

Getting to Scale: Energy Investment Partnerships & Early Secondary Market Transactions

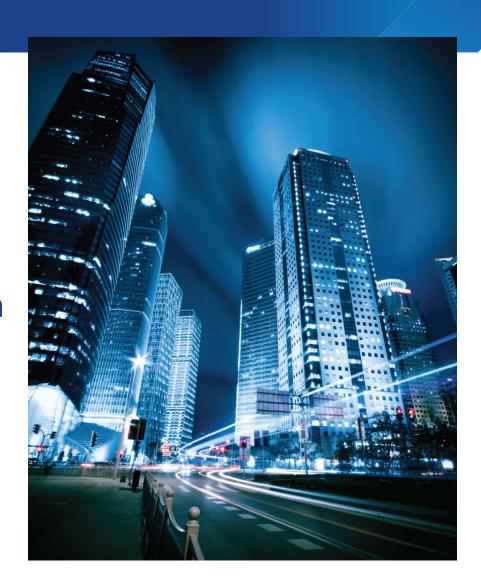
Derek Smith, Clean Energy Works Oregon Bruce Schlein, Citi Ben Healey, Clean Energy Finance & Investment Elizabeth Bellis, Energy Programs Consortium Authority

Moderator: Molly Lunn, U.S. DOE



Derek Smith

- Chief Executive Officer, Clean Energy Works Oregon
- CEWO partnered with Craft3 and others to offer on-bill financing to OR residents
- Loan portfolio sale to Self Help









Clean Energy Finance and Investment Authority

The First Securitization of Commercial PACE Assets

Better Buildings Summit May 8, 2013

Connecticut Green Bank

Clean Energy Defined by Public Act 11-80























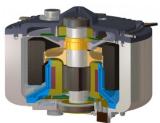








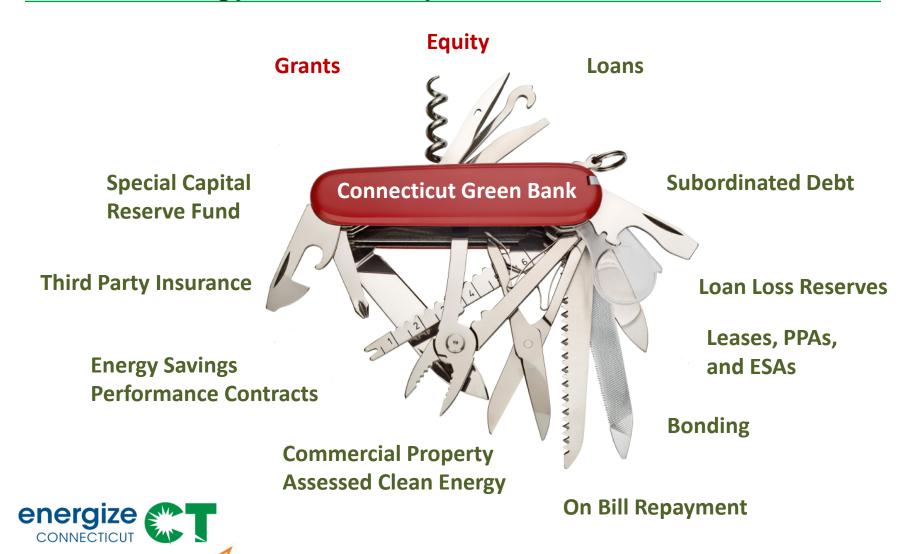






Connecticut Green Bank

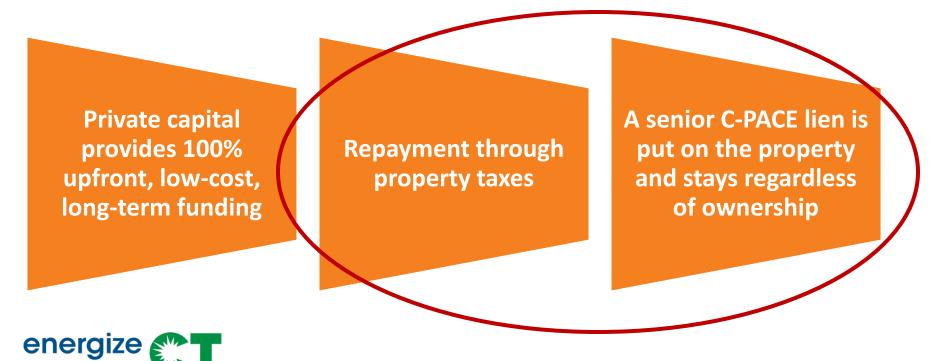
Clean Energy Defined by Public Act 11-80



Commercial Property Assessed

Clean Energy (C-PACE)

 An innovative financing structure that enables commercial, industrial, and multi-family property owners to access financing for qualified energy upgrades and repay through a benefit assessment on their property tax



C-PACE Advantages

for Owners

Near term plan to sell?

Lack of funding?

Cannot assume more debt?

Insufficient payback/ROI?

Split incentives?

Uncertain savings/technical expertise?

Tax obligation fixed to property

100% upfront, 20 year financing

Assessments may qualify as OPEX

Positive cash flow in year 1

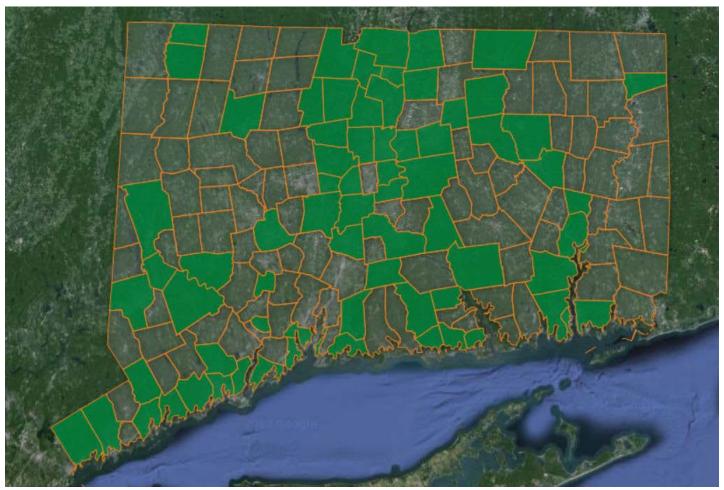
Assessment/savings pass to tenants

Technical underwriting / SIR>1



Current C-PACE Municipalities

80 Signed Up Since Jan 2013





C-PACE Website

Owner / Contractor / Municipal Portal



Whether you are a building owner, a municipality, a contractor, project developer, or an investor, you can get started on C-PACE now. It's easy.



C-PACE Transactions

Closed to Date

	Municipality	Project Type	Lifetime est. savings	Installed Capacity	Amount Financed	EE Utility Incentives	Financing Terms
41 Walnut Street	Hartford	Renewable	\$ 418,690.00	55 kW	\$145,000	\$0	5.5% for 20 years
542 Westport Ave	Norwalk	Both	\$ 794,944.00	100 kW	\$559,952	\$54,584	4.5 for 15 years
1841 Broad Street	Hartford	Renewable	\$ 922,165.00	100 kW	\$325,000	\$0	5.5% for 20 years
100 Roscommon	Middletown	Both	\$ 5,758,229.00	260 kW	\$2,513,914	\$387,885	5.5% for 20 years
86 Hopmeadow	Simsbury	Energy Efficiency	\$ 1,373,297.00		\$674,566	\$165,850	5.5% for 18 years
855 Main Street	Bridgeport	Energy Efficiency	\$ 6,047,504.00		\$1,992,683	\$469,317	5.5% for 20 years
True Value Hardware	Killingworth	Renewable	\$ 298,660.00	71 kW	\$259,000	\$0	5.5% for 20 years
80 Lamberton	Windsor	Energy Efficiency	\$ 3,006,120.00		\$1,818,486	\$464,835	5.5% for 20 years
ID Products	Bridgeport	Energy Efficiency	\$ 290,959.00		\$107,566	\$43,311	5.5% for 15 years
Bushnell Theatre	Hartford	Energy Efficiency	\$ 1,181,420.00		\$384,000	\$16,000	5% for 20 years
Larsen Ace Hardware	Canton	Renewable	\$ 105,274.00	45 kW	\$148,500	\$0	5.5% for 20 years
Danbury YMCA	Danbury	Energy Efficiency	\$ 184,681.00		\$87,938	\$12,800	5.5% for 20 years
Insports Trumbull	Trumbull	Both	\$ 1,833,569.00	252 kW	\$1,001,298	\$0	5.5% for 20 years
NPB Assets Norwich	Norwich	Renewable	\$ 783,840.00	150 kW	\$350,000	\$0	5.5% for 20 years
290 Pratt	Meriden	Energy Efficiency	\$ 3,556,748.00		\$1,790,847	\$56,000	5.5% for 20 years
22 Waterville Road Avon	Avon	Energy Efficiency	\$ 666,291.00		\$419,346	\$167,124	5.5% for 14 years
Sofia East Windsor	East Windsor	Renewable	\$ 1,531,830.00	250 kW	\$750,000	\$0	5.5% for 20 years
Sofia East Windsor	East Windsor	Renewable	\$ 1,531,830.00	250 kW	\$750,000	\$0	5.5% for 20 years
Bourdon Forge	Middletown	Renewable	\$ 2,499,838.00	500 kW	\$1,500,000	\$0	5.5% for 15 years
Air Temp Mechanical	Southington	Renewable	\$ 304,780.00	45 kW	\$135,000	\$0	6% for 20 years
Shagbark	East Haddam	Renewable	\$ 1,215,205.00	157 kW	\$478,000	\$0	5% for 10 years
Northeast Tool	Stratford	Renewable	\$ 215,420.00	30 kW	\$122,471	\$0	6% for 20 years
Calvary Temple	Bridgeport	Energy Efficiency	\$ 136,780.00		\$51,116	\$3,192	5% for 10 years
CLOSED TOTAL - 23			\$ 34,658,074.00	2,265 kW	\$16,364,683	\$1,837,706	



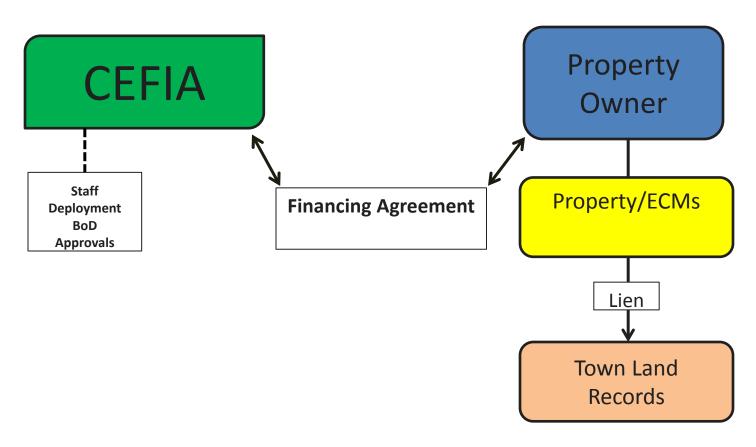
C-PACE Transactions

Approved (not yet Closed)

	Municipality	Project Type	Lifetime est. savings	Installed Capacity	Amount Financed	EE Utility Incentives	Financing Terms
Meriden YMCA	Meridan	Both	\$ 688,991.00		\$372,466		5.5% for 20 years
Quality Inn	Vernon	Renewable	\$1,415,896	200 kW	\$850,000		5.5% for 20 years
255 Bank Street	Waterbury	Energy Efficiency	\$ 879,750.00		\$524,941		5.7% for 17 years
1095 Dayhill Road	Windsor	Both	\$ 1,522,753.00	206 kW	\$829,399		6% for 20 years
Eli Properties (50 Industry Dr)	West Haven	Renewable	\$ 22,710.00	75 kW	\$254,920		6% for 20 years
Brookfield YMCA	Brookfield	Both	\$ 111,104.00		\$1,000,000		5.03% for 15 years
Polamer Precision	New Britain	Renewable	\$ 253,920.00		\$2,500,000		6% for 20 years
Amgraph Packaging	Sprague	Both	\$ 1,047,124.00		\$6,000,000		5% for 10 years
			\$ 4,526,352.00	2,776 kW	\$12,331,726		
CLOSED AND APPROVED TO	OTAL - 29		\$ 39,184,426.00	5,041 kW	\$28,696,409		



First ... Close the Transaction





Then ... Fully Disburse and Finalize Liens

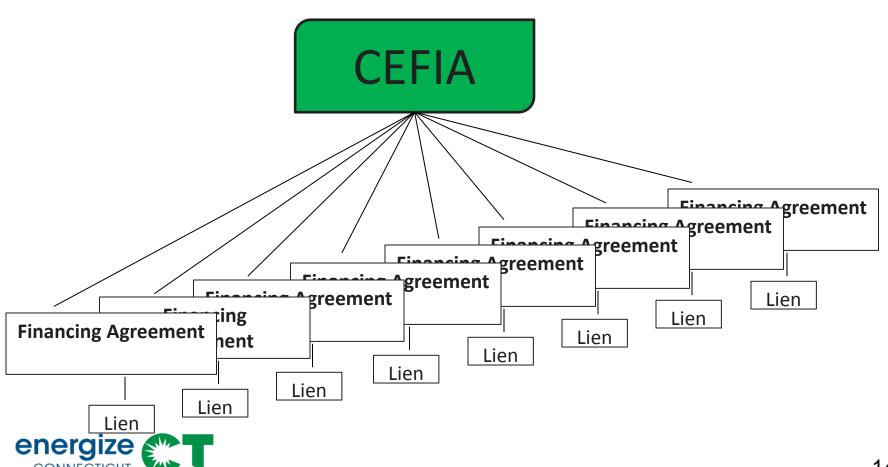


Financing Agreement

Lien



Next ... Aggregate Portfolio Using Warehouse



Sell Down Process

Offering Notice

865 Brook Street Rocky Hill, Connecticut 06067-3444 T: 860.563.0015 F: 860.563.4877 www.ctcleanenergy.com



C-PACE Offering Notice

Sale: Up to \$8,903,830 (face value) C-PACE Benefit Assessment Participation

Interests

Number of

Transactions: Up to 11 transactions, ranging in amou

Collateral: Benefit assessment liens against the b efficiency or renewable energy improve

Location: State of Connecticut
Status: In various stages of advance
Closing Date: October 21, 2013

Summary

CEFIA has entered into, or soon will enter into financ assessment lien and, to a certain extent, promissory r (the "Financing Documents") pursuant to which C assessment advances (and, to a certain extent, advan borrowers for the purpose of renovating or retrofitting properties with energy efficiency or renewable energy in CEFIA has filed or will file benefit assessments against

Where applicable, the borrowers have obtained conse Benefit Assessments (the "Consenting Party" or Conse

Projects (the "Benefit Assessments").

Structure

CEFIA desires to sell, without recourse (the "Benefit A (the "Participation Interests") in such Financing Docum obligations, and interests in and to (i) all payments and Documents, (ii) certain rights of CEFIA existing under I its related Collateral and (iii) CEFIA's position ur Documents, on terms and conditions to be agreed (defined below). The Participation Interests are being o

CEFIA is soliciting indicative bids from qualified C-PAC



CLEAN ENERGY www.ctcleanenergy

Indicative Bid Instructions

Section 1 Applicability, Unless otherwise specified in the C-PACE Offering Notice Dated 28 July 2013 (the "Notice"), the provisions of these CEFIA C-PACE Benefit Assessment Participation Interests Indicative Bid Pr time, will govern the submission and eva

Section 2 Definitions.

For purposes of the Procedures, t have the meanings assigned herein or it

"Benefit Assessment" has the n

"Benefit Assessment Sale" has

"Bid" means an offer to purchase Assessment Sale at a specified Price su

"Business Day" means any day o CEFIA or banks in the states of Conne

"Capital Provider" means a caj Assessed Clean Energy ("C-PACE") Pr

"Effective Yield" means the a Assessment expressed as a percentage.

"Eligible Capital Provider" mea eligible to participate in a Benefit Asse

"Final Bidder" has the meaning

Revised Benefit Assessment Sale Schedule

Event	Date
Offering Notice Distributed	Wednesday, July 31, 2013
nitial Data Distribution (including comprehensive bidding instructions)	Monday August 19, 2013
Complete deal information uploaded into Data Room	Wednesday September 4, 2013
ndicative Bid Date	Wednesday September 18, 2013
Final Bidder(s) Invitation	Friday September 27, 2013
Final Bid Date	Friday October 11, 2013
Winning Bidder Selected	Wednesday October 23, 2013
10% Non-Refundable Deposit Due	Monday October 28, 2013
Closing Date	Friday November 1, 2013

Sell Down Process

Bidders' Diligence

As an investor in Benefit Assessments and their associated Benefit Assessment Liens, you should consider carefully the risks associated with these investments. These risks include, but are not limited to, the following:

The investments will not be listed on any securities exchange. Therefore, in order to sell your investments, you will need to find a willing buyer. CEFIA may assist in the resale of investments, but it is not required to do so. You may be unable to obtain the price that you wish to receive for your investments or you may suffer a loss on your investment. Illiquidity can have a severely adverse effect on the prices of investments that are anticipated to result from a stream of payments over many years and which are subject to default and foreclosure risk.

The Benefit Assessments you may invest in are subject to delinguency, foreclosure and loss, any or all of which

could result in losses to you. In some cases, the ability of a borrower to repay the Benefit Assessment can be dependent upon the successful operation of the underlying project. If the cash flow of the project is reduced, the borrower's ability to repay the Benefit Assessment may be impaired. In providing the financing associated with these Benefit Assessments, we have made certain estimates regarding project cash flows or savings during our underwriting of such financings. These estimates may not prove accurate, as actual results may vary from estimates. The cash flows or cost savings of a project can be affected by, among other things: the terms of the renewable energy certificate contract used in such project; the creditworthiness of the property owner; the technology deployed; unanticipated expenses in the operation of the project and changes in national, regional or local economic conditions; and environmental legislation, acts of God, terrorism, social unrest and civil disturbances. Foreclosure proceedings against a project can be an expensive and lengthy process which could have a substantial negative effect on your anticipated return on the foreclosed Benefit Assessment.

The projects financed by the Benefit Assessments typically rely on third parties to select and manage various

equipment and service providers. These third parties may be responsible for choosing vendors, including equipment suppliers and subcontractors. Project success often depends on third parties who are capable of installing and managing projects and structuring contracts that provide appropriate protection against construction and operational risks. In many cases, in addition to contractual protections and remedies, project/property owners may seek guaranties, warranties and construction bonding to provide additional protection.

The warranties provided by the third parties and, in some cases, their subcontractors, typically limit any direct harm that results from relying on their products and services. However, there can be no assurance that a supplier or subcontractor will be willing or able to fulfill its contractual obligations and make necessary repairs or replace equipment. In addition, these warranties generally expire substantially before the final repayment of the Benefit Assessment or may be of limited scope or provide limited remedies. If projects are unable to avail themselves of warranty protection or receive the expected protection under the terms of the guaranties or bonding, project/property owners may need to incur additional costs, including replacement and installation costs, which could adversely impact the economics associated with the projects related to the Benefit Assessments and the ability of the





Outlined below are login instructions for C-PACE Capital Providers to access the C-PACE portfolio project-level financial and technical underwriting data via CEFIA's Data Management Platform (CDMPpowered by Sustainable Real Estate Solutions, Inc. (SRS).

Step 1: Go to SRS's web site: http://www.srmnetwork.com/, click on Client Login link, upper right corner.

^			CLIENT LOGIN BLOG CONTACT US
	SUSTAINABLE REAL ESTATE SOLUTIONS	HOME SOLUTIONS MARKETS R	ESOURCES NEWS ABOUTU

Step 2: Enter your Username & Password to access the CDMP.

User Name:	
Password:	
Forgot Password?	Login

Step 3: Upon login you will be directed to the CDMP Portfolio Dashboard. Five C-PACE projects will display in the lower left corner. To access property-level underwriting data, click on each property name. Note the aggregate data displayed on the Portfolio Dashboard is not highly-relevant to Capital Provider's

Sell Down Process

Indicative and Final Bids

Attachment A

C-PACE Benefit Assessment Participation Interests Indicative Bid Sheet

Rea	nuiredE	lements:

Eligible Capital Provider Name	
Bidding for Own Account	Bidding on Behalf of Another Investor
Transaction Name	
Price (relative to Par)	
Purchase Amount (≥ 10% of the relevant Benefit Assessment, increasing in 5% increments)	
$Term\ and\ Amortization\ Schedule\ (unless identical\ to\ the\ Benefit\ Assessment-if\ so,so\ state)$	
Optional Elements:	
CEFIA Credit Enhancement	
Prepayment Penalty	
Closing Fees and/or Other Fees	
Additional Terms and Conditions of Bid	
Authorized Representative of Bidder (Printe	dName)
Signature of Authorized Representative of B (An electronic signature will be accepted with the same authority as	
Date of Bid	



C-PACE

Status of Sell-Down

- Closing with Clean Fund occurred on May 6, 2014
- 11 fully disbursed C-PACE transactions included in first tranche, totaling just under \$8M in principal
- Clean Fund purchase price, for right to senior 80% of cash flows = ~\$6M
- Overall deal includes first \$30M of C-PACE projects, with Clean Fund purchasing ~ \$24M via Public Finance Authority bonds
- CEFIA holding onto subordinated 20% of ongoing cash flows



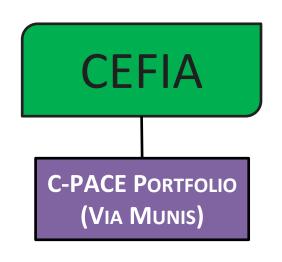
C-PACE

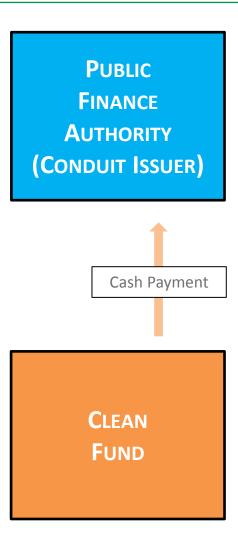
Sell-Down Properties (First Tranche)

Property	Town	Project Type	Amount Financed (with capitalized interest)
41 Walnut Street	Hartford	Renewable	\$145,000
542 Westport Avenue	Norwalk	Energy Efficiency	\$559,950
1841 Broad Street	Hartford	Renewable	\$325,000
100 Roscommon	Middletown	Both	\$2,549,654
86 Hopmeadow	Simsbury	Energy Efficiency	\$685,316
ID Products	Bridgeport	Energy Efficiency	\$107,556
True Value	Killingworth	Renewable	\$261,567
80 Lamberton	Windsor	Both	\$1,837,593
YMCA	Danbury	Energy Efficiency	\$87,938
22 Waterville Road	Avon	Energy Efficiency	\$424,180
InSports	Trumbull	Both	\$1,012,004
			\$7,995,760



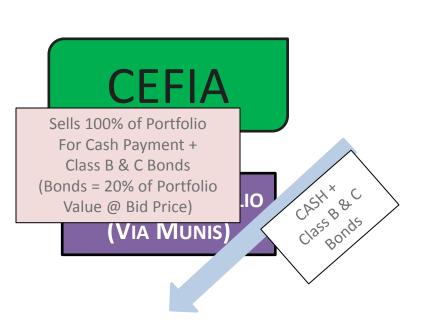
Clean Fund Purchased Portfolio via Conduit Issuer

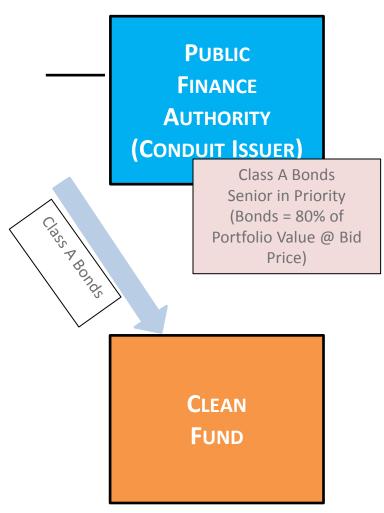






Conduit pays for purchase with Cash + Bonds

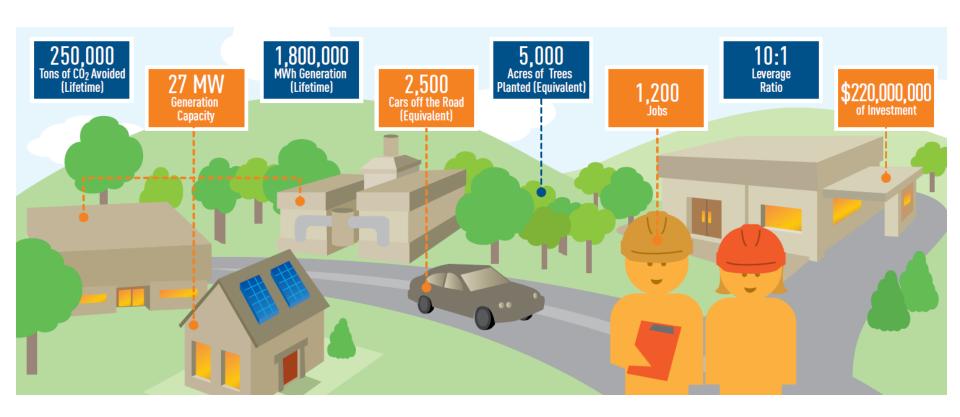






The Green Bank Model Works

Doing More, Faster and Under Budget







Thank You!

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May 2014

Better Buildings Summit | 2014

Getting to Scale: Energy Investment Partnership and Early Sales to the Secondary Market

Presented By:

Bruce Schlein

Director, Corporate Sustainability



Energy Efficiency Financing Solutions

PROPERTY TYPE / SECTOR

PRODUCT / SOLUTION	MUSH	Single Family	Commercial	Corporate/ Industrial
Large Single Project				
Pooled Asset Deal				
ESCO/ESA/Two Factor Credit				
PACE				
On-Bill (OBR)				
Sustainable Energy Utility				
Microfinance				



Energy Efficiency Financing Solutions

PROPERTY TYPE / SECTOR

ı	I	I	I	I	I	
PRODUCT / SOLUTION	MUSH	Federal/ DOD	Single Family	Multifamily	Commercial	Corporate/ Industrial
Large Single Project						
Pooled Asset Deal						
ESCO/ESA/Two Factor Credit						
PACE						
On-Bill (OBR)						
Sustainable Energy Utility						
Microfinance						



Energy Efficiency Financing Solutions

PROPERTY TYPE / SECTOR

PRODUCT / SOLUTION	MUSH	Federal/ DOD	Single Family	Multifamily	Commercial	Corporate/ Industrial
Large Single Project	Yes	Yes	N/A	Yes	Yes	Yes
Pooled Asset Deal	Yes Green Campus	Yes	Yes Kilowatt; WHEEL	Difficult HPET	Difficult Hyb	Yes rids
ESCO/ESA/Two Factor Credit	Yes	Yes	N/A	Difficult NYCEEC	Difficult NYCEEC	Yes Citi London
PACE	Yes C-PACE	N/A	Yes-On hold CAHERO	Yes	Yes	Yes
On-Bill (OBR)	Yes	N/A	Yes NYSERDA	Yes	Yes	Yes
Stranded Cost Tariff	Yes	N/A	Yes	Yes	Yes	Yes
Sustainable Energy Utility	Yes <u>Delaware</u>	N/A	N/A	N/A	N/A	N/A
Microfinance	N/A	N/A	Yes Mongolia	N/A	Yes	N/A





Warehouse for Energy Efficiency Loans

Transforming Energy Efficiency Financing

Better Buildings Summit



Introduction to WHEEL

- Inspired by Pennsylvania's experience with Keystone HELP
- A collaboration among EPC, Pennsylvania Treasury Department,
 Renewable Funding and Citigroup Global Markets
 - Supported by the National Association of State Energy Officials (NASEO)

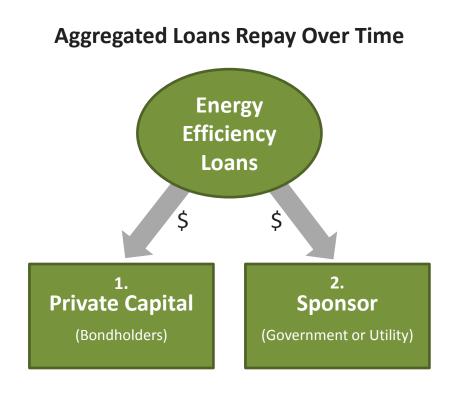
What WHEEL Does

- WHEEL provides low-cost, large-scale private capital to state and local government and utility-sponsored residential energy efficiency loan programs
 - WHEEL facilitates this by purchasing & aggregating loans to support the issuance of investment grade-rated securities
 - A robust secondary market supports more attractive financing with less dependence on public subsidy
 - Opportunity for "zero net subsidy" financing as sponsor revenue can exceed initial contribution
 - Ability to support loans to a wide range of creditworthy borrowers, not just those with high incomes and excellent credit
 - Rate to borrower given current market conditions: <10%
 - Sponsors may choose to provide additional credit enhancement funds to further reduce rate to consumers

The WHEEL Basics

The sponsor provides credit enhancement to allow for low-cost private capital to fund energy efficiency loans. As loans repay, the private investors are repaid first, with all remaining loan repayments provided back to the sponsor.

Sponsor (Credit Enhancement – IRBD) Private Capital (Citi / PA Treasury) \$ Energy Efficiency Loan



WHEEL in Action

- Began purchasing loans originated in sponsor jurisdictions in April 2014
- Currently operating in Pennsylvania and Kentucky
- WHEEL has already acquired over \$13 million in loans
 - Average loan balance: \$8,500
- Accepting additional sponsors now and on a rolling basis

Contact

For more information, please contact me at:

Elizabeth Bellis, Counsel ebellis@energyprograms.org (718) 596-5700

Questions?

