C-PACE: A financing tool for building owners
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
Connecticut Green Bank: Mission and Goals

Attract and deploy capital to finance the clean energy goals for Connecticut

Develop and implement strategies that bring down the cost of clean energy in order to make it more accessible and affordable to consumers

Reduce reliance on grants, rebates and other subsidies and move towards innovative low-cost financing of clean energy deployment
Attract and Deploy Capital
Financial Innovation AND Marketing Innovation

Attract and deploy capital to finance the clean energy goals for Connecticut

Increase the attractiveness to capital providers

Increase the attractiveness to consumers
Connecticut Green Bank: Financial Tools

- Grants
- Equity
- Loans
- Interest Rate Buy Down
- Special Capital Reserve Fund
- Third Party Insurance
- Energy Savings Performance Contracts
- Commercial Property Assessed Clean Energy
- On Bill Repayment
- Subordinated Debt
- Loan Loss Reserves
- Leases, PPAs, and ESAs
- Bonding
C-PACE
In 90 Seconds
Property Assessed Clean Energy

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
## C-PACE Addresses Key Barriers

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Solution</th>
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<tbody>
<tr>
<td>Lack of funding?</td>
<td>100% financing for 20 years</td>
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<tr>
<td>Near term plan to sell?</td>
<td>Tax obligation fixed to property</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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Case Study: Non profit, Boiler Upgrade

Location: 319 Barnum Avenue, Bridgeport CT

Building Type: House of Worship

Building Size: 10,600 Square Feet

Total Project Cost: $53,087

Incentives: $3,460 UI incentive (*boiler only)

C-PACE Financing: $49,627

Term: 10 Years

Annual Interest Rate: 5%

Annual C-PACE Assessment: $6,506

Annual Energy Cost Savings: $13,678

Lifetime Energy Cost Savings: $136,776

Annual Energy Savings: 241 MMBtu
Case Study: Non profit, Energy Efficiency

Location: 166 Capitol Avenue, Hartford CT
Building Type: Entertainment / Culture
Building Size: 95,000 Square Feet
Total Project Cost: $650,000
Incentives: $16,000 CL&P incentive; $250,000 CEBs grant
C-PACE Financing: $384,000
Term: 20 Years
Annual Interest Rate: 5%
Annual C-PACE Assessment: $30,596
Annual Energy Cost Savings: $59,071
Lifetime Energy Cost Savings: $1,181,420
Annual Energy Savings: 703,248 kBTU
Case Study: Non profit, CHP & Lighting

Location: 110 W Main Street, Meriden CT
Building Type: Recreation
Building Size: 40,000 Square Feet
Total Project Cost: $372,466
Incentives: none
C-PACE Financing: $372,466
Term: 19 Years
Annual Interest Rate: 4.94%
Annual C-PACE Assessment: $30,446
Annual Energy Cost Savings: $34,450
Lifetime Energy Cost Savings: $688,991
Annual Energy Savings: 489.2 MMBtu
Program Snapshot

- $70 million in deals approved; $38 million closed
- Sold initial $30M+ portfolio through bid process (closed 5/15/2014)
- 109 towns on board = 85% of the CT market eligible
- 100+ contractors trained
- 20 qualified capital providers
- 100 Projects in Pipeline = over $70M
- 30 mortgage lenders have provided consent
Connecticut General Statute: C-PACE

- Commercial, industrial, multi-family & non-profit 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
What upgrades are eligible?

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

... as long as it isn’t going anywhere

- 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
**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.
Working together: Incentives + Financing

Capital Stack

Incentives

Financing

ENERGY SAVINGS

REPAYMENT

YEARS

10  15  20
Working together: Incentives + Financing

Project Cost

- SBEA
- C-PACE

Simple Payback

Cost Levels

- $100,000
- No max

Simple Payback Periods

- 4 Years
- 20 Years +

- EMS
- VFDs
- Lighting
- HVAC
- Solar
- CHP
- RTU
- Boiler
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