



# The Future of Commercial PACE

Tuesday, 3:45 – 5:00  
PM

# The Future of Commercial PACE

- Today's speakers:
  - Casey Bell, Urban Ingenuity
  - Beau Engman, PACE Equity
  - Brad Copithorne, Renew Financial



# The Future of Commercial PACE

## Casey J. Bell

Senior Advisor, Urban Ingenuity

Principal | Founder, Clean Capital Strategies

2016 Better Buildings Summit

U.S. Department of Energy

May 10, 2016



# Who We Are

## Urban Ingenuity

- First PACE in Affordable Housing
- Creative Structuring for Small Businesses and Non-profits
  - PACE-Secured PPAs
  - HUD-Approved Public Housing
  - Tax-Exempt PACE Financing
- Financial Structuring Support
- Atlantic PACE and DC Program Administration

## Clean Capital Strategies, LLC

**A boutique advisory firm focused on scaling the market for clean energy investment.**

We support:

- Program Development for Clean Energy Financing
- Go-to-Market and Strategic Planning
- Regulatory and Policy Support

**Enterprise National Green Financing Platform**

# Overview

- I. Today's Market
- II. Administration
  - A. Challenges
  - B. The Ideal
  - C. Shifts in Local PACE Policy
- III. Serving New Customers
  - A. CivicPACE
    - 1) Non-profits
    - 2) Affordable Housing
- IV. Creative Structuring
  - A. Tax-Exempt PACE
  - B. PACE-Secured PPA

# Today's Market

## Property Assessed Clean Energy



*Philadelphia Opt-in  
Fire District 1736*

1. Voluntary Local Tax Assessment  
*(Like TIF, PILOT, Front Foot Benefits Charge)*
2. Owner Chooses Cost-Saving Projects
3. Consent Secured from Existing Lenders
4. Private Capital Funds Improvements
5. Special Assessment Repaid Over Time

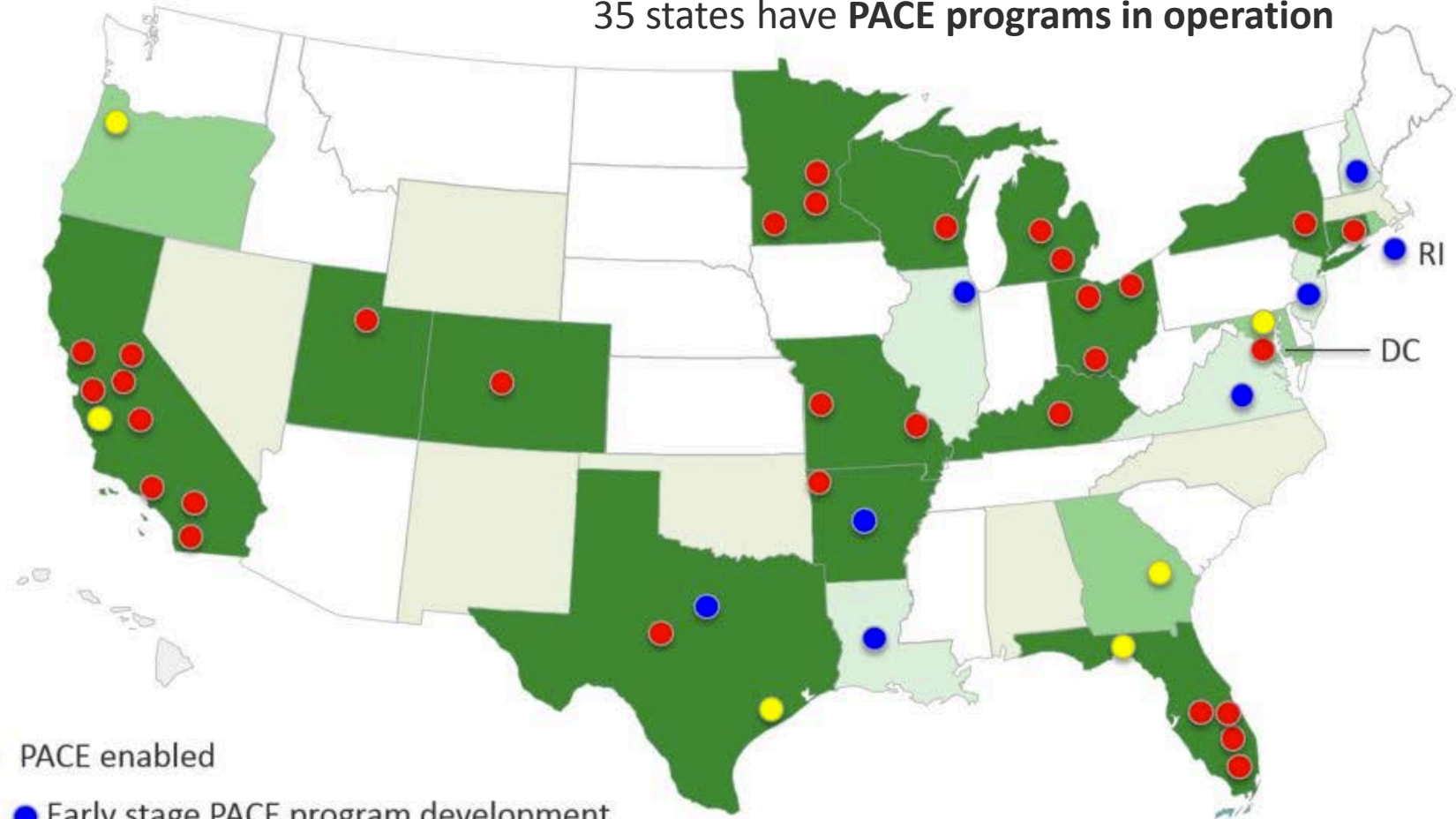
# PACE 101: Market in 2010





# PACE 101: Market in 2016

32 states & DC have **PACE-enabling legislation**  
16 states have an **active PACE program**  
35 states have **PACE programs in operation**



*730+ Projects – \$230+ million*

# Mortgage Lender Consent

150+ Mortgage Lenders Support PACE Nationwide

PACE becomes part of taxes which is senior to other debts. Most legislation requires existing lenders provide consent or acknowledgement that their lien will become secondary.

They usually say YES, here's why:

1. PACE project makes the lender's collateral more valuable
2. Positive cash flow enhances the property owner's ability to make their mortgage payments
3. Only the portion of a PACE assessment in arrears is senior
4. Underwriting standards make sure projects are appropriate

# ADMINISTRATION

# ADMINISTRATION MODELS: THE CHALLENGES

## A Wholesale Business for Retail Customers

- Nuances in local-level tax collection practices
  - Notes, liens, and surcharges
  - Tax sale process
- Lack of financial support for origination and programmatic activities
- Construction Period Risk

# ADMINISTRATION MODELS: THE IDEAL

An open-market, statewide offering that is easy for contractors and capital providers to use.

## Essential Elements:

- A well-regarded host entity
  - A Green Bank
  - A State Energy Office
  - An Energy Improvement District
  - A Non-Profit Entity with Statewide Credibility
- A clear path to procurement
- Public and transparent program guidelines
- A Standard Offer for capital providers
- **Strong origination partners**

# ADMINISTRATION MODELS: THE IDEAL

An open-market, statewide offering that is easy for contractors and capital providers to use.

## Bonus Points:

- Business model that empowers local contractors and lenders
- Local programmatic support
- Capital and vendors that can serve multiple market subsectors
- Guidelines for regional/interstate interoperability

# SHIFTS IN LOCAL PACE POLICY

- The end of SIR requirements?
- Other building upgrades that may be PACE-able
  - Stormwater Management
  - Seismic Upgrades
- Third-party Technical Review Requirements
- Open or Lending Tree?

# SERVING NEW CUSTOMERS



# Non-profits: *Challenges & Opportunities*

## Challenges:

- Poor Credit / Access to capital
- Aversion to debt / Other Priorities
- Low tax appetite
- Complex decision-making
- Incentive for ad hoc projects

## Opportunities:

- Deferred maintenance = Savings
- Interest in new capital structures
- Mission driven
- Focus on OpEx + Cash flow

# What is CivicPACE? – *Serving the Community*

## CivicPACE



*US DOE SunShot Initiative supporting PACE for solar with non-profit owners*



- Affordable housing
- Houses of Worship
- Charter Schools
- Health Care Facilities
- Higher Ed Campuses
- Non-profit Office

*PACE solves key financing challenges for civic institutions...*

# HUD Assisted Case Study: *Phyllis Wheatley YWCA*



**Project:** Deep rehab of historic property offering transitional housing for homeless women

**Challenges:**

- Capital source for improved equipment
- No impact on capital or operating budgets
- Approval from many public & private partners

**Solution:**

- Gap finance for LIHTC project
- 30 kW rooftop solar
- Efficient HVAC systems, Heat recovery system, LED lighting, & low-flow water fixtures



# HUD Assisted Case Study: YWCA Project Benefits

- PACE: \$635,000 (15 Yrs.)
  - Tax Equity: \$65,000
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- PACE finances solar PV and efficiency in one package
  - Infrastructure improvements without raising rents
  - Net benefit \$7,000/yr. cash flow
  - First HUD approved PACE for mixed finance property
  - Integrated PACE with LIHTC, DHCD, DCHA & other structures

## Property Owner: Annual Benefit

Utility savings	\$73,000
PACE Payments	\$(66,000)
<b>Net Cash Flow</b>	<b>\$7,000</b>

## Equity Investor Benefits

SREC Revenue (pre-tax)	\$72,000
ITC	\$36,000
Depreciation	\$35,500
<b>Total Benefit</b>	<b>\$143,500</b>
Tax Equity	-\$65,000
<b>Net Benefit</b>	<b>\$78,500</b>

# PACE for Public Housing: *Mixed Finance Precedent*

## YWCA structure conforms with HUD-PIH requirements

1. **Inter-Creditor Agreement:**
  - i. **PACE Subordination:** to Declaration of Trust (DOT/DORC)
  - ii. **Right to Cure:** PHA may cure any delinquency in payment
  - iii. **First Refusal:** In foreclosure PHA can buy Tax Cert for \$1
2. **Declaration of Trust:** Includes language that ownership transfer under PACE is conditioned on observing DOT/DORC
3. **Mixed Finance ACC Amendment:** Language references PACE subordination to DOT/DORC through inter-creditor agreement
4. **Rental Term Sheet:** HUD approves terms that include PACE financing along with ACC payments within the capital stack



# Extending PACE: *Conventional Public Housing*

## Modified structure for conventional public housing...

1. **Inter-Creditor Agreement:** Provide subordination to DOT and appropriate rights to cure for interested parties
2. **Declaration of Trust:** Include language that ownership transfer under PACE is conditioned on subordination to DOT
3. **Section 30 ACC Amendment:** If required, Section 30 language will reference PACE subordination to DOT
4. **Rental Term Sheet:** Agreement on rental terms and ACC payment with HUD reference subordination of PACE to DOT
5. **Revising Security Interests:** Unlike mixed finance, a CMHA subsidiary would be party to the PACE note, security interest would come from replacing third party (GP) in the inter-creditor



# Why “CivicPACE” for Public Housing?

## Enhancing Energy Projects:

1. New funds for upgrades & RAD Conversion
2. Improved operating subsidy & project economics
3. Alternative to EPC, without equipment lien
4. Stronger PPA with better returns & transparency

## Engaging Partnerships:

1. GCEA Technical Support and Validation
2. Enterprise Green Finance Platform
3. CivicPACE & The Solar Foundation (TSF)
4. HUD’s PACE Commitments (MF, FHA, PIH), White House Climate Action Plan, & CGI America (06/16)



# CREATIVE STRUCTURING



# Case Study: Nonprofit HQ – Tax-Exempt PACE



**Project:** PACE as a layer in capital stack for gut rehab of an abandoned building to serve as new HQ of a non-profit with retail tenants.

## Challenge:

- Structure tax-exempt PACE to sit alongside tax-exempt IRB financing
- Construct an energy baseline for property without utility usage history

## Solution:

- Constructed baseline that qualifies property for **\$2 M in PACE financing** for energy efficient HVAC equipment, LED lighting, envelope improvements, efficient kitchen equipment for restaurant

# PACE security enhances a solar PPA structure

## PACE improves Solar PPA contracting...

- A. PACE is a credit enhancement:** Adds security for investors, reduces default risk, brings more economics into transaction.
- B. PACE simplifies underwriting:** PACE is tied to the asset not the credit of the borrower, simplifying underwriting.
- C. PACE eliminates personal guarantees:** PACE security removes the need for contractor or owner guarantees on debt.
- D. Increases owner benefits:** PACE can structure tax equity investment to maximize cash flows.

# Case Study: House of Worship - Solar PPA + Efficiency



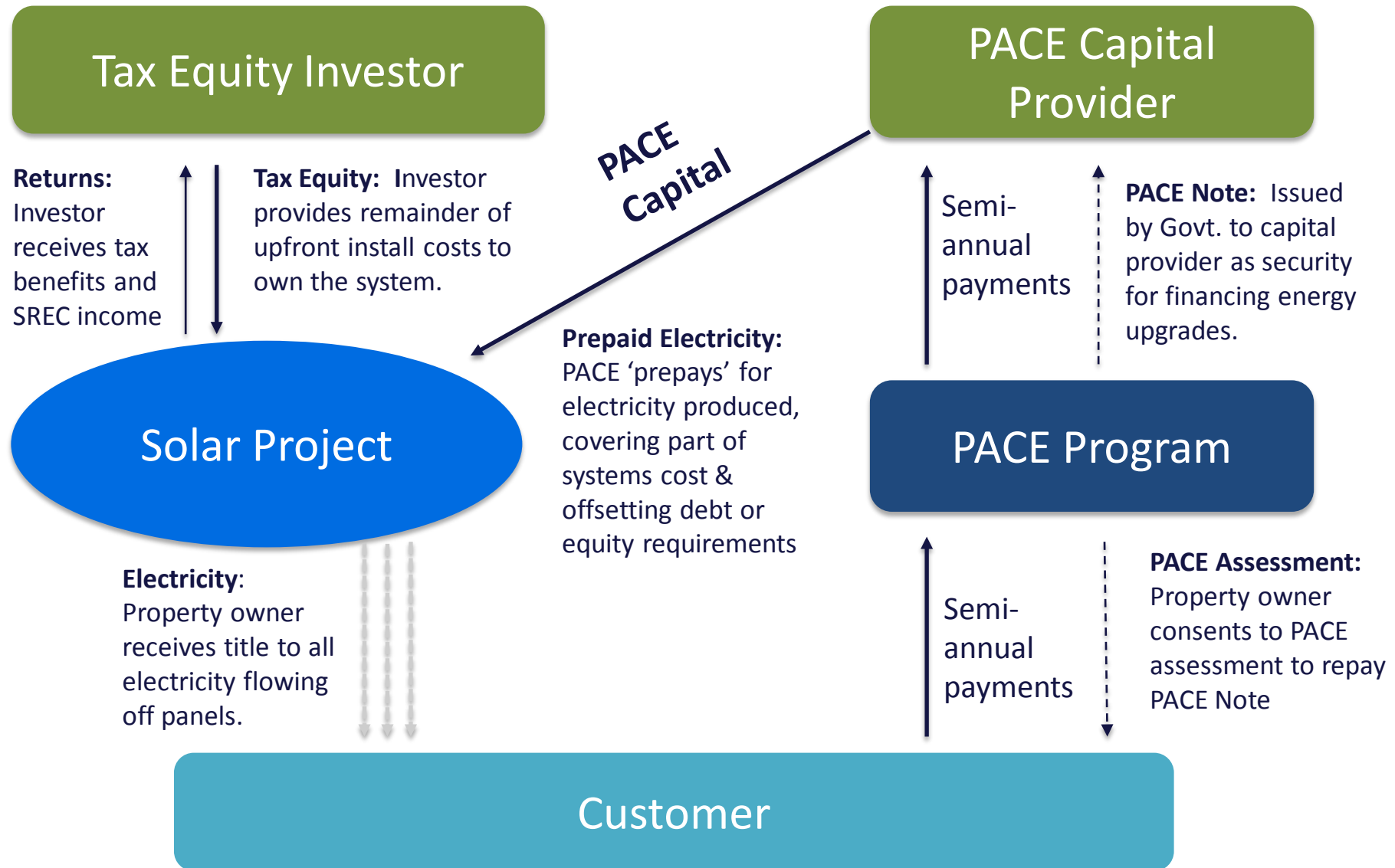
**Project:** Energy and infrastructure upgrades on four large properties for a prominent church

## Challenges:

- Monetize tax benefits from solar PV
- Use savings to finance structural work
- Retire traditional mortgage debt

**Solution:** \$3 million in building upgrades, including solar PACE-secured PPA for 300 kW system, partial roof replacements, HVAC upgrades, smart thermostats & controls, LED lighting, low-flow water fixtures

# PACE-Secured PPA: *Transaction Structure*



# Questions?

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## CPACE: Opportunities and Obstacles

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Better Buildings Summit

May 2016



# RF is a Leader in CPACE

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- Renew Financial is a leading commercial and residential PACE originator and administrator
- RF partners w/ Hannon Armstrong as preferred lender for CPACE
  - Low funding costs
  - Streamlined underwriting
- Renew Financial is committed to low-cost, open-source PACE administration
  - Single point of customer contact
  - Partner w/ leading PACE developers – manage potential channel conflict
  - Currently available in California and Florida
- Investment in PACE administration as a business
  - Standardized documentation and execution procedures across jurisdictions
  - Documentation and procedures that are compatible with securitization
  - Compatibility with range of solar PPA and lease solutions
  - Technology and customer service resources
  - [renewfinancial.com](http://renewfinancial.com)
  - AB 1883 compatible assignment structure in California

# Opportunities in CPACE

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- PACE can be used to fund a wide range of projects that have a public benefit
  - Energy Efficiency
  - Renewable Generation
  - Water Conservation (CA and TX)
  - Seismic (CA)
  - Storm Hardening (FL)
- Landlords can use PACE to solve split incentive issues
  - Landlords and tenants BOTH receive project benefits
- CPACE can solve capital budgeting constraints for EE projects
- In California, CPACE can fund eligible measures in new construction
  - Lowers overall cost of capital as equity is replaced with long term debt



# Solar is Largest CA CPACE Market

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- The solar market is accustomed to financing projects for 20+ years
- W/o PACE few commercial properties can qualify for 20-year financings
  - Often requires an investment grade host
- PACE PPAs can be constructed for hosts that cannot monetize solar tax benefits
  - As low as \$.08-.10/ kwh with a 0.5% annual escalator
  - Can be structured to share benefit between landlord and tenant
- Renew Financial and SolarCity are using PACE to provide solar for small and medium business market

# Obstacle to Success: Lender Consent

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- PACE program requires consent or acknowledgement from mortgage holder
  - Over 80 financial institutions have consented to commercial PACE transactions
  - Includes Wells Fargo, JP Morgan, US Bank, Citi, BofA, Union Bank, Bank of the West, Deutsche Bank, Prudential and MetLife
- PACE obligation can never accelerate and is not structurally senior to mortgage
- Best practices include demonstrated savings in year one
  - Strong LTVs are also helpful
- Renew Financial is working with leading lenders and SBA to develop guidelines for approving PACE financings

# Obstacle to Success: Customer Experience

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- Single point of contact that controls all key elements of execution
  - PACE originators should have strong working relationships with administrator
- Simplified fees, expenses and rates
- Similar execution procedures and documentation across jurisdictions
- First class customer service and technology support
- Volume, volume, volume leads to reduced costs per transaction
- Title Insurance may be able to streamline legal due diligence



**RENEW**  
FINANCIAL

# Thank You

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# PACE Equity

Renovating America the Efficient Way

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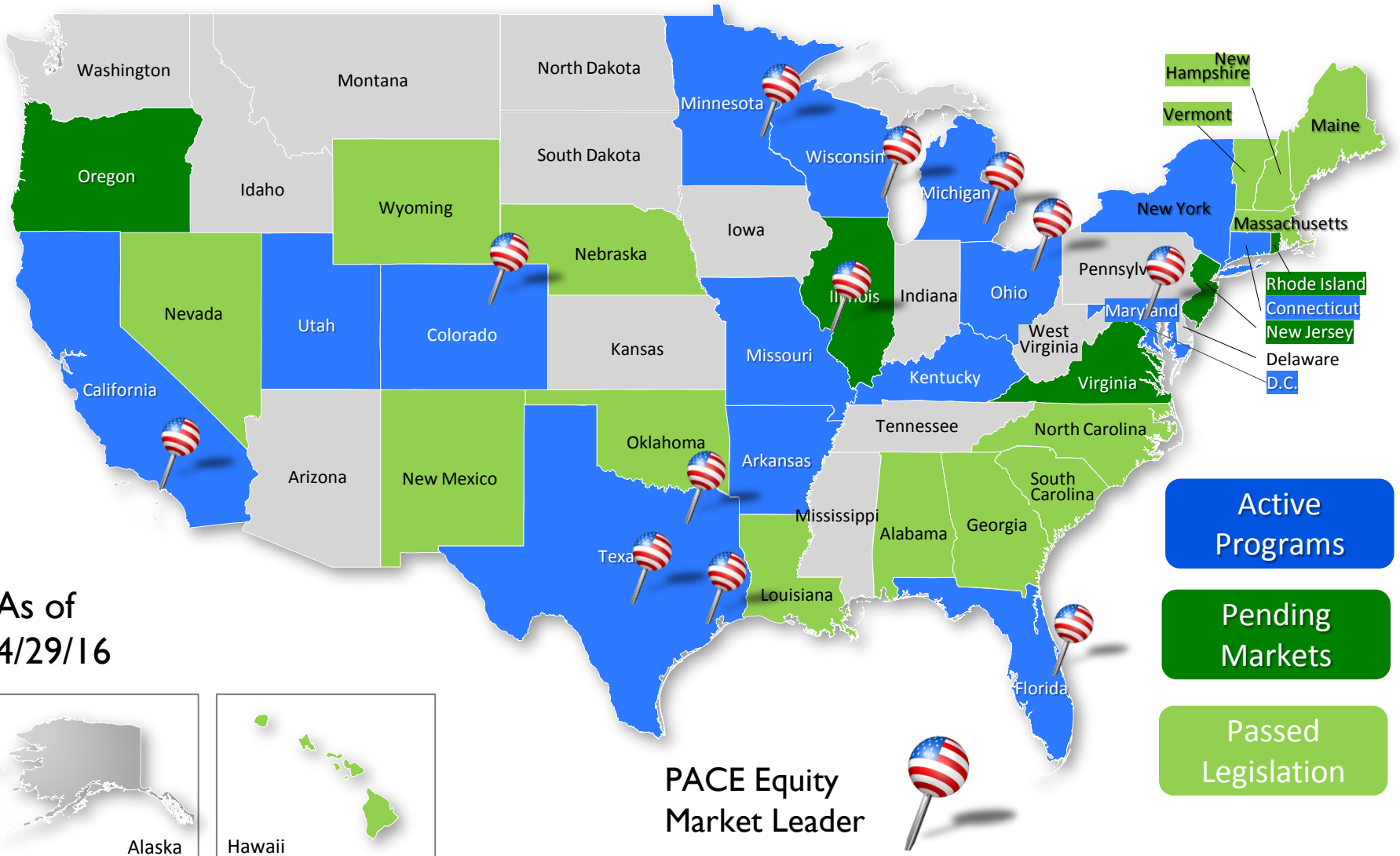
Better Buildings Summit – Washington, DC

## PACE Equity Overview

- ❑ Founded in 2014. Today a profitable closely held business recognized as a leading developer of commercial PACE projects across the US.
- ❑ Experienced Management Team with significant finance, building efficiency and early stage company experience.
- ❑ National PACE leadership on the board of PACE Now.
- ❑ Unmatched commercial PACE experience where the principals have closed over 100 PACE projects in their career.
- ❑ National reach with local presence in 12 Commercial PACE Markets. (Soon to be 16)
- ❑ Focused exclusively on building owners & developers.
- ❑ Robust processes and underwriting in place.



# Where is PACE Available?



# PACE Equity Solution

Enabling building owners to take advantage



## Project Governance

- ❑ Experience & Knowledge of PACE
- ❑ Stakeholder Engagement
- ❑ PACE District Formation

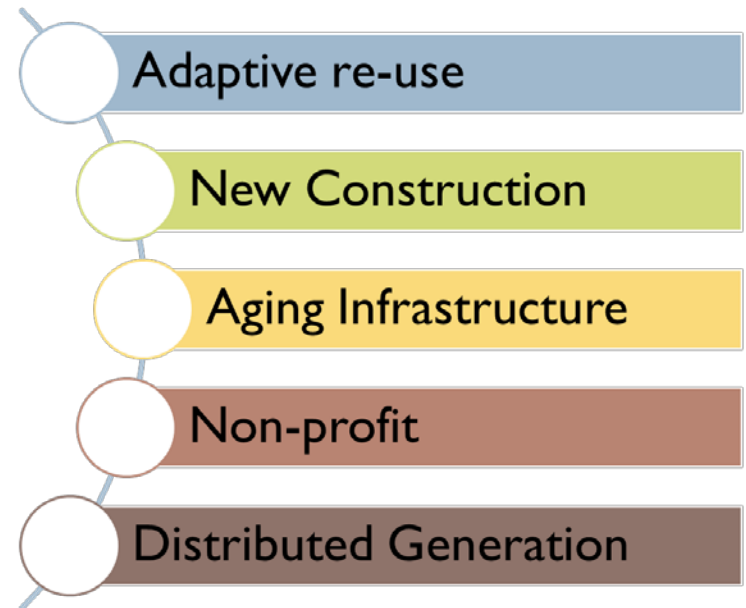
## Energy Engineering

- ❑ Bundling of multiple measures
- ❑ Development of energy models
- ❑ Performance Assurance

## Financing

- ❑ Project Development Funding
- ❑ Construction Financing
- ❑ PACE Financing

## Common scenarios for PACE Financing





# Case Study: Redevelopment

## The Mackie Building Redevelopment

### Background

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- ❑ Constructed in 1879 in Milwaukee, WI. Roughly 55,000 sq. ft.
- ❑ Housed the Milwaukee Chamber of Commerce and a grain trading room
- ❑ Converted to a retail and office building in 1950s and later, an event venue
- ❑ Suffered from little investment in 50+ years, many windows original to building, some rooms were heated by fireplaces
- ❑ Sold to Milwaukee developer Josh Jeffers in late 2014
- ❑ On the National Register of Historic Places



# Case Study: Redevelopment

## The Mackie Building Redevelopment Opportunity



- ❑ Restore the grain exchange and redevelop the building into luxury apartments
- ❑ Developer was seeking alternative financing strategies, as well as doing energy efficient systems, such as a variable refrigerant flow system (VRF)
- ❑ Engaged with PACE Equity to fill a developer financed TIF and fulfill desires for energy efficiency



# Case Study: Redevelopment

## The Mackie Building Redevelopment Results



### Customer Objectives

- Optimize design for energy efficiency
- Non-recourse financing
- Reduce outside equity requirements
- Complement complex capital stack of tax credits, debt, TIF and city grants
- Allow for high efficiency equipment without upfront investment
- Invest in and preserve a historic building

### Results

- \$1.7M in funded building improvements
- \$2.2m in savings over 20 year term
- “Really critical piece” of the project
- Measures funded by PACE Equity include elevators, domestic hot water, low flow plumbing and HVAC



### Project Details

- Closed in October 2015
- 20 year fixed rate term
- 20% of value at completion
- Project governance, energy engineering, savings guarantee and financing provided by PACE Equity

# Case Study: New Construction Hospitality Development Background



- ❑ Project is a \$65m new construction hotel in a major downtown metropolitan area
- ❑ Broke ground in 2016
- ❑ Approximately 180,000 sq. ft.
- ❑ Developer is a specialist in hospitality development and a multiple-project client of PACE Equity





# Case Study: New Construction Hospitality Development Opportunity



- ❑ Engaged PACE Equity to work closely with developer, architect, GC and MEP firms to design an energy efficient building, in addition to providing project governance and financing
- ❑ A hypothetical baseline was built based on similar buildings
- ❑ PACE Equity evaluated different system options and performed lifecycle cost assessments, this was done in part with an ASHRAE Level 3
- ❑ PACE Equity drove savings of 42% over the baseline or \$1.39 PSF



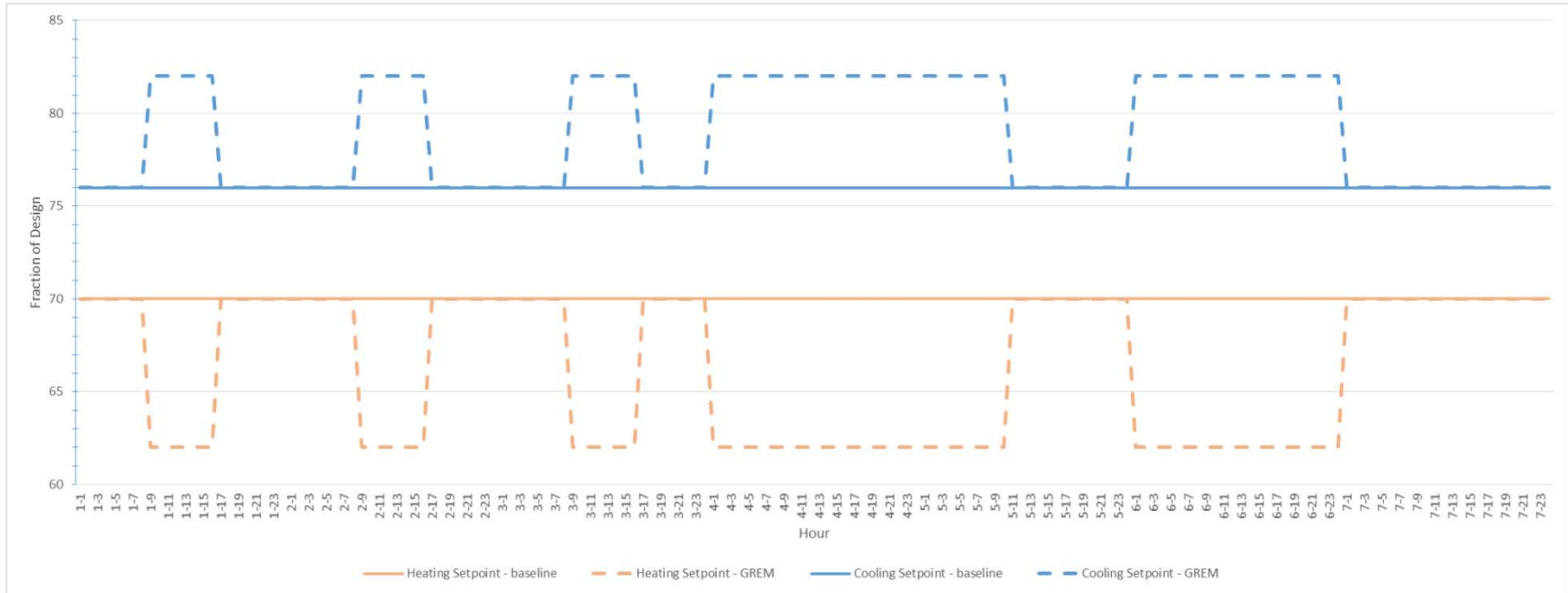
# Case Study: New Construction

## Hospitality Development

### Energy Engineering



Guest Room Energy Management Schedules – Thermostat Setpoints



Measure Number	Measure Description	Savings		
		Electricity Savings (\$)	Gas/Fuel Savings (\$)	Total Cost Savings
ECM-16	HVAC System Efficiency - Guest Room Energy Management	\$ 3,373	\$ (171)	\$ 3,201

# Case Study: New Construction Hospitality Development Results



## Customer Objectives

- ❑ Replace outside equity and reduce cost of capital for the project
- ❑ Collaborate between architect, GC, MEP, developer and PACE Equity to evaluate systems and drive savings, without driving costs
- ❑ Non-recourse financing

## Results

- ❑ \$6.8 million funded by PACE Equity
- ❑ First new construction to utilize PACE financing
- ❑ 42% savings over baseline, \$1.39 psf
- ❑ Measures funded by PACE Equity include: windows, HVAC, and hot water heating



## Project Details

- ❑ Closed in February 2016
- ❑ PACE Equity funds account for 10% of total development costs
- ❑ Project governance, energy engineering, savings guarantee & financing by PACE Equity