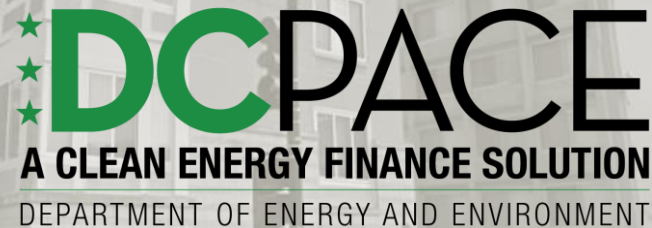
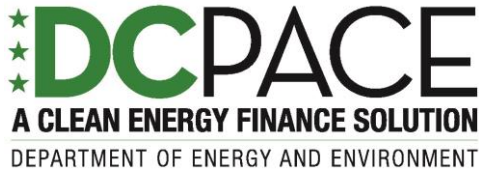


DC PACE: Financing Energy, Water, and Infrastructure Upgrades

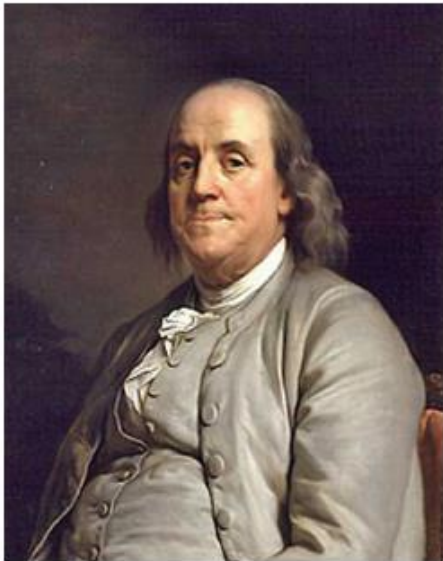


PACE: A New Use for an Old Concept



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

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



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

About Property Assessed Clean Energy

- **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

What projects can be financed?



Office



Institutional



Multifamily



Industrial

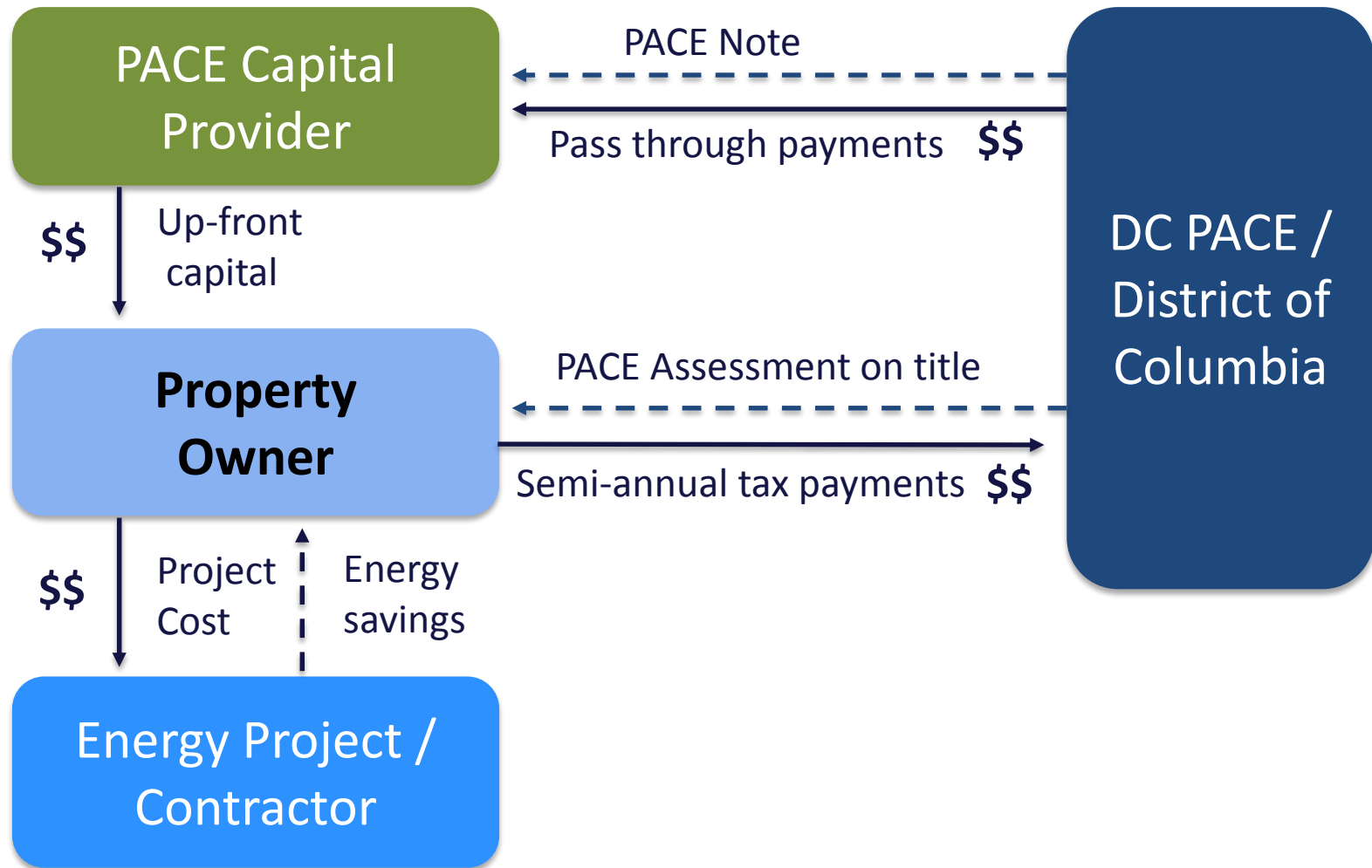
Properties

- Most commercial properties in the District of Columbia (many MD counties too)
- Both for profit and tax-exempt properties are eligible
- Stand alone / part of larger capital stack
- Must be current on taxes
- Not owned by govt. (but groundlease may be okay)

Measures:

- Almost anything tied to an energy or water saving
- Large multi-measure retrofits
- Single-measure like solar panels, boiler replacements, etc.
- Clean energy improvements
- Energy efficiency upgrades (HVAC, lighting, envelope, controls, etc.)
- Water conservation measures
- Rehab or new construction

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	

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

DC PACE Process

Project Development

- Submit initial application online
- DC PACE will work with the design team to develop a PACE project scope around planned EE measures

Underwriting

- Technical validation of savings estimates
- Financial underwriting to ensure property meets program standards; lender consent with existing mortgage-holder

Closing

- PACE docs executed by property owner, capital provider, and District
- Funds made available for construction

Construction

- Owner draws down on funds as agreed in draw schedule
- Procurement and installation managed by contractors

Post-Construction

- Property owner makes semi-annual assessment payment
- M&V as required

Thanks!

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