• Jocelyn Durkay, National Conference of State Legislatures

• Jessica Bailey, Connecticut Clean Energy Finance and Investment Authority

• Eleni Pelican, U.S. Department of Energy

• Moderator: Colleen Cain, PhD, Northeast-Midwest Institute
Topics

• Residential and commercial Property Assessed Clean Energy (PACE) financing programs in the Northeast-Midwest region, generally

• An exemplary commercial PACE program in Connecticut

• Federal policy issues around PACE implementation
Residential and Commercial PACE Programs in the Region

Jocelyn Durkay
Policy Associate, Energy
National Conference of State Legislatures
Property Assessed
Clean Energy (PACE)
Financing:
Program Overview &
State Activity

Jocelyn Durkay
National Conference of State Legislatures
• Brief overview of NCSL
• What is PACE financing?
  – Residential and Commercial PACE
• What are states doing with PACE?
NCSL is committed to the success of all legislators and staff. Our mission is to

- Improve the quality and effectiveness of state legislatures.
- Promote policy innovation and communication among state legislatures.
- Ensure state legislatures a strong, cohesive voice in the federal system.
The Challenge

- Aging, inefficient buildings
- High up-front costs for energy (and water) efficiency upgrades or renewable energy installations
- Building owners move regularly, making it difficult to make property investments that cannot be recouped quickly.

= The need for a innovative financing
PACE Financing

• Immediate benefits, flexible payback periods
• Decreases energy bills
• Streamlined process
• Financing transfers across building owners
• Benefits older building stock; building owners
• Economic development tool
State Legislation Enabling PACE

Municipality → Building Owner → PACE Lender → Contractor

Municipality remits funds to lender
Lender provides financing to owner
Owner pays for the project costs through property tax bill
Payment → Service

Graphic inspired by Milwaukee Energy Efficiency (ME2) presentation
Residential & Commercial PACE

Commercial

• According to PACE Now’s 2013 annual report, 180 commercial building projects have been funded in 7 states and Washington, D.C.
• 2013, C-PACE investments totaled $33 million

Residential

• Originally took precedence over existing liens
• May require acknowledgment or consent from existing lien (mortgage) holder
State & Local Process

State Legislation
- Program purpose
- Program basics
- Benefits districts or voluntary assessments

Local Program Design
- Land-secured financing district
- Bonding
- Program development
- Pre-approve contractors
PACE is authorized in 31 states and Washington, D.C.

Currently 12 states and Washington, D.C. have active programs
2014 Policy Developments

- **Connecticut**: residential PACE feasibility report
- **Delaware**: exploring financing to expand energy efficiency
- **Maryland**: administrative surcharges allowed
- **New Hampshire**: credit requirements; notification of lien holders; foreclosure stipulations; and increases loan maximums
Thank you!

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View our PACE Financing 2014 Update at:
An exemplary Commercial PACE Program in Connecticut

Jessica Bailey
Director, Commercial and Industrial Programs
Connecticut Clean Energy Finance and Investment Authority
C-PACE:
A financing tool for CRE owners
Northeast-Midwest Institute
Energy Challenge in Connecticut

**High Cost**
CT has *THE* highest cost for electricity in the "lower 48"

**Old, Energy Inefficient Building Stock**
CT has some of the oldest and most energy inefficient building stock

**Need for "Cleaner / Cheaper" Energy Sources**
Programs that will diversify our energy mix into renewable/clean power

**"More Reliable" Grid**
5 major storms in 2 years with widespread outages
Who is CEFIA?

Help ensure Connecticut’s energy security and community prosperity by realizing its environmental and economic opportunities through clean energy finance and investments.

Support the Governor’s and legislature’s energy strategy to achieve cleaner, cheaper and more reliable sources of energy while creating jobs and supporting local economic development.
Property Assessed Clean Energy

- An innovative financing structure that enables commercial, industrial, and multi-family property owners to access financing for qualified energy upgrades and repay through a benefit assessment on their property tax.

CEFIA provides 100% upfront, low-cost, long-term funding

Owner repays over time through property taxes

A senior PACE lien is put on the property and stays regardless of ownership
Connecticut Special Session
Public Act 12-2 (June 2012)

- Commercial, industrial & multi-family property
- Requires the consent of the existing mortgage lender
- Requires SIR>1; permanently affixed
- Enables municipalities to opt-in
- Enables CEFIA to administer a statewide program
THE C-PACE PROCESS

1. GETTING STARTED
   - Building owner works with contractor to develop a project plan.
   - Owner submits project plan and financing application to C-PACE.
   - Application is reviewed.

2. GETTING PROJECT DONE
   - C-PACE contacts local municipality and a lien is placed on property.
   - C-PACE loan is closed and funding goes to building owner.
   - Project begins.

3. PAYING IT OFF
   - Owner begins saving money on their energy bills.
   - Owner repays C-PACE loan through a benefit assessment charge on their municipal tax bill.
   - Through improved property, owner enjoys increased cash flow and lower operating costs.
C-PACE Addresses Key Barriers

| Lack of funding? | 100% upfront, 20 year financing |
| Near term plan to sell? | Tax obligation fixed to property |
| Insufficient payback/ROI? | Positive cash flow in year 1 |
| Split incentives? | Assessment/savings pass to tenants |
| Uncertain savings/technical expertise? | Technical underwriting / SIR>1 |
### C-PACE Advantage to other stakeholders

<table>
<thead>
<tr>
<th>Capital Providers</th>
<th>Mortgage Lenders</th>
<th>Municipalities</th>
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<tbody>
<tr>
<td>• Low risk investment opportunity</td>
<td>• Improves Building Financials/Risk</td>
<td>• Creates economic development &amp; jobs</td>
</tr>
<tr>
<td>• Senior lien</td>
<td>• Lowers OPEX</td>
<td>• Reduces energy costs for businesses</td>
</tr>
<tr>
<td>• Secure repayment mechanism (taxes)</td>
<td>• SIR&gt;1</td>
<td>• Reduces pollution</td>
</tr>
<tr>
<td>• Legal and technical structure administered by CEFIA</td>
<td>• Creates a more attractive building for occupants and owners</td>
<td></td>
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<tr>
<td></td>
<td>• Finances deferred maintenance needs</td>
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Reflect: Snapshot of progress

- What have we done
  - $27M closed (37) deals;
  - $23.7M (26) approved (not including following deals)
  - Over $50MM since inception
  - 99 towns = 85% eligible market covered
  - 25 banks have provided mortgage lender consent
  - 30 contractors have approved projects
  - Over 100 contractors registered
What does the Green Bank do?

Statutory:
- Bring on municipalities
- Design technical standards and approve SIR
- Secure lender consent
- Establish credit enhancement
- Require muni to place lien and collect assessments

Programmatic:
- Marketing and outreach
- Solve problems (ex audit or appraisal fund)
- Support to building owners and contractors
- CDMP review process

Warehouse:
- Prescreen
- Check for all financials
- Financial underwriting and diligence memo
- Prepare for closing: title search, insurance review, service contract review
- Close: alert municipality, file lien
- Disburse: manage disbursement requests from owner/contractor, check permits, work with Cortland
- File final payment schedule with town; alert QDS
- Sell-down process
C-PACE Technical Underwriting Team

• Industry leader in building energy performance assessment software and support services
• Nationwide PACE program experience
• Energy efficiency program technical management expertise

3rd Party Technical Underwriting Manager

SRS’s technical underwriting team evaluates C-PACE projects

Multi-Measure Projects (Full Assessment: HVAC, controls, windows)
Celtic Energy, Inc.

Targeted ECM Projects (Fast Track: Solar PV, Lighting)
J.E. Ekegren Assoc.

Specialty Technologies (Hydro)
GZA, Inc.
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GZA, Inc.
What upgrades are eligible?

Anything that saves energy from baseline ... as long as it isn’t going anywhere

- High efficiency lighting
- HVAC upgrades
- New automated building and HVAC controls
- Variable speed drives (VSDs) on motors fans and pumps
- High efficiency chillers, boilers, and furnaces
- High efficiency hot water heating systems
- Combustion and burner upgrades
- Fuel switching
- Water conservation
- Heat recovery and steam traps
- Building enclosure/envelope improvements
- BMS
- Renewable energy systems
- District heating and cooling
- Micro grids
What buildings are eligible?

- LTV must not exceed 80%
- Positive operating profit and net income in each of last 2 years
- Positive cash from operations in each of last 2 fiscal years
- Debt service of at least 1.25x for last fiscal year
- Current ratio of at least 1.00:1.25
- Total Liabilities/ Tangible Net Worth not in excess of 2.00:1.00
- Interim statements disclose no material adverse changes
- CEFIA exposure must not exceed 35% of property’s value
In a ‘Watershed’ Deal, Securitization Comes to Commercial Efficiency

Connecticut’s green bank executes the first securitization of commercial efficiency assets.

Nick Lombardi
May 19, 2014

Securitization, the holy grail of energy efficiency finance, has finally arrived in the commercial sector.
CEFIA Capital Partners

Deutsche Bank USA

PACE Connecticut

Renew Energy Partners
A Smart Approach to Making Energy Efficient Upgrades

Brookfield

energize CONNECTICUT CT

structured finance ASSOCIATES, LLC
Case Study: Energy Efficiency Upgrade in Simsbury

Project
- $675,000 energy efficiency upgrade, including
  - Installation of Air Leakage Improvements
  - High Efficiency lights
  - Occupancy Sensors and Upgraded Energy Management System
  - New Rooftop Units

Utility Incentives
- $165,850

Impact
- Annual savings $61,000
- 18M kBTU saved
Case Study: Solar and Energy Efficiency Upgrade in Middletown

Project
- $2,535,766 including
  - the installation of air units, variable frequency drives, high efficiency lights, occupancy sensors, air leakage improvements, an upgraded energy management system,
  - and a 260 kW ground-mounted photovoltaic system.

Utility Incentives
- $387,885

Impact
- Energy savings of $224,272 annually
- 51M kBTUs saved
- 8.5M kWh clean energy produced
Case Study: Solar System at Polamer Precision

Project
- $2,502,975 for 954 kW solar PV installation

Utility Incentives
- Received ZREC contract through CL&P

Financing
- $2,502,975 financed through 20-year C-PACE financing at 6% interest rate
- Annual C-PACE assessment of $218,918

Impact
- Cost savings of $253,920 annually
- 24,133 MWh saved over finance term
- 30% investment tax credit
Case Study: Solar and Lighting Upgrade
Norwalk Shopping Center

Project
- $550,000 exterior LED lighting upgrade and solar parking canopy.

Utility Incentive
- $54,584 utility incentives for lighting

Financing
- $185,000 of lighting upgrade financed through 13 year C-PACE assessment. CEFIA providing construction financing.
- $365,000 solar parking canopy received a ZREC
- Savings of $55,000 plus 30% ITC

Impact
- 741k kBTUs saved
- Produces 5.8M kWh in clean energy
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Federal Policy Issues around PACE Implementation

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U.S. Department of Energy
PACE Webinar
Northeast-Midwest Institute

October 21, 2014

Eleni Pelican, Policy Advisor

Office of Weatherization and Intergovernmental Programs
PACE Overview

• Brief Overview of PACE
• Current Status of PACE
• Resources for State and Local Governments
Timeline of Events

- October 2009-Whitehouse Issues “Policy Framework for PACE Financing Programs”
- **May 2010- Fannie and Freddie Issue “Lender Letters”**
- May 2010- DOE issues “Guidelines for Pilot PACE Financing Programs”
- July 2010- FHFA Issues “Statement on Certain Energy Retrofit Loan Programs”
- July 2010-OCC Issues “Supervisory Guidance” to National Banks
- July 2010: The PACE Assessment Protection Act Introduce and Referred to Committee
- Fall 2010: Florida, California, and New York File Lawsuits
Timeline of Events

- February 2011- FHFA’s Second Directive to Fannie and Freddie
- August 2011- California District Court Directs FHFA to Conduct Formal Rulemaking
- July 2011- PACE Assessment Protection Act Introduced and Referred to Committee
- June 2012- FHFA Publishes Proposed Rule and Appeals California District Court Ruling
- March 2013- Circuit Court Overturns Prior Decision Direction FHFA to Conduct Rulemaking
- September 2013- CA Governor Announces Intent to Create PACE Reserve Fund to FHFA
Timeline of Events

- December 2013 - Mel Watt Confirmed as New FHFA Director
- March 2014 - California Establishes $10M Loan Loss Reserve Fund
- March 2014 - PACE Assessment Protection Act Introduced and Referred to Committee
Significant Successes

- To date, 31 states and the District of Columbia have PACE enabling legislation

- HERO PACE: Western Riverside Council of Governments [heroprogram.com](http://heroprogram.com)
- PACE Toledo-Lucas County Port Authority
- C-PACE: Connecticut [c-pace.com](http://c-pace.com)
- Lean and Green Michigan [www.leanandgreenmi.com](http://www.leanandgreenmi.com)
Resources for State and Local Governments

Visit our Commercial PACE pages on the TAP Solution Center

energy.gov/eere/wipo/property-assessed-clean-energy-programs
Solution Center: Template Documents

Application Templates
• Program Handbook
• Eligible Measures List
• Application Form
• Lender Acknowledgment Form

Marketing Templates
• Customizable Press Release
• Program Overview
• Program FAQ
• Program Brochure
• Social Media Toolkit
DOE Supported PACE Activity in 2015

- **NASEO**: Analysis of Statewide Property Assessed Clean Energy (PACE) Programs
- **Technical Assistance Program**: PACE in the Box Analysis
- **Better Buildings Challenge**: Milwaukee PACE Implementation Model
Questions & Next Steps

• **Resources** on Solution Center:
  
  http://energy.gov/eere/wipo/state-and-local-solution-center-0

• *Commercial PACE materials*
  
  energy.gov/eere/wipo/property-assessed-clean-energy-programs

• **Additional Resources**

  ➢ pacenow.org
Thank you!

DOE’s Technical Assistance Program welcomes your questions and feedback at TechnicalAssistanceProgram@ee.doe.gov
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