LLP and Baker Tilly Capital, LLC; has been with the firm since 1997. Mike provides financial advisory and private investment banking services to clients in the renewable energy industry. This includes development support, deal structuring, tax credit monetization, grant procurement, and funding placement of both equity and debt.

He has closed or is involved with a wide range of renewable energy projects including wind, solar, biomass, waste-to-energy, and geothermal. This includes numerous 1603 grant projects from the unique perspectives of manufacturers, developers, and investors. Broader representative transaction experience consists of more than 100 transactions over the past ten years, with sizes ranging from \$5 million – \$300 million.

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## Rich Frohmader

Partner with Baker Tilly Virchow Krause, LLP; has been with the firm since 1989. He is a Manufacturing/Distribution Services Group Tax Partner and a member of the Baker Tilly Renewable Team. Rich previously served as the firm's Tax Director. He has more than 30 years of public accounting experience, including more than 10 years with an international firm.

1. What types of projects qualify?
2. What form do the incentives take?
3. What are the potential economic benefits?
4. When must projects begin or be completed to qualify?
5. What action do you need to take?

# What types of projects qualify?



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- > American Reinvestment and Recovery Act (ARRA) of February 2009 established definition of “Qualified Facilities”
- > Applicable energy generation technologies include:
  - > Wind
  - > Solar
  - > Biomass
  - > Landfill gas
  - > Anaerobic digestion
  - > Trash
  - > Geothermal
  - > Fuel Cells
  - > Hydropower

# What form do the incentives take?



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- > Production Tax Credit (PTC)
  - 10 years of credits based on the amount of electricity produced
- > Investment Tax Credit (ITC), in lieu of PTC
  - One time credit based on amount of project costs for eligible energy property
  - Earned when eligible energy property is placed in service
- > 1603 Grant-in-lieu of ITC
  - Forgo the ITC in favor of receiving non-taxable direct cash payment from the US Department of Treasury in an amount equal to the ITC

**In addition, renewable energy projects can qualify for accelerated depreciation treatment**

# What form do the incentives take?



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## > Production Tax Credit (PTC)

- Initially created in 1992
- 10 years of credits equal to \$.021/kwh + inflation
- “Open Loop Biomass” PTC is 50% of the \$/kwh amount

## > Investment Tax Credit (ITC) , in lieu of PTC

- 30% of eligible energy property placed in service, therefore not dependent upon the amount of energy produced
- For some technologies, the ITC is 10% of eligible property costs
- 5 year recapture period

# ITC applicable percentage of eligible costs



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<b>Specified Energy Property</b>	<b>Applicable Percentage of Eligible Costs</b>
Closed-loop Biomass	30%
Open-loop Biomass	30%
Geothermal under IRC § 45	30%
Landfill Gas	30%
Trash	30%
Qualified Hydropower	30%
Marine and Hydrokinetic	30%
Solar	30%
Geothermal under IRC § 48	10%
Fuel Cells	30%
Microturbines	10%
Combined Heat and Power	10%
Small Wind	30%
Geothermal Heat Pumps	10%
Large Wind	30%

# What form do the incentives take?



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## > 1603 Grant-in-lieu of ITC

- Forgo the ITC in favor of receiving non-taxable direct cash payment from the US Department of Treasury in an amount equal to the ITC
- This payment is available for projects that are either placed in service by 12/31/2011, or projects that “begin construction” prior to 12/31/2011
- As of November 2011, \$9 billion of 1603 grant funding has been provided to nearly 20,000 projects

## What form do the incentives take?



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- > 1603 Grants **cannot** be paid to
  - > Governmental bodies, political subdivisions, agencies or instrumentalities thereof
  - > Tax-exempt entities or Indian tribes
  - > A cooperative electric company
  - > A pass-thru entity that has one of the aforementioned named as a partner
- > **If an entity described above owns its interest through a taxable C corporation, that could then allow the use of the grant**

# Why might there be confusion regarding tax-exempt organizations' ability to use the 1603 Grant?



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- > Question 17, US Treasury Frequently Asked Questions:
  - > Question: “Are schools, colleges or universities eligible applicants?”
  - > Answer: “Schools, colleges or universities that are agencies or instrumentalities of a Federal, State or Local government are not eligible for payment. Additionally, schools, colleges or universities that are organizations described in section 501(c) of the Internal Revenue Code and exempt from taxation under section 501(a) of the internal Revenue Code are not eligible for payment.
  
- > Question 26, US Treasury Frequently Asked Questions:
  - > Question: “Can a taxable corporation that is wholly-owned by an ineligible entity be eligible?”
  - > Answer: “A taxable corporation can be an eligible applicant even if wholly owned by an ineligible entity.”

# What form do the incentives take?



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## > New Markets Tax Credits

- Congress created this program founded in 2000, designed to encourage investment in Low-Income Communities (“LIC”) as defined by US Census Tract Data
- 39% federal tax credit taken over 7 years; when monetized, provides benefit to the project of approximately 20% of the project cost
- Not an entitlement program
  - » Annual allocations of tax credits are made to Community Development Entities (“CDEs”) through an application process who then have three years to put the credits to work in qualified projects
  - » Total allocations of \$29.5 billion since the NMTC program’s inception
  - » \$3.5 billion was awarded in February 2011
  - » Another \$3.5 billion will be awarded at the end of 2011

## What are the potential economic benefits?



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- > When taken in total, these federal incentives can reduce the cost of an eligible project by 30%-50%
- > If projects are completed or have “started construction” by December 31, 2011, higher education institutions may make use of the incentives without an outside party
- > For projects started in 2012 and beyond, a partner will be required

## When must projects begin or be completed to qualify?



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- > Those starting construction or being built in 2011, or planned to be built and placed in service during the next several years
  - > Placed in service deadline depends upon the type of Qualified Facility:
    - > Large Wind: 12/31/2012
    - > Biomass, municipal solid waste, landfill gas: 12/31/2013
    - > Solar, geothermal, small wind: 12/31/2016
- These completion deadlines apply to all incentives (PTC, ITC and 1603 Grant)

## What action do you need to take?



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- > 1603 Grant – no outside partner is required. Must create a stand-alone legal entity and legal agreements with vendors (applies for projects begun or completed in 2011).
- > Tax Credits – need to partner with an outside “tax investor” that can utilize the tax incentives by investing in the Higher Education institution’s project (applies for projects placed in service by their respective deadline).
- > For both options, the Higher Education institution can maintain control of the project’s operation.

**Section two**

**1603 GRANT INCENTIVES**  
**THE FACTS**

## **Start construction by December 31, 2011**

1. Physical work of a significant nature
2. 5% safe harbor towards eligible purchases

Either test can show that construction has begun; if possible, meet both tests

# Physical Work of a Significant Nature (PWSN)



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- > This test has nothing to do with dollars
- > Preliminary work such as clearing land, obtaining permits, or installing fencing does not qualify as PWSN
- > Engineering, accounting, banking services may not be PWSN
- > PWSN must occur on eligible property – not work on building and/or transmission tower
- > PWSN can also be met off-site by manufacturer of energy property if binding written contract was entered into before work commenced
- > PWSN test can, therefore, be met even if a location for the energy property has not yet been purchased or even identified

## 5% safe harbor



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- > At least 5% of the total eligible costs must be paid or incurred by December 31, 2011, depending on applicant's accounting method.
- > It appears that a cash method applicant can simply make a 5% deposit by December 31, 2011, and meet this test. Any eligible costs would qualify – watch out for land, building, fencing, transmission towers, etc.
- > Who can use the cash method?

## 5% safe harbor (cont.)



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- > Accrual method applicants must “incur” costs: (1) the fact of the liability is fixed, (2) the amount can be determined with reasonable accuracy, and (3) economic performance test is met
- > Economic performance occurs when property is provided to the applicant if title to the property has passed to the applicant or when it is delivered to or accepted by the applicant. Property that the applicant reasonably expects to be provided within 3½ months of the date of payment will be considered provided on the payment date
  - For example: an accrual method applicant might meet the 5% safe harbor test by making a \$1 million payment on December 31, 2011, for \$1 million generator that they reasonably expect to receive by April 14, 2012, on a total project of \$20 million

# Other observations



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- > Be as conservative as possible – comfortably exceed 5% and take steps to alleviate all doubt
- > Consider taking steps to meet both PWSN and 5% safe harbor tests
- > Consider language in purchase contracts requiring manufacturer to cooperate and provide information so 1603 Grant can be obtained

# Non-qualifying expenses



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- > Asset tax basis is key
- > Planning and design
- > Engineering and developer fees
- > Financing costs
- > Land
- > Buildings
- > Roads and fences
- > Electrical transmission equipment
- > Basis reductions due to Section 179 or other grants
- > Property located offsite

# 1603 timetable



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- > Start construction by December 31, 2011
- > Obtain proof that construction started by December 31, 2011
- > Submit application to US Treasury before October 1, 2012 (use estimates if project is not completed) [www.treasury.gov/recovery](http://www.treasury.gov/recovery)
- > Place property in service before credit termination date

## 1603 timetable (cont.)



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- > Obtain a commissioning report to prove that the property is placed in service
- > If interconnected with a utility, obtain an interconnection agreement
- > Independent CPA to certify detailed breakdown of costs if project exceeds \$500,000
- > Supplemental information must be submitted to US Treasury within 90 days after property has been placed in service
- > US Treasury will review submission and make payment within 60 days

**Section three**

**PARTNERSHIPS WITH TAX  
INVESTORS  
THE FACTS**

- > Why are tax investors interested in higher education institutions?
  - > Higher Education institutions often represent a low credit risk and have access to low cost capital
  - > Many campuses have aging infrastructure that will need to be replaced. Coupled with the increasing cost of new fossil fuel projects, there are strategic reasons for investors and schools to invest in renewable projects.
  - > Reduction of project development risk: Oftentimes Higher Education represents both a buyer for the energy and project developer/owner in one organization. This offers unique ability to streamline zoning/permitting.
  - > Higher Education can help equipment manufacturers implement next generation technology, natural fit with research institutions

## Partnership structures

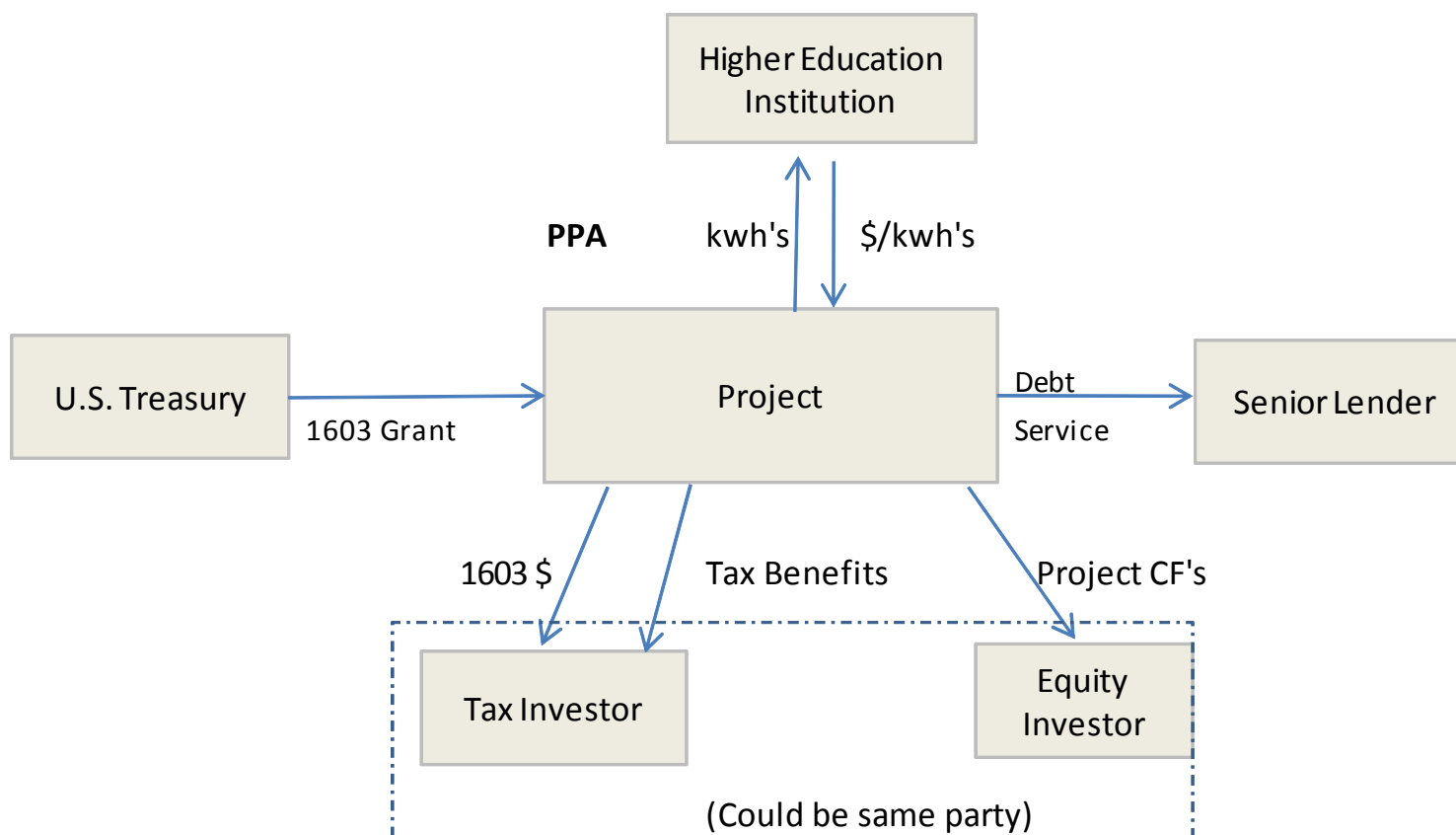


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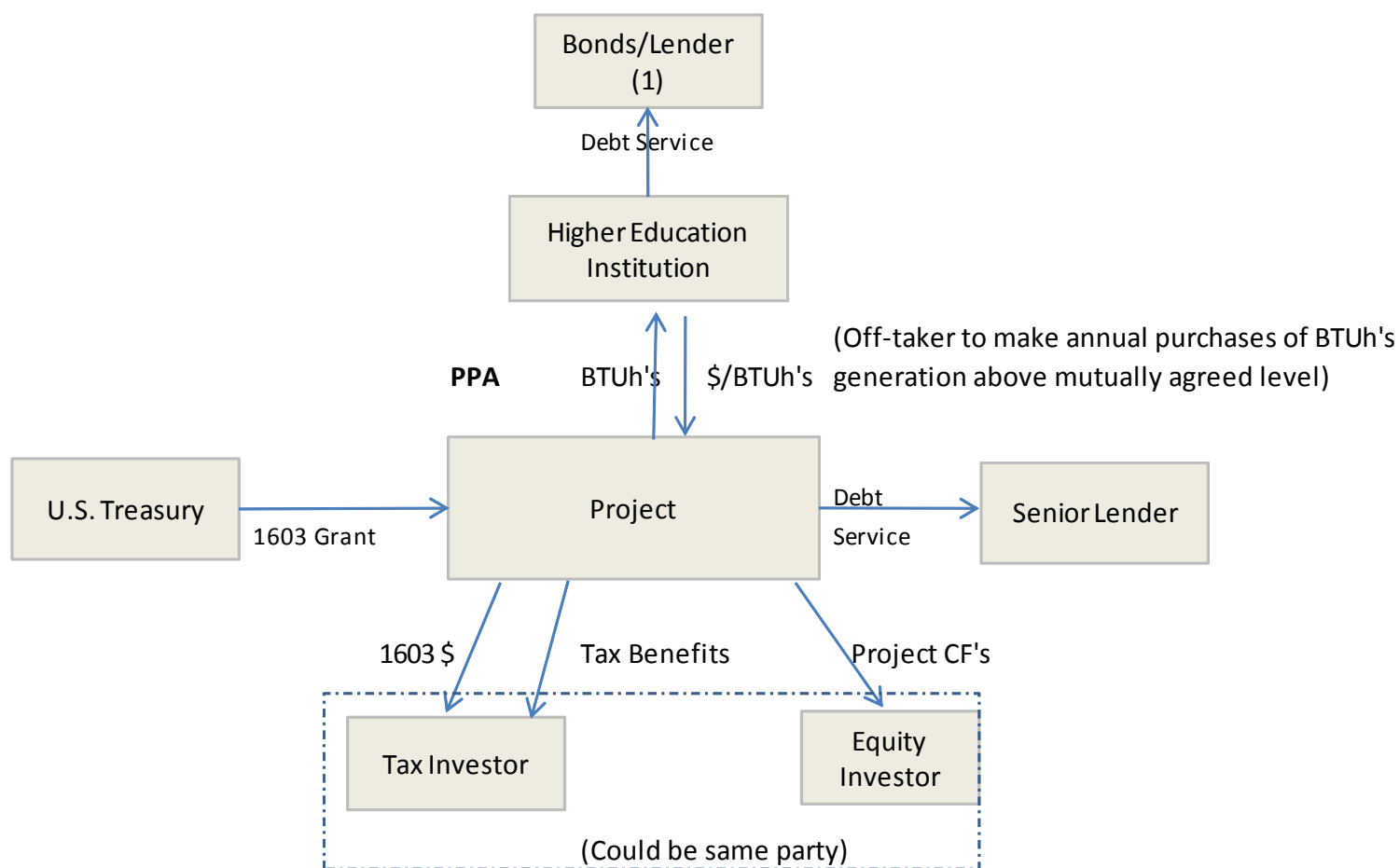
- > Power Purchase Agreement
- > Pre-paid Power Purchase Agreement
- > Lease Agreement

The terms of agreements under each of these structures must meet IRS rules regarding “substantive economic effect.”

## Potential Structure Diagram - PPA

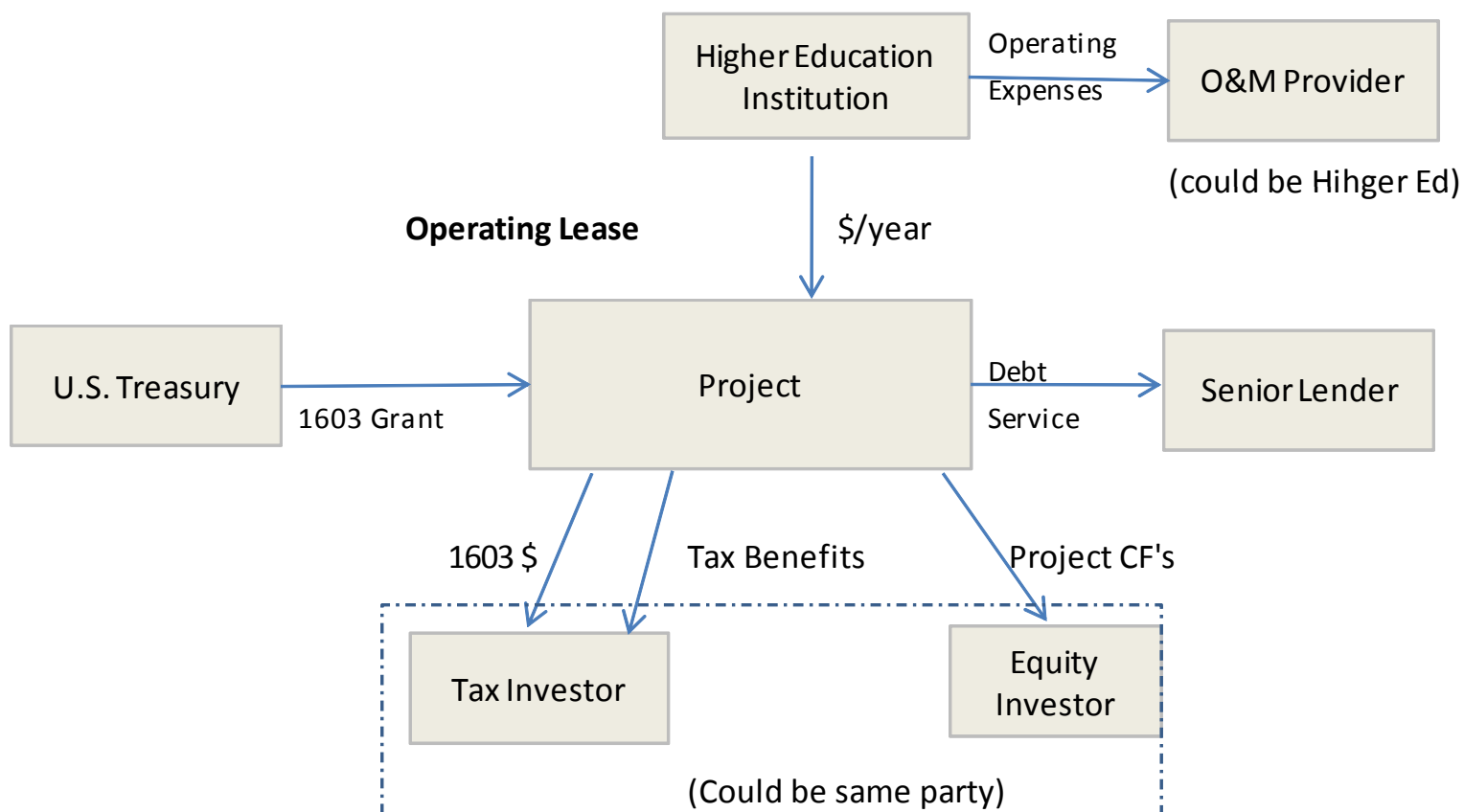


## Potential Structure Diagram - Pre-paid PPA



(1) Amount of equity and senior debt would be reduced by pre-paid funds.

## Potential Structure Diagram - Lease



# Comparison of funding options



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Potential Funding Options	Cost of Funds	Comments
1603 Grant Funds*	Nearly 0%	May be "reserved" via Safe Harbor Plan
NMTC Proceeds	Nearly 0%	Actual cost of funds depends upon CDE
Vendor Safe Harbor Actions**	Nearly 0%	Vendor could "incur" costs and fund part or all of S.H. Plan
Foundation Investments	5-8%	Depends upon fit of project with "Program Funds" available
Senior Debt/Revenue Bonds	5-8%	Tax-exempt status of bonds depends upon structure
Tax Equity	10-15%	Not required if "Blocker C" structure is used.
Equity	12-20+%	Depends upon technology's stage of development

\* Requires a bridge investment (funds received post COD).  
\*\* Requires binding written contract PRIOR to the work being done and costs being "incurred" by the vendor.

## What actions do you need to take?



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- > Why haven't more higher education institutions taken advantage of these incentives?
  - > Sustainability initiatives are relatively new in the United States, and the incentives are complex
  - > Passed in February 2009, ARRA was the first time renewable energy incentives had more than a one-year time horizon in the United States, enabling more stable project planning efforts

## Section four

# QUESTIONS AND ANSWERS

## Contact information



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