



**VERMONT ENERGY**  
INVESTMENT CORPORATION

# Clean Energy Assessment Districts – Property Assessed Clean Energy (PACE) in Vermont

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## How does PACE work?

- Voluntary mechanism allowing individuals to opt in to a special assessment district created by their municipality
- Eligible energy efficiency and / or renewable energy improvements are funded by taxable municipal bonds or other municipal debt
- Repayment period up to 20 years—may not exceed projected life of improvements
- Special assessment fees transfer to the new owner when the property is sold, or assessment obligation can be paid in full at time of transfer

## Why do we need PACE?

- For 150+ energy finance programs, participation has been  $< 0.5\%$
- Energy financing programs mostly serve those who least need them
- Short-term consumer financing (less than 7 years) is not effective unless there are substantial subsidies
- Positive cash flow is key
  - It reduces the risk perceived by lenders
  - It supports loans to those who would be judged unable to meet debt obligations without promised savings

## Vermont's program—why “PACE”?

- The Vermont Energy Act of 2009 (Act 45) authorized the creation of “Clean Energy Assessment Districts” (CEADs)
- As this concept has gained popularity nationally, the structure has come to be generally referred to as PACE, or “Property Assessed Clean Energy”

## History of PACE programs nationally

- Berkeley, CA – Solar PV-only pilot, 38 projects, \$1 mil
- Palm Desert, CA – 70% solar, 206 projects, \$7.5 mil
- Boulder County, CO – 393 projects, \$7.5 mil
- Babylon, NY – redefined existing district, 169 projects, \$1.2 mil
- 14 states are “PACE enabled”: CA, CO, IL, LA, MD, NV, NM, OH, OK, OR, TX, VT, VA, and WI

## Vermont PACE program parameters

- The cost of the project financed through PACE cannot exceed 15% of the assessed value of the property
- The loan-to-value ratio of any outstanding mortgages plus the amount of the PACE assessment cannot exceed 90% of the assessed property value
- Residential (1-4 units): the cost of the project financed through PACE cannot exceed \$30,000, or 15% of the assessed value of the property, whichever is less

## Vermont PACE program parameters by municipality

- Typically \$5,000 project minimum for participation
- Municipalities could
  - **specify more restrictive loan-to-value requirements**
  - **impose lower \$ maximums or required ownership period**
  - **require that work be done by certified professionals**
- Eligible measures could
  - **include or exclude specific renewables**
  - **allow only projects with positive cash flow**

# Structure of a PACE program



City or town  
provides  
capital



Repaid  
on tax  
bill



## CITY OR TOWN

- Creates special tax assessment district
- Develops an approval process
- Provides upfront capital (bonds or other)

## PROPERTY OWNER

- Identifies work & chooses contractor
- Applies for financing
- Repays financing over ~20 years

# Sources of funds



## FINANCIAL MARKET

- Bonding or other municipal debt

Financial market provides capital



Interest paid semiannually, principal at maturity



## CITY OR TOWN

- Collects assessments from participating property owners

## Process requirements

- Property owner notifies municipality of desire to opt in
- Municipality approves property owner
- Property owner has analysis performed to:
  - **quantify project costs and energy savings**
  - **quantify estimated carbon impacts**
  - **determine annual cash flow**
- Energy efficiency utility reviews and approves analysis
- Written agreement and analysis filed with the clerk of the municipality for recording in the land records

## Vermont—what happens next?

Each Vermont municipality must:

- decide whether it wants to place a resolution on ballot
- define its own program parameters, including eligibility of properties and improvements
- hold a public vote
- obtain financing, either through bonding or other municipal debt

## Benefits for Vermont property owners

- Overcomes a key financial hurdle for energy efficiency and renewable energy investments
- Incremental special assessment payments are low and fixed for up to 20 years, with no up-front cost
- No costs to property owners who do not participate
- Electricity and fuel bills are lower than they would be without the improvements

## Benefits to Vermont's cities and towns

- Can use PACE to become more self-reliant and energy efficient
- Contributes to meeting community sustainability, climate, and energy goals
- Increases the value and quality of the housing stock in the community
- Provides a valuable public service to the members of their community

## Benefits to Vermont's economy

- Could inject millions of dollars directly into the Vermont economy, to make lasting energy and building infrastructure improvements
- Provides a steady and growing demand for good-quality sustainable jobs that cannot be outsourced
- Decreased energy costs will increase disposable income of Vermonters, allowing money to be saved or spent on other essentials

## More information

- Vermont's Clean Energy Assessment Districts  
[www.veic.org/ResourceLibrary/PACE.cfm](http://www.veic.org/ResourceLibrary/PACE.cfm)
- White House Policy Framework for PACE Financing Programs  
[www.whitehouse.gov/assets/documents/PACE\\_Principles.pdf](http://www.whitehouse.gov/assets/documents/PACE_Principles.pdf)
- Other programs around the country  
[www.pacenow.org](http://www.pacenow.org)
- “Guide to Energy Efficiency & Renewable Energy Financing Districts for Local Governments”  
<http://rael.berkeley.edu/financing/resources>