

Overview of Presentation

concept and timeline

Recap of Energy Investment Partnerships (EIP)

- Recap of EIP Webinar 1: Energy Investment Partnerships (EIP) -- What Is It and How to Get Started
- Fact Sheet Release
- Resources to Support EIP Development

Energy Investment Partnerships Guide

www.cdfa.net

cdfa







Energy Investment Partnerships: How State and Local Governments Are Engaging Private Capital to Drive Clean Energy Investment



December 2015



www.cdfa.net

Webinar video and presentations available on the CDFA website:

https://www.cdfa.net/cdfa/cdfaweb.nsf/ordredirect.html?open &id=201602-Energy%20Investment%20Partnerships%20Webinar%201

Speakers Included:

- Karen Wayland, Deputy Director for State and Local Cooperation, U.S. Department of Energy
- Toby Rittner, President & CEO, Council of Development Finance Agencies
- Jeffrey Schub, Executive Director, Coalition for Green Capital
- Bryan Garcia, President & CEO, Connecticut Green Bank
- Deana Carrillo, Executive Director, California Alternative Energy & Advanced Transportation Financing Authority (CAEATFA)
- Adam Zimmerman, Executive Vice President, Craft3



- Topics Discussed
- www.cdfa.net

 Karen Wayland, Deputy Director for State and Local Cooperation, U.S. Department of Energy





Recap EIP Webinar 1

Topics Discussed

 Toby Rittner, President & CEO, Council of Development Finance Agencies



The Toolbox & Financing Spectrum

5 Practice Areas

www.cdfa.net



Bonds and the Basics of Public Finance

Practice Area 2: Targeted Tools

Tax Increment Finance, Special Assessment Districts, Government Districts, Project Specific District Financing & Tax Abatements

Practice Area 3: Investment Tools Tax Credits, EB-5

Practice Area 4: Access to Capital Lending Tools

Revolving Loan Funds, Mezzanine Funds, Loan Guarantees and Microenterprise Finance, Seed & Venture Capital

Practice Area 5: Support Tools Federal Funding



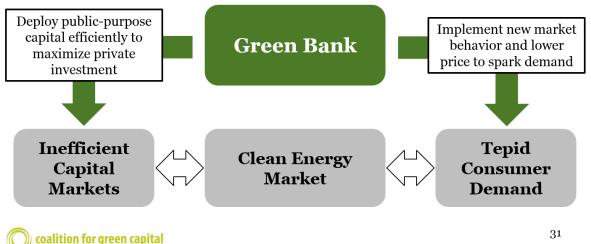
Topics Discussed

4 🔊 🖉 🖪 🔍 💿

 Jeffrey Schub, Executive Director, Coalition for Green Capital

Green Banks (EIPs) fill the financing gap and draw in the capital needed to make clean energy markets grow

A green bank is a public financing authority that leverages private capital with limited public-purpose dollars to accelerate the growth of clean energy markets



www.cdfa.net



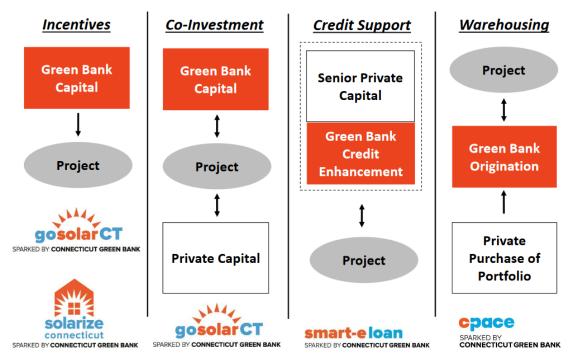


- Topics Discussed
- www.cdfa.net



What are Green Bank Products and Programs





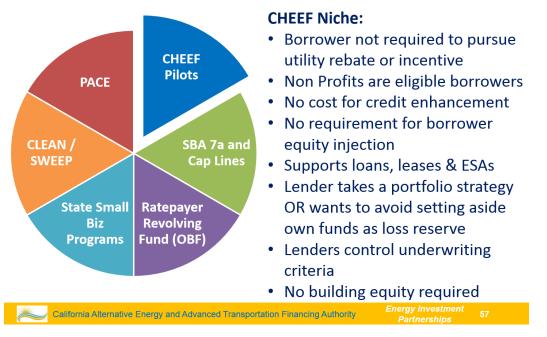


Recap EIP Webinar 1

Topics Discussed

 Deana Carrillo, Executive Director, California Alternative Energy & Advanced Transportation Financing Authority (CAEATFA)

CHEEF pilots complement existing programs that support small business Energy Efficiency



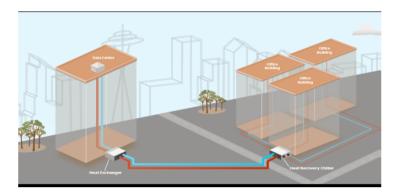


Recap EIP Webinar 1

- Topics Discussed
 - Adam Zimmerman, Executive Vice President, Craft3

Commercial/Industrial Energy Efficiency: McKinstry Eco District Seattle 1, LLC

- Craft3 provided project financing for a waste heat exchange system that will produce space heat and hot water for a large new office complex in downtown Seattle
- The project had limited collateral which made it more difficult to finance with traditional debt



Economic Resilience

- 26 construction jobs created
- \$2,400,000 of investment leveraged

Ecological Resilience

• 5,516 metric tons of CO2 averted



EIP Fact Sheet

www.cdfa.net

Focus: Implementation and looking ahead at the EIPs Online at: https://www.cdfa .net/cdfa/cdfawe b.nsf/ordredirect .html?open&id= 201603-EIPFactSheet1. html



Energy Investment Partnerships

What They Are & How to Get Started

Implementing an Energy Investment Partnership

What is an Energy Investment Partnership?

Energy Investment Partnerships (EIPs)—sometimes called Green Banks—are newly emerging public-private partnerships with the authority to raise capital. These partnerships rely on a variety of means and can align clean energy finance initiatives and traditional development finance tools to maximize the impact of public funds. The end goal is to accelerate clean energy deployment and economic development.

DOE's Energy Investment Partnership Report

In December 2015, the U.S. Department of Energy released a report that examines innovative financing mechanisms adopted by eight states— California, Connecticut, Florida, Hawaii, New Jersey, New York, Ohio, and Oregon—to spur investments in clean energy, energy efficiency and resilient infrastructure. The report, "Energy Investment Partnerships: How State and Local Governments Are Engaging Private Capital to Drive Clean Energy Investments, "illustrates how states and entities are driving clean energy deployment through leveraging private capital.



By leveraging private dollars, Energy Investment Partnerships generate an impact well beyond what would be possible with public funds alone.

States and Local Governments Taking Action

An EIP helps to attract private capital to clean energy projects in many ways, including through the traditional development-finance tools, such as issuing bonds, colending with banks, and insuring or credit enhancing private loans.

Innovative financing mechanisms like EIPs are critical for mobilizing the public and private capital necessary to transition to a low carbon economy. States, cities, and counties are beginning to deploy EIPs to help meet carbon emissions reductions goals and to fund more resilient infrastructure.

By developing public-private partnerships and bringing the right mix of partners, authorities, and strategies to the table, each state, region, municipality, and market can create a unique—but effective—vehicle to support clean energy finance and deployment.

The implementation of these EIPs is typically a result of carefully structured public-private partnerships, cooperative political environments, legislative mandates, and access to credit enhancement tools. By leveraging private dollars, EIPs generate an impact well beyond what would be possible with public funds alone, and are expanding the legacy of financing infrastructure and economic development for clean energy deployment.

The full report is available online at: energy.gov/epsa/energy-investment-partnerships

Looking Ahead

This trend is continuing to spread across the nation as additional state and local governments prioritize investments in clean energy. For example, in 2015, the State of Rhode Island passed legislation for the Rhode Island Infrastructure Bank, and Montgomery County. Maryland, also passed legislation for a "Green Bank"—both entities are now moving forward in their development. Other states and counties are following suit and are paving a path forward in the creation of EIPs. Due to the success and growth of these kinds of programs, there is much anticipation that additional state and local EIPs will emerge in the coming years.

The potential impact of EIPs extends across environmental, fiscal, social, and physical boundaries. Through forming partnerships and addressing the diverse needs of stakeholders, EIPs contribute valuable direction toward reducing the need for public capital in the transition to a clean energy economy.

EIP Factsheet written by the Council of Development Finance Agencies | www.edfa.net

The authors are not engaged in undering legal, accounting, or other protessional services, nor do they intend that this material be odied upon to the exclusion of outside counsel. These wesking to conduct complex financial deals are encouraged to seek the advice of a skilled legal/consulting professional.





EIP Fact Sheet

www.cdfa.net

Focus: Summary of **EIPs & related** programs Online at: https://www.cdf a.net/cdfa/cdfa web.nsf/ordredi rect.html?open &id=201603-EIPFactSheet1

<u>.html</u>

Energy Investment Partnerships

What They Are & How to Get Started

Summary of Energy Investment Partnerships and Related Programs

The table below provides an overview of the EIPs and programs profiled in the EIP report. By establishing state and regional partnerships to repurpose existing funding sources and attract private capital, each EIP has generated an impact well beyond savings on utility bills. Programs and states were chosen based on a wide range of factors, yet aimed to show a diversity in structure, markets, and execution, and illustrate the multitude of ways that EIPs can increase investment in clean energy projects. The EIPs profiled in this document represent a few of the ways that public and private funding sources can combine to optimize access and affordability of financing for businesses and homeowners.

The full report is available online at energy.gov/epsa/energy-investment-partnerships.

State	Entity	Programs (in report)	Legal Structure	Capitalization	Market Sectors
CA	CA Alternative Energy & Advanced Transportation Financing Authority	PACE Loss Reserve; CA Hub for Energy Efficiency Financing	State agency	State allocation + CA PUC allocation	Resident & commercial; efficiency & renewables
CA	CA Infrastructure and Economic Development Bank	CA Lending for Energy and Environmental Needs Center	State agency	Self-capitalized	State and local govt.; efficiency, renewable, water conservation, & distribution
ст	CT Green Bank	CT Solar Lease; Energize Connecticut Smart E-Loan; Commercial PACE; CT Solar Loan	State agency	Systems Benefits Charge + RGGI funds + U.S. DOE grant +private investments+fees	Resident & commercial; efficiency & renewables
FL	Solar & Energy Loan Fund	Clean Energy Loan Fund	Nonprofit, CDFI	U.S. DOE grant + private investments	Resident & commercial; efficiency & renewables
н	Hawaii Green Infrastructure Authority	Green Energy Market Securitization	State agency	Bonds + utility fees	Resident & commercial; efficiency & renewables
	NJ Board of Public Utilities	NJ Clean Energy	State agency	Self-capitalized	Resident & commercial; efficiency & renewables
NJ	NJ Energy Resilience Bank	Wastewater and Water Treatment Plant Funding	State agency	U.S. Dept. of Housing & Urban Development grant	Utilities; renewables
NY	NY State Energy Research & Development Authority	Green Jobs - Green NY	State agency	Systems Benefits Charge + RGGI funds + U.S. DOE grant + Qualified Energy Conservation Bonds	Residential & commercial; efficiency
	NY Green Bank	Clean energy financial products and advisory services	Division of a state agency, NYSERDA	Allocation of uncommitted Efficiency & RPS & System Benefits Charge funds	Resident & commercial; efficiency & renewables
	Toledo-Lucas County Port Authority	BetterBuildings Northwest OH	Local agency	Fees + U.S. DOE grant + tax levy	Resident & commercial; efficiency & renewables
он	Greater Cincinnati Energy Alliance	Greater Cincinnati Home Energy Loan; Building Communities Loan	Nonprofit	U.S. DOE grant + private impact investment + fees	Residential & nonprofit; efficiency & renewables
	Port of Greater Cincinnati Development Authority	Greater Cincinnati PACE	Local agency	Fees + county & city allocation	Commercial; efficiency & renewables
OR	Energy Trust of OR	General efficiency incentives	Nonprofit	System Benefits Charge	Residential & commercial; efficiency
	Enhabit	General efficiency incentives	Nonprofit	Fees + U.S. DOE grant	Residential; renewables
	Craft3	Home Energy Efficiency Loan	Nonprofit, CDFI	Private investments + private contributions + grants	Residential; efficiency

EIP Factsheet written by the Council of Development Finance Agencies | www.cdfa.ne

The authors are not engaged in rendering logal, accounting, or other professional services, rur do they intend that this material be relied upon to the exclusion of outside counsel. These seeking to on complex financial deals are encouraged to seek the advice of a skilled logal/consulting professional.



EIP Resources – Training

Intro Energy Finance Course CDFA Summer School August 9-10, 2016 Baltimore, Maryland

- Comprehensive training course focused on building capacity and programming to support energy development in the local community. Topics include:
 - Energy development industry overview
 - Legal and regulatory considerations
 - Property Assessed Clean Energy (PACE)
 - Understanding various financing programs for EE/RE initiatives
 - Tax-exempt and taxable bonds for energy development
 - Loan programs
 - Tax credits and other incentive programs supporting energy development
 - Innovative energy development financings





New Orleans, Louisiana

- Nation's first comprehensive training focused on developing local and state PACE programming. Topics include:
 - How PACE works
 - Why use PACE as a financing tool

EIP Resources – Training

- Addressing barriers to PACE implementation
- Financing process & terms
- Important regulations & guidelines
- Management structures
- How to create a PACE program for a community
- Example PACE programs from start to finish
- Residential vs. Commercial
- PACE Bonds
- Eligible PACE Products
- Players involved administer, contractor, investor, financier, property owner
- Marketing your PACE program
- Finding potential investors and contractors
- Lender consent process



CDFA Florida Financing Roundtable May 4-5, 2016 Tampa, Florida

EIP Resources – Training

- The Florida Conference will have a specific concentration on Property Assessed Clean Energy (PACE) as an emerging financing tool designed to catalyze energy efficiency improvements on industrial, commercial and residential structures and its burgeoning market in Florida. Topics include:
 - The Economic Development Finance Climate in Florida
 - Leveraging CRA Investment in Florida
 - The Latest on Qualified Energy Conservation Bonds (QECBs)
 - State of the PACE Market & PACE Expansion in Florida
 - What You Need to Know Before Creating a PACE Program in Florida
 - Operating a Successful PACE Program
 - Understanding Consumer Protections



Past Webinars & Resources

CDFA Brownfields Financing Webinar Series: Financing Green Energy on Brownfields

As part of the CDFA Brownfields Technical Assistance Program, the fourth installment of the Brownfields Financing Webinar Series examines the potential behind using brownfields as sites for renewable energy generation, the unique financing tools...

Yale CEFF and CDFA Energy Finance Webinar Series: Catalyzing Energy Investment with Development Finance Programs

The first installment of the Yale CEFF & CDFA Energy Finance Webinar Series focused on the impact that tested development finance tools can have on clean energy investment. Speakers discussed the role leveraged bond financing structures, non-energy...

Yale CEFF & CDFA Energy Finance Webinar: Accessing Creative Revenue Sources for Clean Energy

The second installment of the Yale CEFF & CDFA Energy Finance Webinar Series focused on innovative state and local programs that successfully catalyzed clean energy. Speakers discussed the role of purchasing power agreements, PACE, and energy...



Past Webinars & Resources

www.cdfa.net

CDFA California Financing Roundtable Webcast: PACE Financing in the Golden State

Property Assessed Clean Energy (PACE) financing is being implemented by communities across the nation as a powerful tool to drive the installation of energy efficiency improvements and renewable energy systems. In light of this emerging trend, the...Yale CEFF and CDFA Energy Finance

CDFA // BNY Mellon Webcast Series: \$1.4B in New Clean Renewable Energy Bonds Available

In the February 2015 CDFA // BNY Mellon Webcast, the allocation of \$1.4 billion in New Clean Renewable Energy Bonds was discussed by Doug Lamb of McGuire Woods LLP, John May of Stern Brothers & Co., and Anna Van Degna of Stifel Nicolaus & Company,...

Dozens more...



Past Webinars & Resources

www.cdfa.net





CDFA Online Resource Database

The CDFA Online Resource Database (ORD) is the nation's only electronic resource collection dedicated exclusively to development finance.

Search Results: Displaying 1 - 50 of 500

Previous | Next | New Search

Energy Investment Partnerships Webinar Series - CAEATFA Members Only P Energy Finance | Green Finance | U.S. Dept. of Energy (DOE)

Deana Carrillo, Executive Director, of California Alternative Energy and Advanced Transportation Financing Authority discusses existing programs and pilot programs that complement existing programs that support small business energy efficiency.

Tax Credit Finance Reference Guide

Brownfield Financing | Energy Finance | Federal | Innovation Finance | Internal Revenue Service (IRS) | (more) Written in conjunction with Ice Miller LLP, the Tax Credit Finance Reference Guide examines how to effectively apply tax credits to development opportunities, and explains the basics of tax credits and the fundamentals of using these tools. In...

PACE - CASE Studies: Eutectics Members Only

Energy Finance | Property Assessed Clean Energy Bonds (PACE)

A number of successful PACE programs produced to renovate buildings in Minnesota are detailed by Jeremy Kalin of Eutectics LLC.

PACE Program Management Members Only

Bond Finance | Energy Finance | Property Assessed Clean Energy Bonds (PACE)

The fundamental goals, law and management, loans vs. bonds, project monitoring, funds dispersal, and financial security of PACE programs are described by David Rogers of FBT Project Finance Advisors LLC.

PACE Shared Back Office Members Only

Energy Finance | Property Assessed Clean Energy Bonds (PACE)

Andy Holzhauser of the Greater Cincinnati Energy Alliance shares the lessons learned of the finance, legal, marketing, administration and reporting, and workforce development aspects of Property Assessed Clean Energy (PACE).

C-PACE: Green Bank's Finance Offering for C & I Members Only

Energy Finance | Branath Acadesad Olash Energy Bonds (BACE) | State Energy Finance Bragrams



Energy Finance Update

www.cdfa.net

 Free monthly newsletter featuring national and local perspective on energy finance

 Subscribe at www.cdfa.net

	Upcoming Events			
	CDFA Florida Conference: State of the PACE Market & PACE Expar Join CDFA for the 3rd Annual Florida Financing Roundtable Conference partnership with Florida Development Finance Corporation & endorsed b Association. This year's conference will feature a special focus on the cr Assessed Clean Energy (PACE) and its use as a tool to finance the critic	on May 4-5 in Tampa! In y the Florida Redevelopment ritical topic of Property cal need of energy efficiency		
Cdfa Cadir Carlier Carlier Carlier Carlier	Energy Finance UPDATE	• of Florida. This		
	Highlights from the Energy Finance Industry	Clean Energy Investment		
Features				
S1.9M for Utility Conservati According to the Daily Illini, th announced that \$1.9M will be semester. The money comes USDA Approves \$11M Bion OregonLive reports that the U biorefinery in Boardman that's spuring economic developme	inance Program ARPA-E Summit deral Green Finance			
SolarCity Revamps Solar Le SolarCity, the largest solar por from it's traditional solar loan installation, Utility Dive report	lar Development nd nfrastructure Finance			
Apple Issues \$1.5B in Bond The Drum reports that Apple projects across the company' storage and efficiency, green				
The solar industry got a big b	DOE Awards \$18M for Energy Storage Integration Projects The solar industry got a big boost from the Department of Energy with \$18M in SunShot Initiative rants. The new grants are funding six major solar-plus-storage projects and it marks the first time			
the DOE has focused specifie	cally on energy storage integration with solar power. The grants are ogies and advancements aimed at balancing energy demand and	ogram Finance Program		
Los Angeles PACE Finance	Angeles PACE Finances \$70M in Upgrades in First Year Alone			
Since the launch of Los Ange City's Sustainable City pLAn, in home efficiency upgrades,	les' Property Assessed Clean Energy program in 2015 as part of the Los Angeles residents have financed more than seventy million dollars resulting in projected savings of two hundred million gallons of water n kilowatt hours of power, according to 3BL Media.	ince Program ance Program State		
	, well-organized and experienced individual to fill the position of Vice osition is critical to the continued success of CDFA's education,			
Lincoming Events				

Jpcoming Events