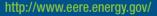# Commercial Property Assessed Clean Energy (PACE) Primer
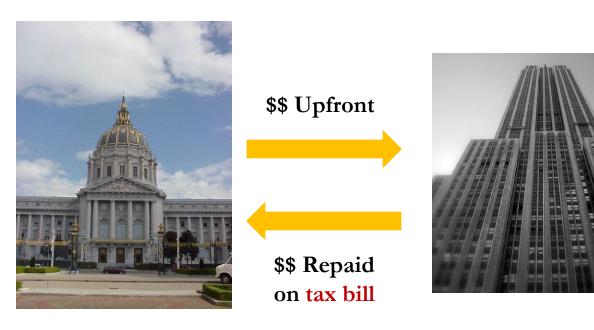
Overview

Commercial PACE	
	•Commercial PACE programs may be used by local governments to finance energy efficiency and renewable energy improvements. •Local governments finance the up-front costs of these improvements, and property owners repay the costs as a line item on property tax bills •State legislative authority must exist and local governments must setup energy financing districts in order to operate commercial PACE programs •Federal Housing Finance Agency (FHFA) guidance does not impact commercial PACE •Mortgage holder consent is required before PACE applications are approved and assessments are placed

Commercial PACE Mechanism

$$ Upfront

$$ Repaid on tax bill

- **Creates financing district & approval process**
- **Provides upfront capital**
- **Attaches repayment obligation to the building**

- **Identifies work & chooses contractor**
- **Repays financing as a line item on the property tax bill**
- **Repayment obligation transfers with ownership**

More information on setting up PACE programs can be found in the PACE How-To Guide:
http://rael.berkeley.edu/sites/default/files/berkeleysolar/HowTo.pdf

Commercial PACE Advantages & Disadvantages

Advantages	Disadvantages
Allows for secure financing of comprehensive projects over a longer term that enhances paybacks	Legal and administrative expenses to set up
Repayment obligation passes with ownership, overcoming hesitancy to invest in longer payback measures	May not be appropriate for small towns and cities as scale is required to reduce costs
Taps into private capital, such as the municipal bond market	Mortgage holder approval required
Allows governments to encourage energy efficiency and renewable energy without putting their general funds at risk	

Three Financing Pathways

Pathway	Description
Pooled Bond	PACE applications are aggregated, and a revenue bond is issued to fund proposed projects
Stand-Alone Bond	For sufficiently large projects, a revenue bond is issued to fund an individual (or small number of) projects
Owner-Arranged Bond	An owner arranges project financing with a private lender and the lender accepts PACE securitization and payback framework

Commercial PACE Financing Potential

$2.5-$7.5 billion annually by 2015*

$88-180 billion opportunity in large commercial buildings alone**

- www.pikeresearch.com/newsroom/u-s-energy-service-company-market-to-increase-250-by-2020

**Financing Retrofits in Large Commercial Buildings Through PACE Loans, Clinton Climate Initiative, February 2010

Eligible Properties

Property Type	Examples
Multi-family (greater than 4 units)	•Condominiums •Apartment complexes
Commercial	•Office buildings •Malls •Gas stations •Restaurants
Industrial	•Factories •Warehouses •Computer chip manufacturers

Eligible Measures

• Generally, packages of energy improvements should be deemed cost effective by an audit. Energy efficiency, water efficiency and renewable energy improvements may be eligible for Commercial PACE financing

Measure Type	Examples
Energy Efficiency	•Energy management systems •Insulation & air sealing •HVAC systems •Boilers & furnaces •Lighting •Energy recovery & redistribution systems •Motors & drives
Water Efficiency	•Greywater systems •High efficiency toilets •Waterless urinals
Renewable Energy	•Solar hot water •Solar photovoltaics

Attractive Properties for Commercial PACE**

Property Description*	Why PACE financing may be attractive
Mid-to-large size properties	•Davis-Bacon Act compliance is not likely to make PACE financing unattractive
Owners with multiple properties	•Davis-Bacon Act compliance is not likely to make PACE financing unattractive
Office buildings less than six stories	•Limited access to alternative financing
Select service hotels	•Limited access to alternative financing
Small malls with central HVAC	•Limited access to alternative financing
Newly-purchased distressed properties	•Energy improvements can drive market repositioning (eg green leases in office buildings)
Large commercial properties	•PACE programs may allow them to negotiate lower cost financing by using the PACE securitization and payback framework
Condos or apartment buildings (greater than 4 units)	•Tenants are increasingly aware of energy efficiency and may drive owners towards PACE-financed improvements

*This list is for illustrative purposes and is not exhaustive.

**Adapted from Pike Research: PACE Financing For Commercial Buildings. Visit
http://www.pikeresearch.com/research/pace-financing-for-commercial-buildings

Existing Pilot Commercial PACE Programs

Pilot Programs
Palm Desert Energy Independence Program Palm Desert, CA Launched Fall 2008
Sonoma County Energy Independence Program (SCEIP) Sonoma County, CA Launched Spring 2009
GreenFinanceSF San Francisco, CA Expected launch Fall 2010
Boulder County ClimateSmart Loan Program Boulder County, CO Commercial Applications due August 2010

Uses of ARRA Funds to Support Commercial PACE

Permitted ARRA Fund Uses
Debt service reserve or loan loss reserve
Program design, implementation and administrative fees
PACE assessments directly
Audits & quality assurance
Marketing & outreach
Workforce training
Interest rate buy-down

DOE Resources

To request specific Technical Assistance go to the TAC website at
https://tac.eecleanenergy.org/Default.aspx

DOE Resource website on financing, including PACE programs:
http://www.eecbg.energy.gov/solutioncenter/financialproducts/

How to Guide for PACE Programs
http://rael.berkeley.edu/files/berkeleysolar/HowTo.pdf

Webinars, including 3 on aspects of PACE programs:
http://www.eecbg.energy.gov/solutioncenter/webcasts/

State legal authority for PACE programs is tracked by the DSIRE database
http://www.dsireusa.org/incentives/index.cfm?EE=1&RE=1&SPV=0&ST=0&searchtype=PTFAuth&sh=1