

NYC Accelerator: PACE Financing

Climate Mobilization Act Series, July 17 2019

OneNYC

OneNYC 2050

30 initiatives across 8 goals
to secure our city's future



PACE & the Climate Mobilization Act

LOCAL LAWS 92 AND 94

requiring that the roofs of certain buildings be covered in green roofs or solar PV systems

LOCAL LAW 95

a building energy efficiency grade

LOCAL LAW 96

establishing a sustainable energy loan program (i.e. PACE)

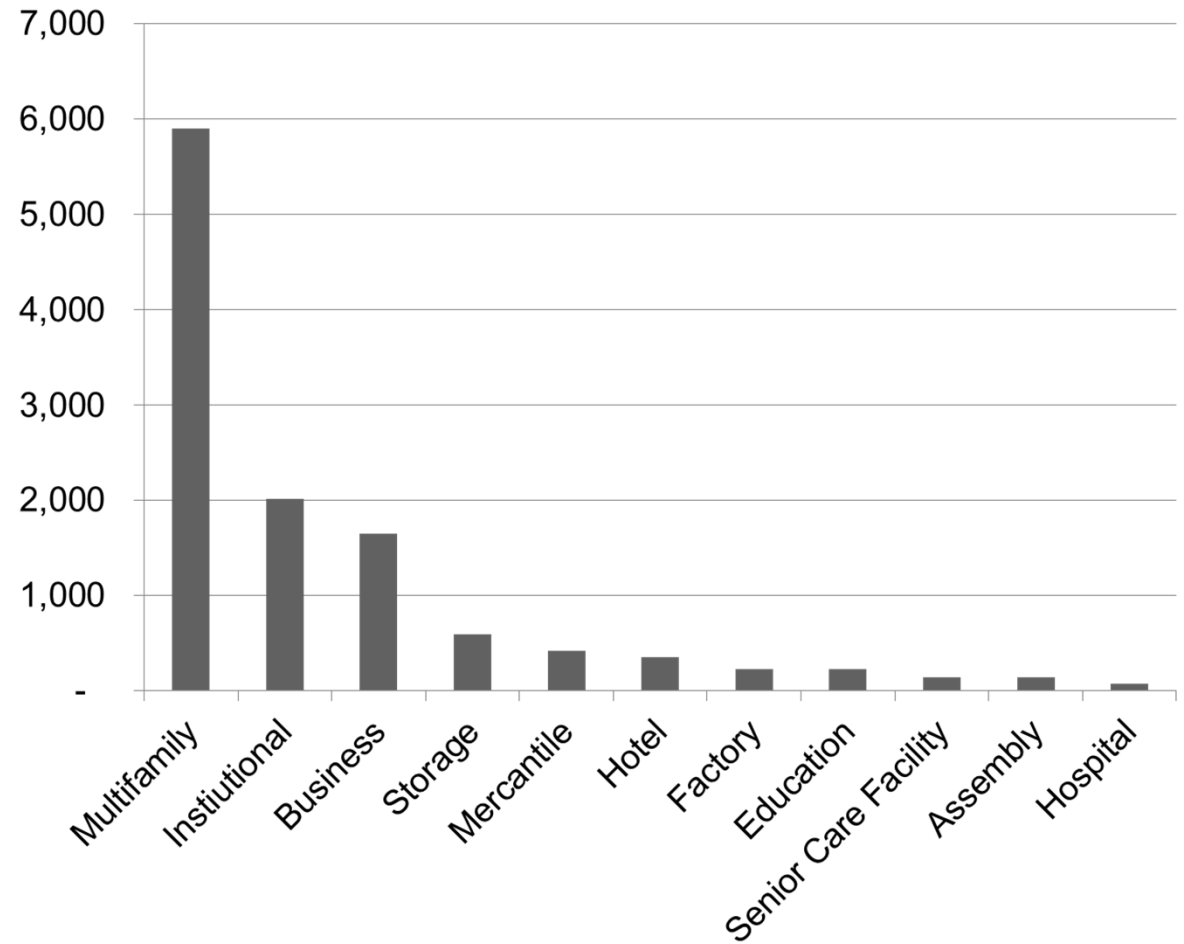
LOCAL LAW 97

the commitment to achieve certain reductions in greenhouse gas emissions by 2050

Expected LL97 Demand for Retrofits

Asset Class	Count
Residential	5,902
Institutional	2,007
Business	1,643
Storage	587
Mercantile	415
Hotel	351
Factory	221
Education	221
Senior Care Facility	142
Assembly	137
Hospital	73
Total	11,699

**Estimate based on 2017 LL84 Benchmarking*



NYC Retrofit Accelerator

Free Help. Simple Fixes. Big Results.

The NYC Retrofit Accelerator's Efficiency Advisors will:

- Work with you one-on-one to understand your needs
- Connect you with qualified contractors to do the job
- Find cash incentives and financing to help pay for your upgrades
- Train your building staff so your building continues to run efficiently
- Support you every step of the way from project start to finish

**GET IN TOUCH
TODAY!**

nyc.gov/RetrofitAccelerator

info@nyc retrofit.org

212-656-9202

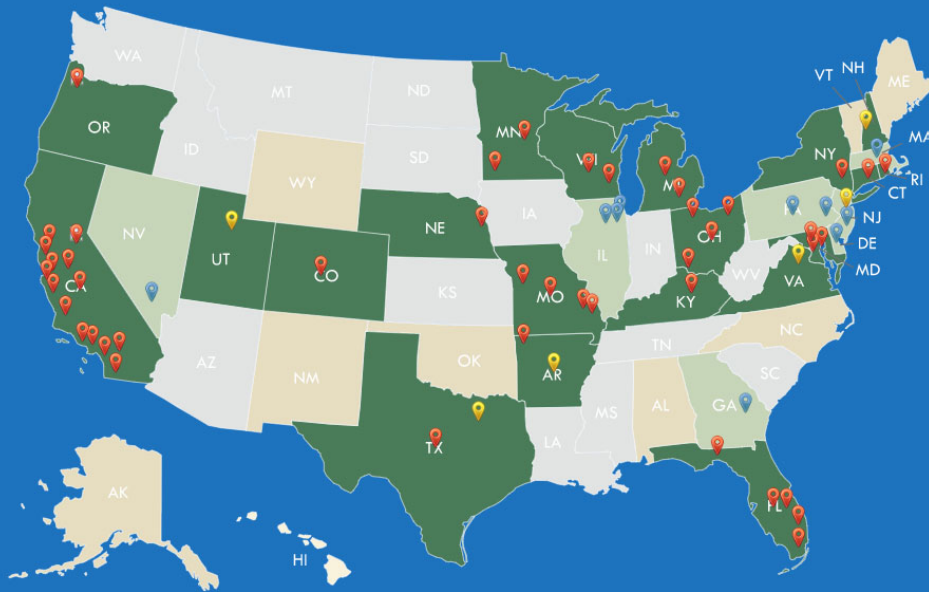


What is PACE?

Property Assessed Clean Energy is a tax-assessment based financing mechanism providing long-term financing for energy efficiency and renewable energy projects.

- PACE loans are made using private funds through pre-qualified capital providers.
- PACE loans are repaid as a charge on a building's tax bill.
- PACE debt is non-accelerating and repayment charges can be passed through to tenants on leases where appropriate.

Commercial PACE Overview



- Active program with funded projects
- Program in development
- Launched PACE program
- PACE enabled

Source: <https://pacenation.us/pace-programs/>

PACE is legislated in 36 states + Washington D.C.

1,938 commercial PACE projects have closed, totaling \$887 million

13,305 jobs created



NYCEEC

- NYC's C-PACE administrator
- Created by NYC in 2010, currently an independent 501(c)(3) specialty finance provider
- First municipal Green Bank in the U.S.
- Active mission-based lending business in NYC + Northeast/Mid-Atlantic region

Direct loans to building owners
ESA, PPA financings
Pre-development lending

NYCEEC



NYCEEC'S TRACK RECORD

- **\$152 million projects financed**—4x initial capital grant
- **749,000 metric tons** avoided greenhouse gases
- Improved **220 buildings** and **5,395 affordable units**
- Created **1,647 Jobs**
- Established a **successful community-scale model** and now advising **new local green banks**

PROPERTY TYPES (% of total project cost)

55%
commercial
& industrial



45%
Multifamily,
affordable
& market-rate

As of May 2019

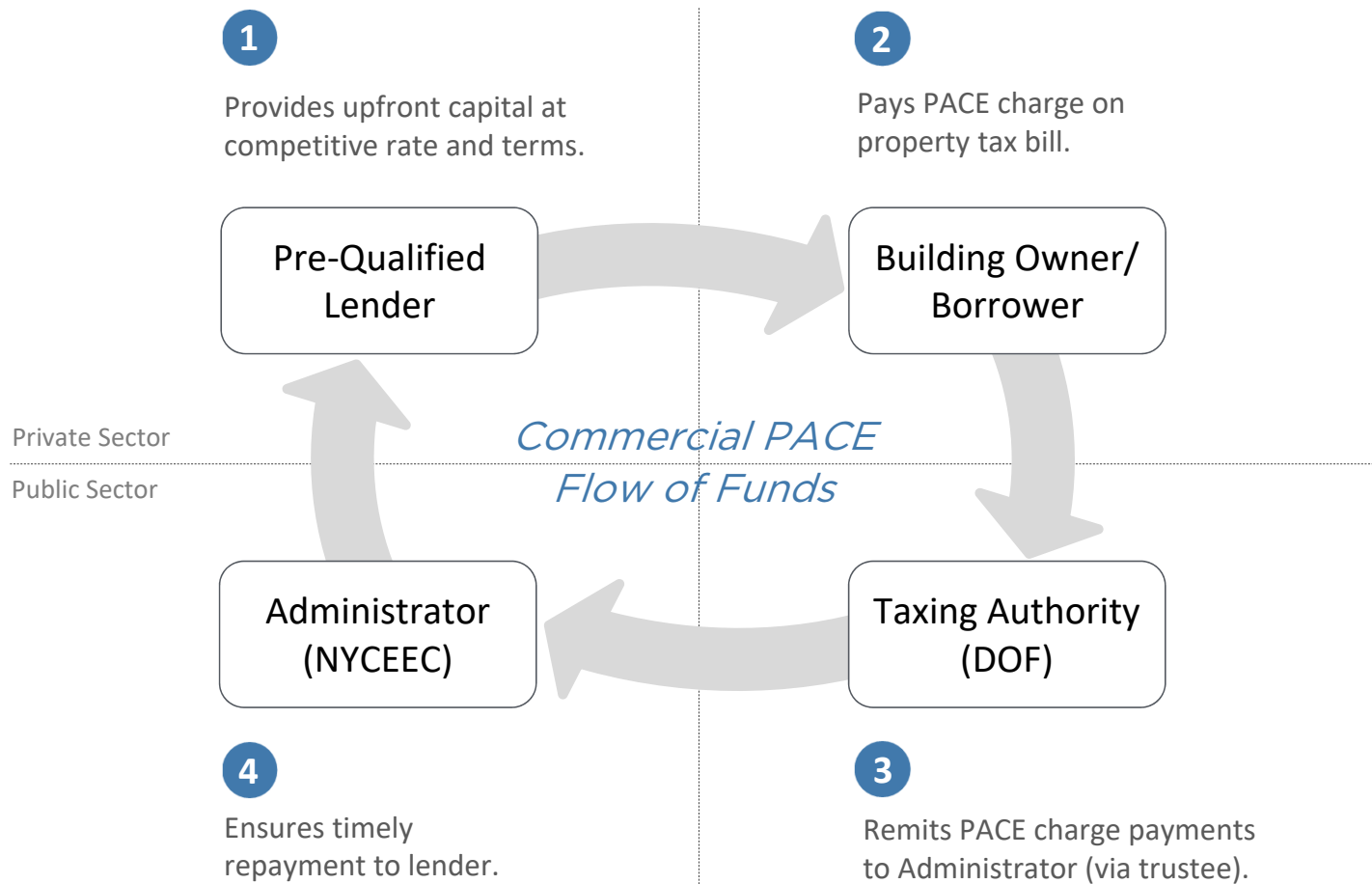
Working with lenders, policymakers and philanthropies, we are helping to solve the challenge of climate change

The PACE Charge

Local Law 96:

“A loan shall be repaid by the property owner through a charge on the real property benefitted by such loan. Such charge shall be on the real property and shall be levied and collected **at the same time and in the same manner as municipal taxes**, provided that such charge shall be separately listed on the tax bill.”

The PACE Charge



Value Proposition

Multifamily Coop Building PACE Borrower

Building address	123 4 th Avenue
Assessed market value	\$20,000,000
Tax before exemptions and abatements	\$2,543,800
Tax rate	12.719%

PACE Loan

Loan amount	\$1,000,000
Interest rate	6%
Term	20 years
Annual payment	\$87,185
Annual energy cost savings	\$100,000
Adjusted “tax” rate for remaining term of PACE loan	13.155%

NYC Project Eligibility

NYC Accelerator: PACE Financing criteria

- The property must be **commercial real estate** located in New York City (including multifamily of 3+ units, non-profit and religious facilities)
- All measures must be cost-effective **energy efficiency** measures, **renewable energy** systems, or **related costs**.

RIVER ARTS
APARTMENTS
158-18 159-40 158-34

NYC Mayor's Office of
Sustainability

NYCEEC
BUILDING FINANCIAL SOLUTIONS

Borrowing Process



1-2 Weeks

- Building owners, capital providers, project developers, and contractors may market products and source deals competitively.
- The Project submits a pre-application form to NYCEEC and enters the PACE financing pipeline.

1-3 months

- Project obtains energy audit or feasibility study as applicable; develops scope of work and PACE financing terms; completes all pre-development work required and submits full application to NYCEEC. NYCEEC approves PACE financing.

~1 month

- Required financing documents are executed and New York City places charge on the subject property.

Depending on construction scope of work

- Contractor completes work. Construction financing is available through PACE.

Coming Soon

- CAPA rulemaking process (public review)
- NYC Accelerator expansion and marketing
- Financing available by early 2020

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PACE FINANCIAL SERVICING

THE FLEXIBILITY OF PACE FINANCING IN SERVING DIFFERENT PROPERTY OWNERS



AGENDA

1. Overview of PFS
2. Jurisdictions Under Contract
3. Common Project Types
4. PACE for Different Property Types
5. MAPA

OVERVIEW OF PFS

NATIONALLY RECOGNIZED LOCALLY DRIVEN

- PFS is a women-owned and operated business
- Senior team members were the primary architects of the award-winning Connecticut C-PACE Program
- PFS' team members have also acted as advisors to numerous state administrators in the crafting of C-PACE legislation and program design, including Pennsylvania, Colorado, Rhode Island, Texas, Delaware, New Jersey, South Carolina, Oklahoma, Alaska, etc.
- The Connecticut C-PACE program was the first program of its kind to achieve major scale: from its launch in 2013 to 2015, nearly half of the roughly \$200 million C-PACE transactions closed nationally during that time period were originated and administered in Connecticut under the direct leadership of the senior PFS team
- Recognized as thought leaders in the industry on how to craft C-PACE programs that attract private capital at scale while minimizing administrative burden on local governments and cost for property owners
- PFS team members are highly sought-after C-PACE experts that have been featured speakers at conferences hosted by PACENation, the Department of Energy, the Mid-Atlantic PACE Alliance, etc.
- PFS is a core contributors to the Mid-Atlantic PACE Alliance toolkit, a set of standard C-PACE program administration practices that were developed by a group of industry stakeholders in the Mid-Atlantic through the award of a U.S. Department of Energy grant in 2015

Our Mission

To support governments in the creation of open, standardized, low-cost C-PACE markets designed to drive private sector C-PACE investment and scale

Core Value

To structure each C-PACE program in a manner that scales energy efficiency and clean energy while fulfilling the unique needs of each jurisdiction

JURISDICTIONS CURRENTLY UNDER CONTRACT





COMMON PROJECT TYPES



The Main Street Business



Main Street Business: The Finishing Touch

Description: The Finishing Touch, a custom frame and print boutique in downtown Chestertown, MD, had air conditioners and windows that dated back to 1978. These outdated HVAC systems were inefficient and expensive to operate.

Solution: The property owner focused on tenant experience and operational costs as motivation to upgrade the 60+ year old HVAC system and high efficiency windows throughout. The mixed-use building was vastly improved and is now more tailored toward customer and renter comfort.

Financing: \$134,408

Measures Financed:

- HVAC upgrades
- Replacement of more than 1,000 sq ft of low R-value glass

Savings:

\$7,000 in the first year and \$300,704 in lifetime savings!

Find lenders that are:
community banks, CDFIs, etc.

The Historic Renovation/ Adaptive Reuse



Brown's Arcade

Description: Brown's Arcade is a mixed-use commercial building encompassing both retail and business offices. It was constructed in the 18th century and is therefore listed on the National Registry of Historic Places. It is the only building of its kind left in the City of Baltimore, and the last known building of its kind in the state. Its historic roots shine through in embellished Colonial Revival details.

“We are very excited about this opportunity to re-position and transform this historic building with new retail concepts and multifamily apartments in downtown Baltimore alongside our recent acquisition of Brown's Loft which sits on the same 300 block of N Charles Street.” – Kelvin Fu, GL Capital

Measures Financed:

- Water conservation measures
- Building enclosure improvements
- Lighting replacements
- New automated building & HVAC controls

The Energy Warrior



Summer Camp: Br-T

Description: An innovative property owner wanted to install renewable generation to serve his summer camp for youth. Project SIR greater than one.

Financing: \$250,000

Measures Financed:

- Solar system (70+kW)
- Battery backup systems
- Energy monitoring system
- Roof replacement

Projected Energy Savings (Cumulative)			EUL	Projected Energy Savings (Annual Average)		
kWh	BTU	\$	years	kWh	BTU	\$
1.9m	685m	315k	20	94k	34m	16k



Owners with Tax Appetite Love PACE

- Full realization of tax credits – including solar ITC
- Accelerated depreciation benefits (MACRS)

The Large Portfolio



Multifamily Properties Across DC/MD Line

Description: A multi-family property management firm needed to replace obsolete boilers in 11 tenant-occupied buildings across state/district borders of Maryland and Washington, D.C., before the winter season.

Challenges: Multi-jurisdictional & multi-property

Financing: \$4,800,000

Savings: \$843,258 in the first year and \$3,767,263 in lifetime savings



Owners in Need of Flexibility

- Buildings that **may sell before full payoff**
- Building where **tenants pay energy bill** but owner finances upgrades
- Project has longer payback period

The Basic Retrofit



Medical Office Building

Description: Recently purchased medical office building with pharmacy in need of extensive renovations

Financing: \$800,000

Measures Financed:

- Air handling units and thermostat
- Modern elevator controls
- LED lighting
- Roof insulation
- TPO roofing

Projected Energy Savings (Cumulative)			EUL years	Projected Energy Savings (Annual Average)		
kWh	BTU	\$		kWh	BTU	\$
4.7m	329m	857k	20	235k	16m	43k

The Non-Profit



Non-Profit

Description: A Baltimore-based non-profit wanted to expand the capabilities of its residential re-entry center by building out 5,000 square feet of unused space in their facility. The goal of this project was to complete the planned build out while incorporating energy and water efficient equipment.

Challenge: Underwriting cash flows of a non-profit; many NPOs do not think they are eligible for PACE financing

Financing: \$785,000

Measures Financed:

- Insulation and Building Envelope Improvements
- New HVAC and Electrical Installation

Savings: \$3,100 in the first year and \$80,000 in lifetime savings



Owners Who are Un-Financeable

- Owners with “Zero Cash Down” Focus
- Owners without good access to Capital (Non-Investment Grade Credit)

PACE FOR DIFFERENT PROPERTY OWNERS

Offices



- Improves NOI (assessment is treated as an operational expense; off balance-sheet)
- Handles deferred maintenance without utilizing CapEx
- The assessment can be passed through to tenants where appropriate

Hospitality



- Improves NOI (assessment is treated as an operational expense; off balance-sheet)
- Many C-PACE financeable improvements can also be used to comply with Performance Improvement Plans (PIP)

Institutions



- Finance your renovations instead of undergoing a long capital budget process with donors
- Go green, go solar, achieve commercial economics on solar projects even as a NPO

Developers



- With C-PACE, achieve a lower blended cost of capital
- Replace expensive mezzanine debt with C-PACE
- Don't value engineer out green features

Manufacturing



- C-PACE is a way to preserve your credit lines and save cash for core business opportunities
- Invest in solar and earn tax credits and depreciation within one year

MID-ATLANTIC PACE ALLIANCE



MAPA is partnership between stakeholders in Virginia, Maryland and the District of Columbia, created to accelerate Commercial PACE programs and project closings in the region. MAPA is supported by funding from the U.S. Department of Energy.



Goals

- ✓ Increase market awareness through coordinated outreach and education.
- ✓ Promote harmonized program design throughout the region.
- ✓ Drive demand and increase volume of C-PACE projects in the region.

Benefits

- ✓ Create streamlined and consistent processes for property owners and contractors working with C-PACE programs in the region
- ✓ Maximize consistency to foster economic development & encourage private capital investment
- ✓ Coordinate marketing approaches and develop consistent messaging about C-PACE




THANK YOU!

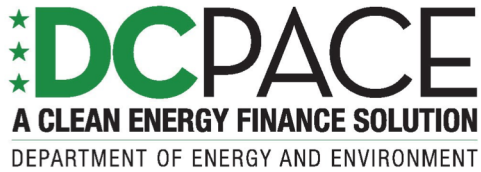


DC PACE: Financing Energy, Water, and Infrastructure Upgrades

CMA Series: PACE Financing
July 17, 2019


DC PACE
A CLEAN ENERGY FINANCE SOLUTION
DEPARTMENT OF ENERGY AND ENVIRONMENT

PACE: A New Use for an Old Concept



DC PACE is the District's clean energy financing program for building upgrades.

Urban Ingenuity is the DC PACE program administrator, under contract to DOEE

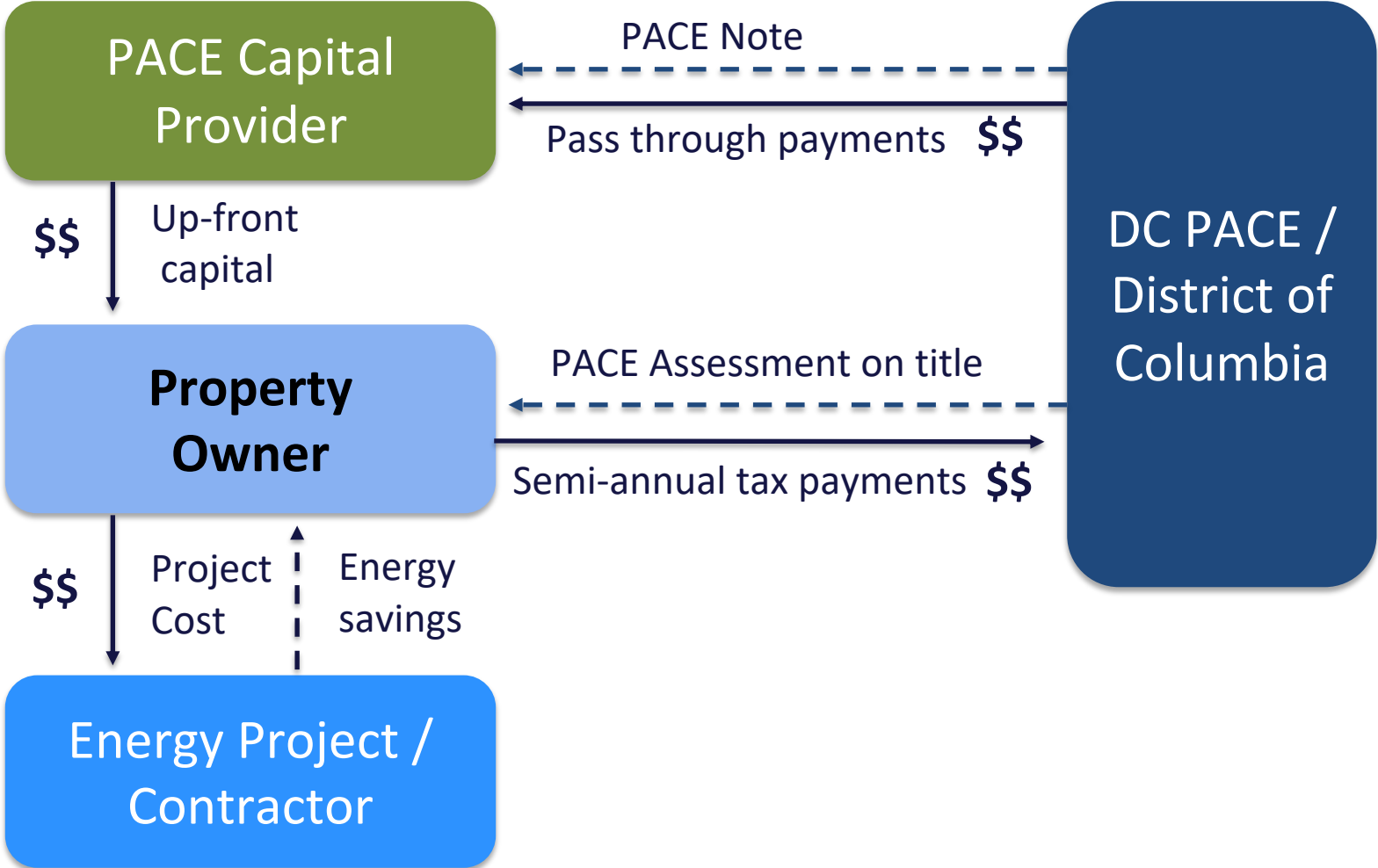
About Property Assessed Clean Energy



Philadelphia first used this mechanism for an opt-In Fire District in 1736

- **Zero Dollars Out-of-Pocket:** PACE provides property owners with up to 100% financing for energy and water upgrades at long (15 - 20 year) terms
- **NOI Positive:** Owners realize savings immediately, and use those savings to pay back the cost of the measures through a special assessment that is placed on the property
- **Off-Balance Sheet:** Extend the capital budget and finance comprehensive projects with potentially off-balance sheet financing – PACE is not conventional debt

How it works: DC PACE transaction structure



How PACE Works: *Case Study*

Customer: Downtown office building with energy-conscious anchor tenant

- High annual energy spend
- Building constructed in 1980s, due for capital upgrades

Challenge: Finance large retrofit project without adding debt

Project: EE, water conservation measures. roof replacement



How PACE Works: *Sizing the Financing*

ECMS	Cost
Lighting	\$150,000
Water conservation	\$25,000
HVAC improvements	\$775,000
Roof rehab	\$550,000
Building controls	\$100,000
Total	\$1,600,000

Annual Savings	
Energy	\$100,000
Water	\$10,000
O&M	\$60,000
Total	\$170,000



PACE Eligibility

- Savings can offset annual payments up to \$170,000
- That finances up to \$1,950,000 (20 year term)



How PACE Works: *Project Cash Flow*

Project Basics

- PACE Eligibility: Up to \$1,950,000
- Actual Project Size: \$1,600,000
- Annual PACE Payments: \$140,000

- Improved building performance, lower operating costs, and improved NOI for owner
- PACE includes cost of structural improvements, key infrastructure upgrades with no out-of-pocket cost

Annual Cash Flow	
Utility Savings	\$110,000
O&M Savings	\$60,000
Total Savings	\$170,000
PACE Payments	-\$140,000
Net Cash Flow	\$30,000
\$600K net cashflow over 20 years	

Note: Project financials have been simplified for illustrative purposes.

How PACE Works: *Economic Case*

	Self-Funded	PACE
Investment by Property Owner	\$1,600,000	\$0.00
Annual Utility Savings	\$170,000	\$170,000
Annual PACE Payment	\$0.00	\$(140,000)
Net Benefit Year 1	\$(1,430,000)	\$30,000
Annual Net Benefit Years 2-20	\$170,000	\$30,000
5-year NPV of Cash Flows (@ 6% discount rate)	\$(793,000)	\$136,000
10-year NPV of Cash Flows (@ 6% discount rate)	\$(258,000)	\$221,000
5-year IRR	-18%	Infinite
10-year IRR	1%	Infinite

**PACE increases NOI & property value with
Zero dollars out-of- pocket for the owner**

Note: Project financials have been simplified for illustrative purposes.

FSFSC - Gut Rehab & Tax-Exempt PACE



Challenge: Fill a financing gap in a gut rehab / expansion of vacant building as new HQ of non-profit

Solution: \$2.2M in Tax Exempt PACE prevented value engineering given limited capital budget, lower op ex over time

Sources & Uses	
IRB (tax-exempt)	\$6,000,000
IRB (taxable)	\$2,000,000
Local Govt. Grant	\$3,000,000
Financing Gap	\$3,000,000
Project Cost	\$14,000,000

\$2.9 M savings above code over 20 years supported \$2 M+ in PACE

PACE Financing	
Tax-Exempt PACE	\$1,600,000
Taxable PACE	\$600,000
Total PACE	\$2,200,000

Audi Stadium - *Greening a Stadium*



Challenge: Unlock additional funds to green the stadium to LEED Gold standards and extend sustainability commitments

Solution: \$25M in PACE (part of ~\$350M project) - Displacing high cost equity

Key measures:

- Storm water retention
- Solar PV
- LED field lighting
- Low-flow fixtures
- Insulation
- Green roof
- HVAC

1250 Taylor St - Solar + Green Roof

Challenge: Take advantage of solar PV economics while meeting District stormwater retention requirements without increasing out-of-pocket costs

Solution: PACE for 134 kW green roof ballasted solar PV allowed developer to add solar PV without increasing size of construction loan or owner's equity contribution



Thanks!

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URBAN INGENUITY

