



Empowering you to make
smart energy choices

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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Property Assessed Clean Energy

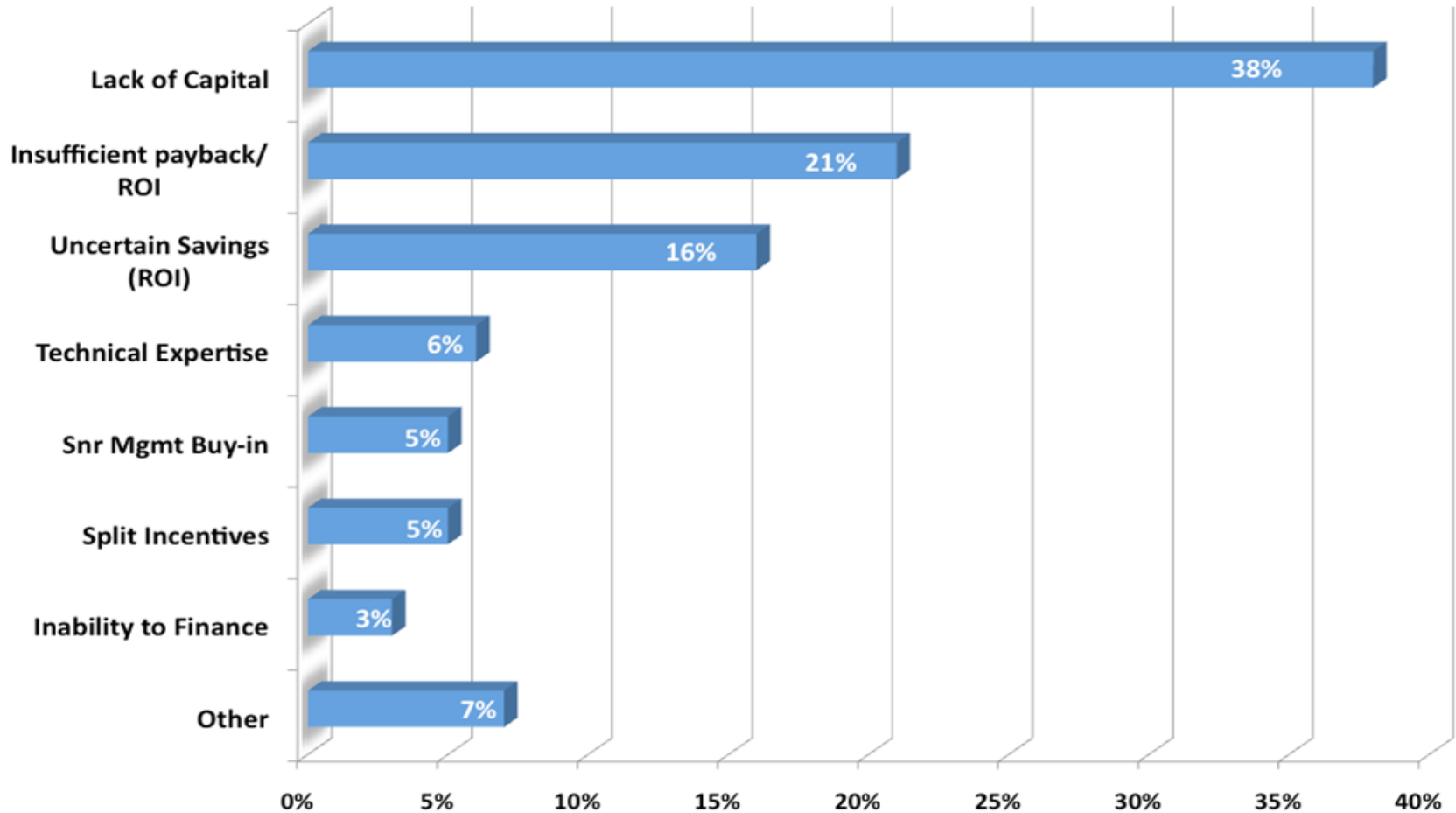
- An innovative financing structure that enables commercial, industrial, and multi-family property owners to access financing for qualified energy upgrades and repay through a benefit assessment on their property tax.

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



C-PACE Addresses Key Barriers

Near term plan to sell?

Lack of funding?

Cannot assume more debt?

Insufficient payback/ROI?

Split incentives?

Uncertain savings/technical expertise?

Tax obligation fixed to property

100% upfront, 20 year financing

Assessments may qualify as OPEX

Positive cash flow in year 1

Assessment/savings pass to tenants

Technical underwriting / SIR>1

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

Capital Providers

- Low risk investment opportunity
 - Senior lien
 - Secure repayment mechanism (taxes)
- Legal and technical structure administered by CEFIA

Mortgage Lenders

- Improves Building Financials/Risk
 - Lowers OPEX
 - **SIR>1**
 - No acceleration
- Creates a more attractive building for occupants and owners
- Finances deferred maintenance needs

Municipalities

- 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

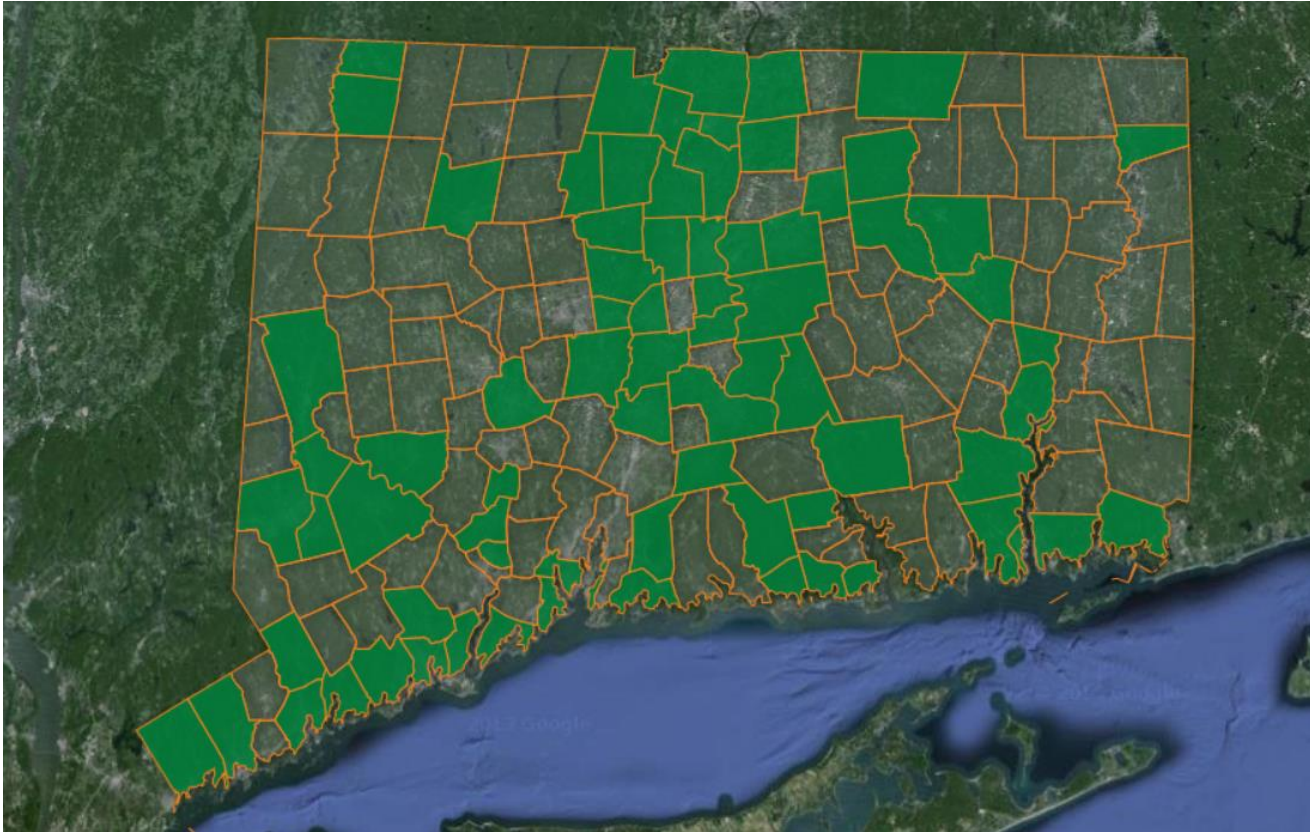
Attract Private Capital

- 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
- Montville
- 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

cpace CREATING CLEAN ENERGY OPPORTUNITIES

BUILDINGS PROJECTS EXPLORE MAP RESOURCES APPLICATION



Connecticut is moving towards an energy future that is cleaner, cheaper, and more reliable.

CEFA is launching a finance program that will allow commercial and industrial building owners to access capital to upgrade their buildings.

[LEARN MORE](#)

FEATURED BUILDINGS Use the map below to discover more about our most recent energy efficient buildings in Connecticut, or [EXPLORE ALL 543 BUILDINGS](#)



State Capitol
Energy Efficiency [VIEW PROFILE](#)


Greenwich Hospital
Energy Efficiency

Yale University-Sterling Memorial Library
Energy Efficiency

Connecticut Science Center
Energy Efficiency

[EXPLORE ALL 543 BUILDINGS](#)

FEATURED PROJECTS Learn more about some of our featured energy efficient projects below, or [VIEW ALL 432 PROJECTS](#)



State Capitol
LOCATION: 123 Location RD East Hartford CT
BUILDING TYPE: Government [MORE DETAILS](#)

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POWERED BY **HB** HONEST BUILDINGS

cpace CREATING CLEAN ENERGY OPPORTUNITIES

BUILDINGS PROJECTS EXPLORE MAP RESOURCES APPLICATION

step two | building information

Address of Property

Date of construction

Is a parking area associated with the building?
If yes, provide description (above/below ground, covered)

Yes No

Gross square footage
(not including any parking area)

Who occupies this property? Owner Tenant

Date and description of last major renovation.
(defined as a renovation that either involved expansion or reduction of the building's gross floor area by 10% or more, or that impacted total building energy use by more than 10%)

What type fuel use? natural gas, oil, steam; fuel provider (s) info

Electricity provider

Do you currently pay property taxes on building? Yes No **Are payments current?** Yes No

Is there a current mortgage on the property? Yes No If yes, note the mortgage holder(s)

Property assessed value **Date of last assessment** **Estimated current value**

Amount of debt
(current outstanding loan balance, including a breakout of the amount of the 1st or 2nd)

Are mortgage payments current? Yes No

Do you have clear title to the property with no encumbrances? Yes No

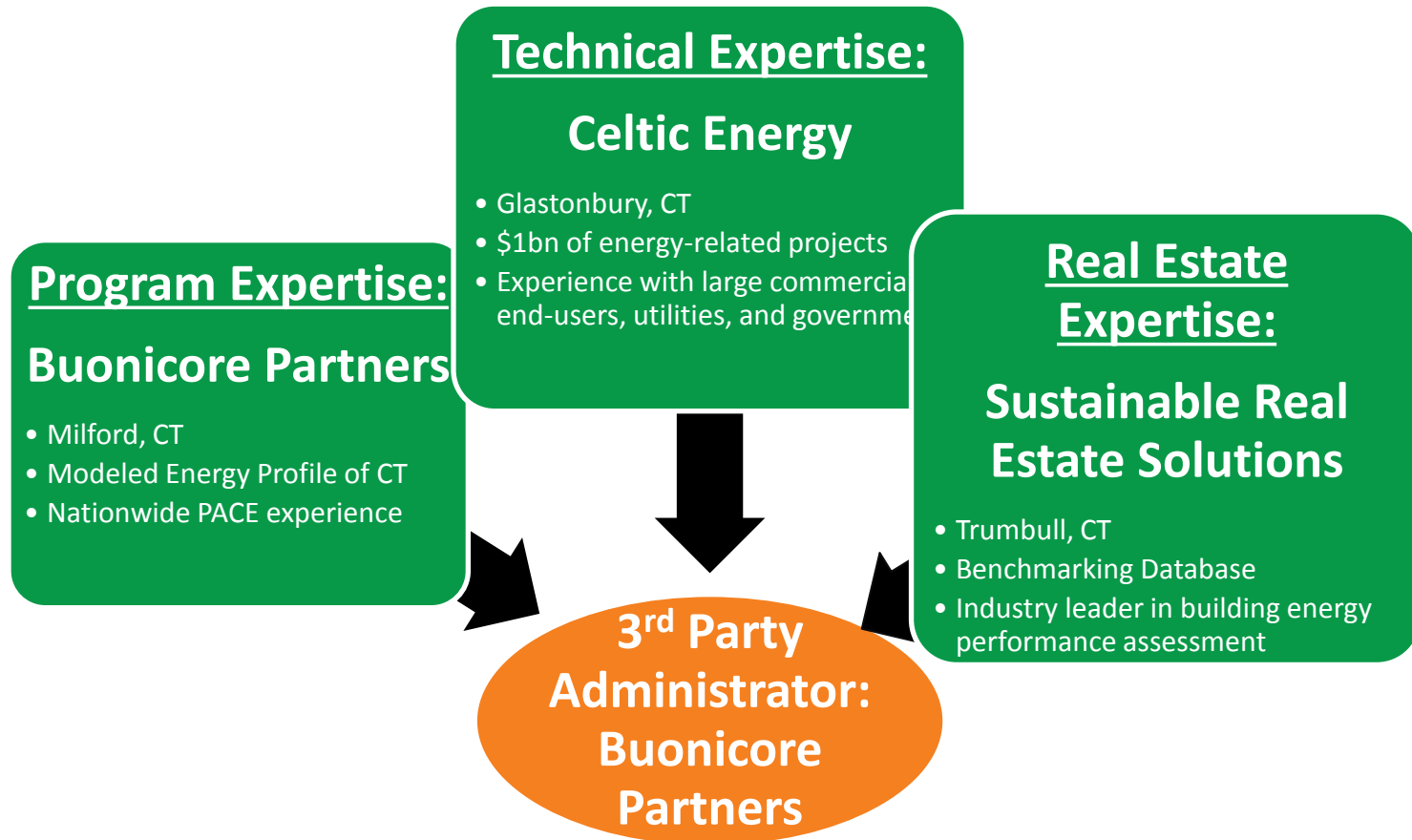
Are there any outstanding tax liens or notices of default? Yes No

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C-PACE Partners do Technical Underwriting



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 ... *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

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.



Renew Energy Partners

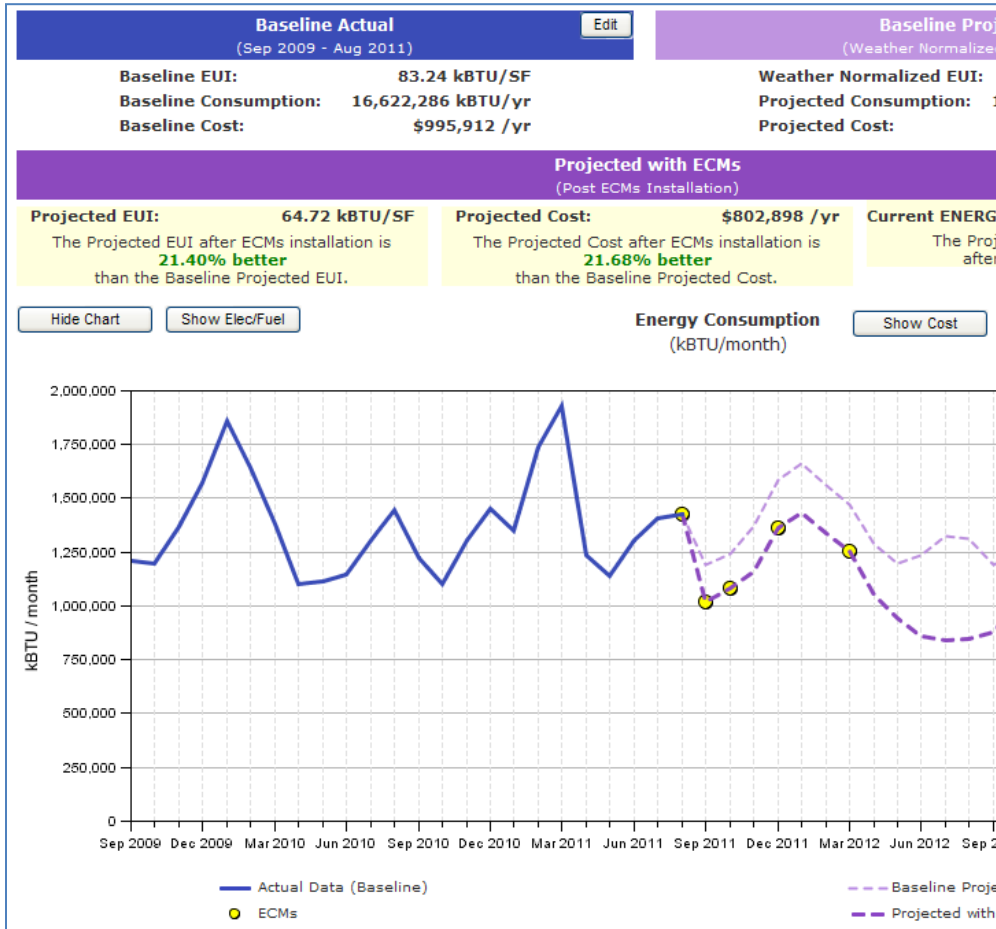
A Smart Approach to Making Energy Efficient Upgrades



Brookfield

structured finance ASSOCIATES, LLC

M&V: Data Management Platform



	Projected
Costs and Savings:	
Estimated Required Investment (unleveraged):	\$1,992,976
Estimated Annual Savings:	\$258,563
Projected: \$21,547 avg. / month	
Return on Investment (ROI):	13.0%
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):	\$0
Amount Financed:	\$1,992,976
Estimated Annual Debt Service:	\$195,411
180 months at 5.5% interest	\$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):	N/A
Net Present Value (unleveraged NPV):	\$470,296
Net Present Value (leveraged NPV):	\$790,653
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



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

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- 3. Third party review of technical and financial details

The C-PACE Process

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- 4. C-PACE alerts municipality; lien is placed on property

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- 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



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- 8. Municipality remits PACE assessment to CEFIA

cpace



- 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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smart energy choices

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