Clean Energy Finance and Investment Authority

C-PACE:
A financing tool for building owners
Agenda

▪ Who is CEFIA?

▪ What is C-PACE?

▪ The C-PACE Advantage

▪ CEFIA’s Role in Designing C-PACE

▪ The C-PACE Process
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.
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- The C-PACE Advantage
- CEFIA’s Role in Designing C-PACE
- The C-PACE Process
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.

- Private capital provides 100% upfront, low-cost, long-term funding

- Repayment through property taxes

- A senior PACE lien is put on the property and stays regardless of ownership
CRE owners face barriers to upgrades

- Lack of Capital: 38%
- Insufficient payback/ROI: 21%
- Uncertain Savings (ROI): 16%
- Technical Expertise: 6%
- Snr Mgmt Buy-in: 5%
- Split Incentives: 5%
- Inability to Finance: 3%
- Other: 7%
## C-PACE Addresses Key Barriers

<table>
<thead>
<tr>
<th>Near term plan to sell?</th>
<th>Tax obligation fixed to property</th>
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<tbody>
<tr>
<td>Lack of funding?</td>
<td>100% upfront, 20 year financing</td>
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<tr>
<td>Cannot assume more debt?</td>
<td>Assessments may qualify as OPEX</td>
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<tr>
<td>Insufficient payback/ROI?</td>
<td>Positive cash flow in year 1</td>
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<td>Split incentives?</td>
<td>Assessment/savings pass to tenants</td>
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<tr>
<td>Uncertain savings/technical expertise?</td>
<td>Technical underwriting / SIR&gt;1</td>
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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
# C-PACE Advantage to other stakeholders

<table>
<thead>
<tr>
<th><strong>Capital Providers</strong></th>
<th><strong>Mortgage Lenders</strong></th>
<th><strong>Municipalities</strong></th>
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</thead>
</table>
| • Low risk investment opportunity  
  • Senior lien  
  • Secure repayment mechanism (taxes)  
  • Legal and technical structure administered by CEFIA | • Improves Building Financials/Risk  
  • Lowers OPEX  
  • SIR>1  
  • No acceleration  
  • Creates a more attractive building for occupants and owners  
  • Finances deferred maintenance needs | • Creates economic development & jobs  
  • Reduces energy costs for businesses  
  • Reduces pollution |
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CEFIA’s Role in C-PACE

Design Program
- Publish Guidelines November 2012
- Onboard Municipalities
- Website launched (www.c-pace.com)

Administer Program
- Technical Underwriting
- Marketing & Outreach
- Work with Existing Mortgage Lenders

Attract Private Capital
- Qualify Capital Providers
- Offer Credit Enhancement tools (as needed)
- Provide capital (as needed)
- Develop warehouse / bonding authority (Q2 2013)
Municipalities Opted into C-PACE

- Ansonia
- Avon
- Beacon Falls
- Berlin
- Bethel
- Bloomfield
- Branford
- Bridgeport
- Brookfield
- Canaan
- Canton
- Chester
- Clinton
- Coventry
- Danbury
- Durham
- East Granby
- East Haddam
- East Hampton
- East Hartford
- East Windsor
- Enfield
- Fairfield
- Farmington
- Glastonbury
- Granby
- Greenwich
- Groton
- Hartford
- Killingworth
- Manchester
- Mansfield
- Meriden
- Middletown
- Milford
- Monticello
- New Britain
- New Haven
- New London
- New Milford
- Newtown
- North Branford
- North Canaan
- Norwalk
- Norwich
- Old Saybrook
- Plainville
- Portland
- Putnam
- Rocky Hill
- Seymour
- Simsbury
- Southbury
- Southington
- Sprague
- Stafford
- Stamford
- Stonington
- Stratford
- Suffield
- Tolland
- Torrington
- Trumbull
- Vernon
- Waterbury
- Waterford
- West Hartford
- West Haven
- Westbrook
- Westport
- Wethersfield
- Wilton
- Windham
- Windsor
- Windsor Locks
Municipalities Opted into C-PACE

80% C&I Market
Customers Apply Into C-PACE
C-PACE Partners do Technical Underwriting

**Program Expertise:**
Buonicore Partners
- Milford, CT
- Modeled Energy Profile of CT
- Nationwide PACE experience

**Technical Expertise:**
Celtic Energy
- Glastonbury, CT
- $1bn of energy-related projects
- Experience with large commercial end-users, utilities, and government

**Real Estate Expertise:**
Sustainable Real Estate Solutions
- Trumbull, CT
- Benchmarking Database
- Industry leader in building energy performance assessment

**3rd Party Administrator:**
Buonicore Partners
CEFIA Team does Financial Underwriting

- LTV, including C-PACE, must not exceed 80%
- Positive operating profit and net income in each of last 2 fiscal 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 change in financial condition
- CEFIA exposure must not exceed 35% of the value of the property
Determine project eligibility

Anything that saves energy from baseline ...

- 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

... as long as it isn’t going anywhere
CEFIA Sources Capital

Construction and Term Financing from CEFIA

- CEFIA authorized $40M short term facility for construction and term financing
- Sells down transaction through bid process

Qualified Capital Providers

- CEFIA qualified 14 capital providers through a RFI.

Owner Arranged Financing

- Property owner is free to choose their capital provider from the private market. There is no government financing required.
M&V: Data Management Platform

Costs and Savings:
- Estimated Required Investment (unleveraged): $1,992,976
- Estimated Annual Savings: $258,563
- Projected: $21,547 avg. / month
- Return on Investment (ROI):
  - Simple Payback Term (years): 7.71
  - True Payback Term (years): 7.33
  - Savings to Investment Ratio (unleveraged): 3.03
  - Savings to Investment Ratio (leveraged): 2.06
- Total Cash Flows (unleveraged): $2,446,034
- Total Cash Flows (leveraged): $1,507,840

Finance Scenario:
- Estimated Required Investment (100% leveraged): $1,992,976
- Amount Financed: $195,411
- Estimated Annual Debt Service: $16,284
- Estimated First Year Benefit: $0
- Excess Annual Cash Flow (first year): $63,152

Financial Analytics:
- Asset Value Impact from ECMs:
  - @ 6.50% CAP rate: $3,977,899
  - @ 7.50% CAP rate: $3,447,512
  - @ 8.50% CAP rate: $3,041,922
- Asset Value Impact less Required Investment:
  - @ 6.50% CAP rate: $1,984,923
  - @ 7.50% CAP rate: $1,454,536
  - @ 8.50% CAP rate: $1,048,946
- Internal Rate of Return (unleveraged IRR): 11.5%
- Internal Rate of Return (leveraged IRR):
- Net Present Value (unleveraged NPV):
- Net Present Value (leveraged NPV):
- Time to Positive Cash Flow (leveraged): Immediate
The C-PACE Process

1. Building owner engages contractor to develop scope of work; works with utilities (CEEF) to incorporate incentives

2. Owner applies to C-PACE program at www.c-pace.com

3. Third party review of technical and financial details
The C-PACE Process

- 4. C-PACE alerts municipality; lien is placed on property
- 5. CEFIA offers 100% upfront financing to owner
- 6. Project commences
The C-PACE Process

- 7. Owner remits payment to municipality as benefit assessment charge

- 8. Municipality remits PACE assessment to CEFIA

- 9. CEFIA “sells down” transaction to capital provider to replenish funds
Program Snapshot: First Year

- 75 towns on board
- 80% of the CT market eligible
- 200+ contractors trained
- 15 qualified capital providers
- 113 Projects in Pipeline
  - Est. $50 million in projects
- $40M in CEFIA capital
  - $20 million approved
  - $7 million in closed transactions
Case Study: Solar and Lighting Upgrade
Norwalk Shopping Center

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

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
Case Study: Energy Efficiency Upgrade
855 Main Street Bridgeport

Project
- $1,990,000 energy efficiency measures, ranging from the installation of variable frequency drives to chiller replacements to new energy efficient windows to new cooling towers.

Financing
- Save owners $241k per year versus $166k in annual C-PACE assessment. Net savings of $80k.

Impact
- 133M kBTUs saved over life of project
Case Study: Boiler Replacement
Bushnell Center for the Performing Arts

Project
- $650,000 boiler replacement

Financing
- $384,000 of replacement financed through 20 year C-PACE assessment.
- $250,000 covered with grant from Department of Economic and Community Development.

Impact
- Annual savings of $48,000
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

Financing
- Annual savings $61,000

Impact
- 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.

Financing

- Energy savings of $224,272 annually

Impact

- 51M kBTUs saved
- 8.5M kWh clean energy produced
Case Study: Solar Project in Hartford

**Project**
- $145,000 solar installation

**Financing**
- ZREC award of $164.22 / MWh from CL&P,
- With ZREC and energy savings, owner expected to see revenue of $21,385 per year

**Impact**
- 1.3M kWh clean energy produced
Case Study: Solar Project in Hartford

Project
- $325,000 solar installation

Financing
- ZREC award of $164.22 / MWh from CL&P,
- With ZREC and energy savings, owner expected to see revenue of $49,916 per year

Impact
- 2.8M kWh clean energy produced
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