PACE 101:
Property Assessed Clean Energy Basics

Julian Boggs, KEEA

Abigail Johnson, Abacus Property Solutions
• **President, Abacus Property Solutions**
  - Real estate advisory firm specialized in developing energy efficiency and clean energy projects for commercial developers/owners.

• **C-PACE expertise:**
  - Developed Program Guidelines for SEF’s Pennsylvania C-PACE program.
  - Executive Director of new non-profit PACE Program Administrator (P.A.), the Virginia PACE Authority.
  - Design and development of programs in Illinois, Pennsylvania, Florida, Texas and Virginia among others.
WHAT IS C-PACE?

- C-PACE stands for Commercial Property Assessed Clean Energy
- C-PACE becomes active when it is enabled at both the state and local levels through enabling legislation
- Innovative financial product that provides 100% upfront funding for:
  - Energy efficiency
  - Renewable energy
  - Water efficiency
WHAT IS C-PACE?

C-PACE is available for all commercial properties:

- Office
- Industrial
- Hospitality
- Retail
- Specialty uses (e.g. religious institutions, golf courses, medical etc.)
- No multifamily
WHAT IS C-PACE? Public-Private Partnership

C-PACE is a **public-private** partnership between:

- **Property Owner**
- **PACE Lender**
- **Local Gov't Program Admin**

**Assessment Payments**

**Project Approval**

**Assessment Payments**

**PACE Financing**
HOW C-PACE WORKS

1. Determine Eligibility & Complete Pre-Application
2. Review Pre-Application
3. Develop Energy Conservation Project & Lender Consent
4. Submit Final Application
5. Review Application
6. Project Implementation
7. Close Financing and Record Assessment, Contract and Bond Agreement

PROPERTY OWNER PROGRAM ADMINISTRATOR
**WHY C-PACE? VALUE FOR BUILDING OWNERS**

- **No cash upfront** = projects gets done
- Long financing terms **reduce** annual payments
- **Fixed** interest rate loans provide piece of mind
- **Solves** split incentive between landlord and tenant
- Financial wherewithal of borrower **less important**

- Annual energy savings typically **greater** than loan payment
- Assessment **automatically** transfers to new owner
- Potential **off-balance sheet** treatment
- **No** access to personal assets in case of foreclosure
Developers use C-PACE to:

- Construct more efficient buildings
- Increase tenant comfort; accelerate occupancy
- Include improvements which otherwise often get “value engineered” out of a project

Potential benefits to developer:

- Finance 10%+ of total project cost
- Reduce owner equity
- No personal guarantees
- No impact on working capital
- No impact on developer credit
WHY C-PACE?
C-PACE vs. OTHER LOAN TYPES
BENEFITS: BUILDING OWNERS

$10.2M PACE financing

- 40% reduction in energy & operating costs
- $1.38M Annual Savings with $526,000 in positive cash flow
- $27.6M Savings over life of loan

- Commercial Offices, St. Paul MN
  - First National Bank Building, 375 Jackson, and US Bank Center
  - From 45 to over 100 years old and approximately 1.3 million SF
- Upgrades: HVAC (VFDs, chillers, boilers, AHU), lighting and controls
BENEFITS: NEW CONSTRUCTION

- Energy Savings: $1.39/SF
- 44% over building code
- 10% of total costs
- Westin Hotel
- New Hotel in Milwaukee, WI
- $6.8M PACE contribution
- HVAC, hot water heating, windows, building controls
- New construction allowed in many states, including Wisconsin, Arkansas, Colorado, Virginia, Pennsylvania, California
JULIAN BOGGS

• **Policy Director, Keystone Energy Efficiency Alliance**
  
  • Worked to pass SB 234, C-PACE enabling statute in 2017 and 2018.

  • Partner with SEF, Philadelphia Energy Authority, in developing model Pennsylvania C-PACE Program.

KEEAA
KEystone ENERGY EFFICIENCY ALLIANCE
WHY C-PACE: BENEFITS FOR CONTRACTORS

- Increase sales volume, improve profit margin
- Add staff, partner with other companies, such as energy engineers
- Help customers reduce costs and improve value of their properties
- Allowing them to spend more money on building improvements
C-PACE helps cities and counties meet environmental and economic development goals.

- Encourages building owners to redevelop existing properties or develop new ones in their communities.
- Prepares communities for future events related to climate change.
- Creates more jobs and revenue for the city/county and local trades.

C-PACE is a tool that can do all of these things...at NO COST to the locality.
EXAMPLES OF PROJECT TYPES

• **Class B/C asset**: Catch up on Deferred Maintenance

• **Class A/B building**: Reduce costs, enhance green “cred”, replace older equipment

• **New Construction/Gut rehab**: Carve out measures, reduce equity required

• **Vacant property**: Redevelopment opportunity
WHERE IS C-PACE?

NATIONALLY

PENNSYLVANIA

Chester County
Northampton County
Philadelphia
Gov. Wolf signed SB 234 into law in June 2018, with bipartisan support in Harrisburg.

The legislation does:

• Permit the establishment of a C-PACE district by local government.
• Establish the framework for placing the assessment and define the role of local government.
• Place certain limits on the program (e.g. no multifamily, lender consent required).

The legislation does not:

• Authorize a state agency to implement C-PACE
• Fund the development or promotion of C-PACE programs
Open markets, universal rules, low cost

Model program guidelines and draft legal documents – “C-PACE in a Box”

Non-profit, low cost administration available for any county through the Sustainable Energy Fund

Administration in Philadelphia through the Philadelphia Energy Authority
## C-PACE STATEWIDE PROGRAM TIMELINE

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>August 2018</strong></td>
<td>C-PACE Partnership developed</td>
</tr>
<tr>
<td><strong>October 2018</strong></td>
<td>Stakeholder meetings on program development</td>
</tr>
<tr>
<td><strong>Dec 2018 - Jan 2019</strong></td>
<td>Program Guidelines Draft Released for Public Comment</td>
</tr>
<tr>
<td><strong>March 22, 2019</strong></td>
<td>Statewide C-PACE in a Box Released, Outreach to Counties</td>
</tr>
<tr>
<td><strong>May 2019</strong></td>
<td>Chester and Northampton County Establish C-PACE</td>
</tr>
<tr>
<td><strong>June 2019</strong></td>
<td>Philadelphia City Council establishes C-PACE</td>
</tr>
</tbody>
</table>
Eligible clean energy resources include those listed in the PA Alternative Energy Portfolio Standard. Must be affixed to property.

Energy Efficiency measures must achieve 20% energy savings, utilize best in class technology, or listed included in approved lists of measures such as the PA PUC Technical Reference Manual.

New construction and gut rehab projects must meet national standards such as LEED or Energy Star.

Baseline energy and/or water survey required.

Two years of measurement & verification.

Contact Us

Abby Johnson
Abacus Property Solutions
abby@abacusprop.com

Julian Boggs
Keystone Energy Efficiency Alliance
jboggs@keealliance.org