

Property Assessed Clean Energy Financing for New Hampshire's Commercial Buildings

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Who Are We?



RESILIENT BUILDINGS

— GROUP —

Superior energy performance

- Non-Profit organization
- Reduce energy use in buildings
- Public policy and program design
- Founded in 1995
- For-profit company, majority owned by The Jordan Institute
- Scale-up number of energy-efficient buildings
- Expand available EE services - projects in the field including energy-centric construction management

2013
Strategic
Plan

2014 Policy and
Program Design

New Hampshire 
C-PACE
FINANCING ENERGY EFFICIENCY

New Hampshire's Commercial Buildings

- 37,031 Commercial buildings*
- 355 trillion Btus annually - 17.6% of NH's energy use**
- Energy Costs – volatile – impact to bottom line
- Building Codes and Compliance – not robust
- Deferred maintenance a huge issue
- Changing expectations and uses of buildings
- Paucity of streamlined support and standards
- Variability of workmanship

*US Census 2011 data; ** Energy Information Administration 2014

The Big Motivators for Energy Efficiency

Reduce Operational Costs

1. Energy Costs
2. Reduce Maintenance Costs
3. Maintain Warranties



Other Motivators

4. Yankee frugality
5. Reduce GHG emissions
6. Health – asthma, cancers, allergies
7. National security
8. Local economic development
 - recirculate \$\$\$ and JOBS!
9. Making other building upgrades
10. Improve comfort



More Motivators

Improve the resiliency of buildings

11. Power outages: buildings stay warmer; pipes less likely to freeze
12. Improve indoor air quality
13. Increase occupancy of buildings
14. Increase the value of buildings
15. Healthier tax base
16. Improved employment numbers



Energy-related Problems in our Commercial Buildings

- **Costs** - Aging buildings were built for different performance standards: shelter, aesthetics, comfort, convention. Energy use/cost was not a priority. Now it is.
- **Comfort**
- **Occupancy rates**
- **Deferred maintenance**
- **End-of-life systems and equipment**
- **Split incentives between owner and tenant**



Fixing buildings is expensive and requires trained professionals, analysis, and a comprehensive approach.

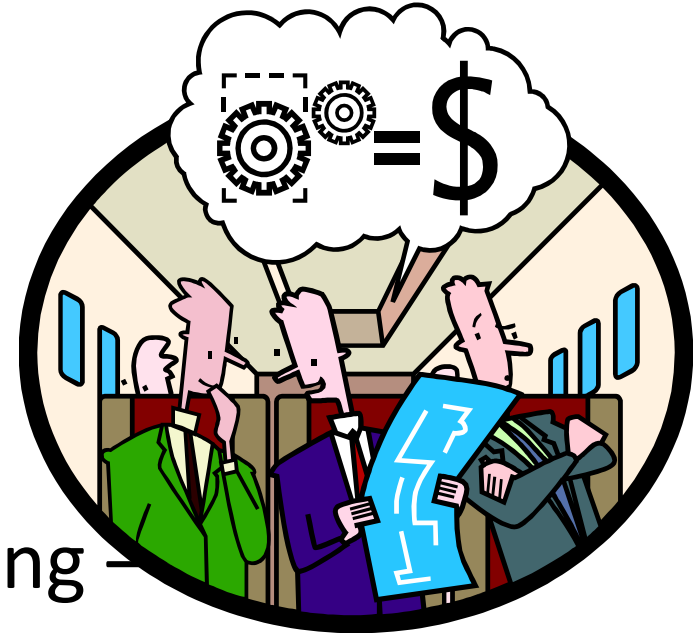
Challenges to make energy upgrades

- Money
- Timing
- Other priorities
- Trust of the market place
- Paucity of public money
- Standard financing terms
- Often not valued by real estate or appraisal professionals
- Split incentives between owners and tenants



Building Owners Need Advocacy

- Information – where to start
- Competing priorities – core business or EE project?
- Who to trust? Uncle Jim? Salesman?
- Energy audit and benchmarking – how bad is the building?
- Where to access funding?
- Does the project actually perform the way it was designed?



Challenges with conventional EE financing

- Loan Terms are short, ~5-7 years
- Hard for comprehensive projects to be cash positive
- Often 15-20% down payment required
- Loan remains on balance sheet
- Accelerated payoff when flipped
- No vetting of project required
- No Monitoring & Verification post project required
- Assessment/Appraisal doesn't always value EE/RE
- Reinforces split incentives between owners and tenants



A Solution: C-PACE

- Voluntary assessment / additional charge - on property tax bill
- No up-front project cost /energy projects are paid in regular installments
- Benefits realized immediately and over the course of the assessment
- Repayment obligation transfers automatically to the next owner if the property is sold. “You pay for the energy efficiency that you use”.
- Similar to sewer tax assessment, capital provided under C-PACE is secured by a lien on the property



“Old Way” vs “New Way” 5-Year Cash Flow

	Old Way: Bank Loan	New Way: C-PACE Lien
Down payment amount	\$52,500 (15%)	\$0.00
Loan amount	\$297,500	\$350,000
Loan term	5 years	20 years
Interest rate	5.00%	6.00%
<u>5-Year Net Cash Flow</u>		
Annual debt service	\$67,370	\$30,090
Annual energy savings	\$36,000	\$36,000
Net annual cash flow	(\$31,370)	\$5,910
Cash flow over 5 years*	(\$156,852)	\$29,549
Down payment cash flow	(\$52,500)	\$0.00
5-Year Net Cash Flow	(\$209,352)	\$29,549

* Assumes no utility cost escalation or performance degradation in order to simplify the case study.

Enabling and voluntary



- Municipality must adopt C-PACE program
- Negotiated between building owner, lender, and municipality
- Checks and balances
- Low-interest capital can be raised from the private sector without government financing
- Reduced risk to municipality/taxpayers

Benefits of C-PACE

- Reduced operating costs due to increased efficiency
- Improved asset value from new equipment
- Better indoor air quality and comfort for occupants
- C-PACE assessments may qualify as an operating expense, allowing building owners to finance improvements without incurring added debt - preserves capital and credit lines for core business investments
- C-PACE assessment payments, as well as energy savings, can be passed along to tenants
- Tax obligation attached to the property and transfers upon sale to the new owner.
- Unlike other lending options, payments do not accelerate in case of default.

Societal Benefits of C-PACE

- Reduce energy use – in aggregate
- Reduce greenhouse gas emissions
- Occupied buildings provide more of a tax base
- Healthier tax base = less tax paid per capita across the community
- Occupied buildings = healthier employment rates
- Work force and stable project flow
- Efficient, resilient buildings better withstand weather events and energy spikes

C-PACE funding size

- For privately financed projects – no \$\$\$ cap
- For projects financed through municipalities (i.e. bonding) – project cap of 35% of the assessed value of the building + property + existing mortgage/s, whichever is MORE.
- Minimum project size – to be determined programmatically
- Not all projects will fit this model

Nuances of C-PACE

- C-PACE participants must negotiate lien position with other existing mortgage holders prior to committing a new lien on the property.
- C-PACE assessments are only paid by participating owners, and only for their own projects, unlike general infrastructure investments such as sewer projects.
- Not for municipal, government, or other public buildings
- Not for residential, <5 units

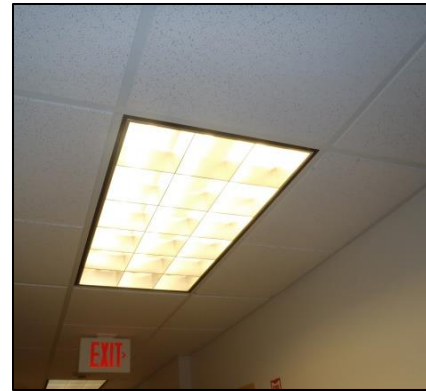
C-PACE Projects Can Include:

Comprehensive projects or individual energy measures

- Airsealing and Insulation - Walls, basements, crawlspaces, attics, roofs, piping, ducts
- Heating, Ventilation, Air-conditioning Systems
- Biomass Heat — pellets or chips
- Ground-Source (aka geothermal) and Air-Source Heat Pumps
- Controls and heat distribution
- Lighting
- Solar – electric, hot water, hot air
- Combined heat and power

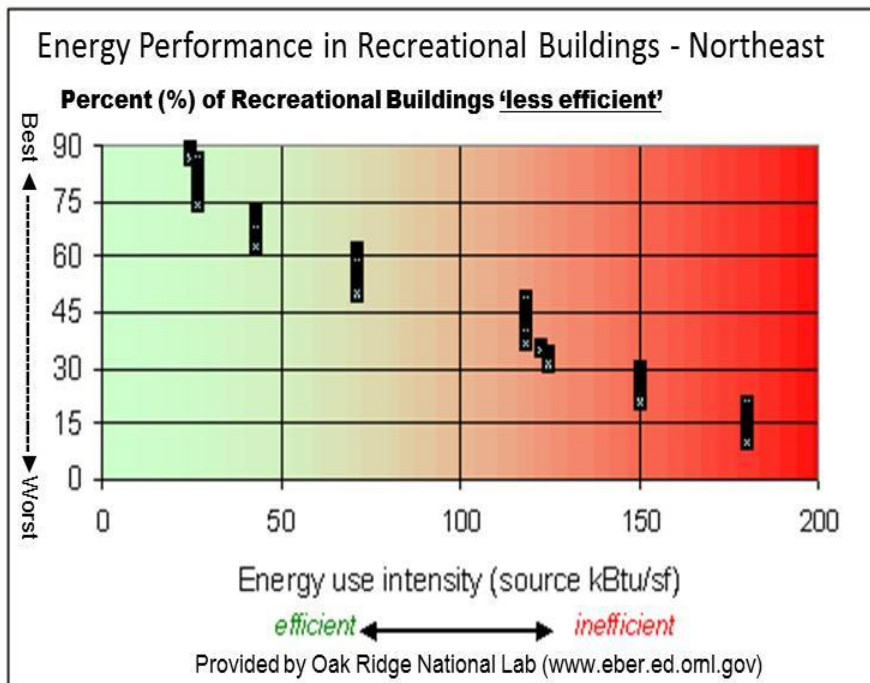
C-PACE Building Types Can Include:

- Office buildings
- Retail – grocery stores, malls
- Big Box or Mom & Pop stores
- Mixed Use buildings
- Hotels & convention centers
- Apartment buildings (5+ Units)
- Manufacturing facilities
- Small retail & big box stores
- Heated warehouses
- Historic buildings
- Health clubs & athletic facilities
- Agricultural buildings
- Restaurants
- And more.



Energy project vetting:

- Benchmarking, energy audits, and evaluations are used to ensure that projects make financial sense and are appropriate for the building



Some buildings in NH are so inefficient they are "off the chart"



Other enticing features:

- 100% financing requires no up-front investment
- Long-term financing allows for stable planning
- No loan payoff upon sale - C-PACE assessments (and energy savings) remain with the property
- Assessment costs and savings can be shared with occupants
- C-PACE may be treated as off balance sheet, non-recourse, non-accelerating financing



C-PACE Elsewhere – as reported 4/21/14 by PACENow.org

PACE Programs:

- 25 active programs/platforms ready to fund projects
- 19 PACE programs/platforms have funded projects
- 11 programs and 3 platforms in development

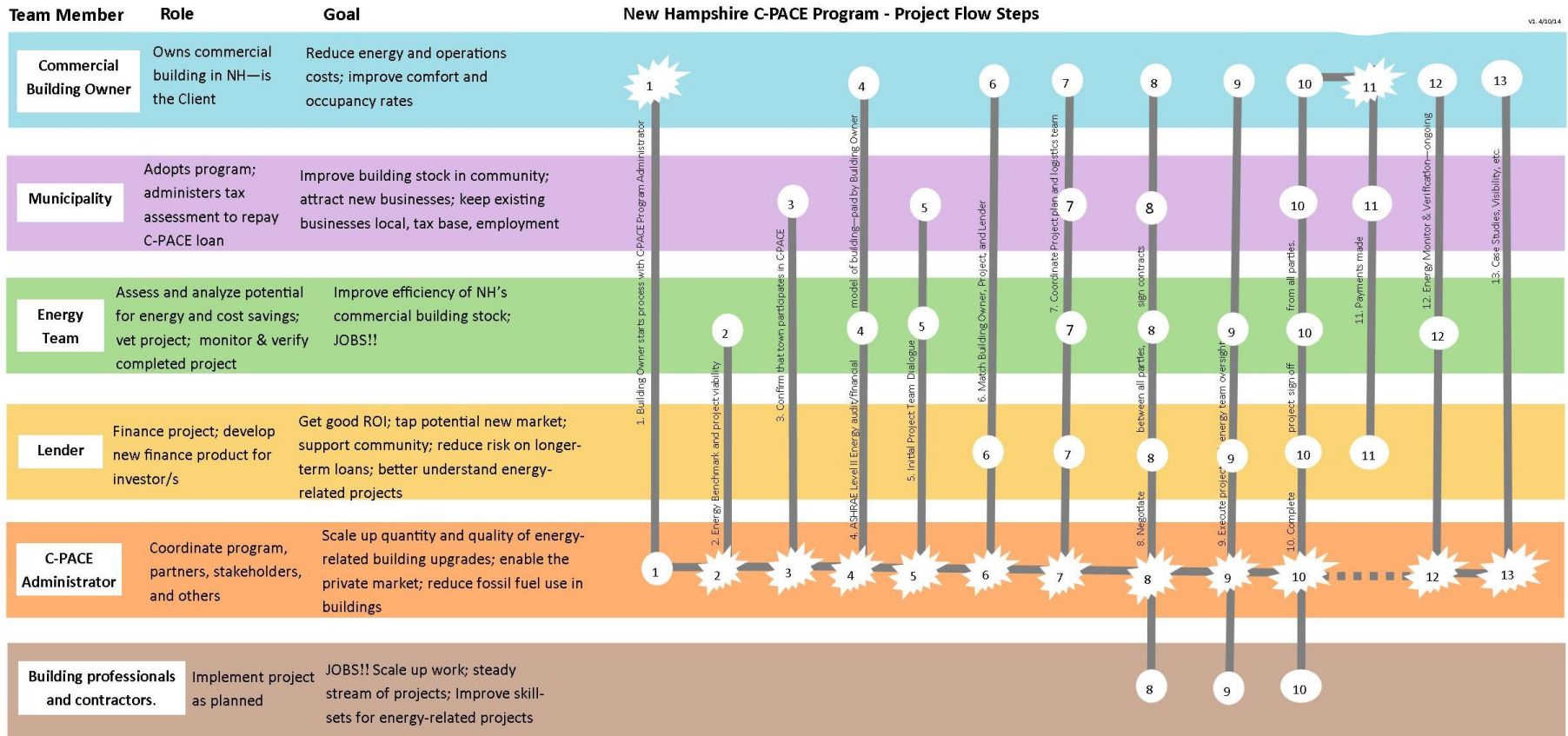
National Landscape:

- 415 municipalities in PACE enabled districts
- 8 states and DC with funded projects
- 9 states and DC with active PACE programs
- 12 states with programs/platforms in development

Financing Activity Snapshot:

- Over 218 commercial PACE projects funded
- Nearly \$72 million in funded projects*
- More than \$250 million in PACE project applications

How C-PACE Works



VI.450914

= Catalyst of step in project

= Team Member in step of project

NH C-PACE Enabling Legislation

- In **2010**, HB1554 signed into law, enabling PACE
- FHA had concerns re lien position; PACE came to a halt
- Other obstacles to creating effective tool

HB532

- Focuses only on commercial buildings
- Addresses lien position
- Allows municipalities to designate another entity to coordinate efforts
- Further clarifies that financing via private individuals or institutions is allowable
- Eliminates \$60K cap
 - No cap for projects privately financed
 - Projects funded through municipal bond, etc., have a cap of 35% of the value of the building and property and existing mortgages or \$1M, whichever is MORE

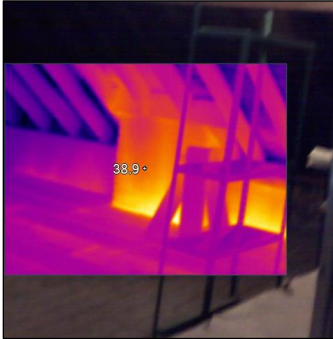


C-PACE Enabling Legislation - status



- HB532 cleared House Municipal & County Government Committee and House, 1/30/14
- HB532 passed 5-0 out of Senate Energy & Natural Resources, 5/7/14
- Senate floor vote 5/15/14
- Passed out of Committee of Conference on 5/30/14
- Committee of Conference Report Approved by Senate & House on 6/4/14
- Awaits Governor Hassan's signature!

C-PACE Next Steps



- C-PACE Advisory Council
- Fundraising to develop program
- Adopt standards and protocols
- Work with interested parties:
 - Lenders
 - Municipalities
 - Businesses
 - Building Professionals
 - Energy Teams
 - Other interested parties
- Launch a program!



Thank you!

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