



Property Assessed Clean Energy Programs

State and Local Solution Center

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The property assessed clean energy (PACE) model is an innovative mechanism for financing energy efficiency and renewable energy improvements on private property. PACE programs exist for:

- [Commercial properties](#) (commonly referred to as Commercial PACE or C-PACE)
- [Residential properties](#) (commonly referred to as Residential PACE or R-PACE).

Commercial and residential PACE programs share a common foundation. PACE programs allow a property owner to finance the up-front cost of energy or other eligible improvements on a property and then pay the costs back over time through a voluntary assessment. The unique characteristic of PACE assessments is that the assessment is attached to the property rather than an individual.

PACE financing for clean energy projects is generally based on an existing structure known as a "land-secured financing district," often referred to as an assessment district, a local improvement district, or other similar phrase. In a conventional assessment district, the local government issues bonds to fund projects with a public purpose such as streetlights, sewer systems, or underground utility lines.

The recent extension of this financing model to energy efficiency and renewable energy allows a property owner to implement improvements without a large up-front cash payment. Property owners that voluntarily choose to participate in a PACE program repay their improvement costs over a set time period—typically 10 to 20 years—through property assessments, which are secured by the property itself and paid as an addition to the owners' property tax bills. Nonpayment generally results in the same set of repercussions as the failure to pay any other portion of a property tax bill.

A PACE assessment is a debt of property, meaning the debt is tied to the property as opposed to the property owner(s). In turn, the repayment obligation may transfer with property ownership if the buyer agrees to assume the PACE obligation and the new first mortgage holder allows the PACE obligation to remain on the property. This can address a key disincentive to investing in energy improvements because many property owners are hesitant to make property improvements if they think they may not stay in the property long enough for the resulting savings to cover the upfront costs.

Advantages

- Allows for secure financing of comprehensive projects over a longer term, making more projects cash flow positive.
- Spreads repayment over many years, seldom requires an upfront payment, and removes the requirement that the debt be paid at sale or refinance.

- Can lead to low interest rates because of the high security of loan repayments attached to the property tax bill.
- Helps some property owners deduct payments from their income tax liability.
- Allows municipalities to encourage energy efficiency and renewable energy without putting general funds at risk.
- Taps into large sources of private capital.

Disadvantages

- Available only to property owners.
- Cannot finance portable items (screw-in light bulbs, standard refrigerators, etc.).
- Can require dedicated local government staff time.
- May require high legal and administrative setup obligations.
- Not appropriate for investments below \$2,500.
- Potential resistance by lenders/mortgage-holders whose claims to the property may be subordinated to the unpaid assessment amount should the property go into foreclosure.

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Commercial PACE

C-PACE programs exist in several states, regions, and local governments. Programs vary across several dimensions including the level of organization (statewide vs. local programs), financing structures, and eligible measures. More than 35 states plus the District of Columbia have C-PACE enabling legislation and more than \$800 million in projects have been financed.

Working Group

The [Commercial PACE Working Group](#) is a cohort of state and local governments working together to learn about, launch, and refine C-PACE financing programs. This DOE initiative will leverage technical assistance from leading C-PACE experts and market partners to:

- Develop tools and solutions to barriers facing state and local governments
- Convene and create peer exchanges to showcase public-sector leadership and effective public-private partnerships
- Provide information from leading technical experts.

The goal of these efforts is to stimulate **\$60 million** in C-PACE investments by 2022.

- Download the [C-PACE Working Group Technical Assistance Overview](#)
- To participate, download and submit the [C-PACE Working Group Expression of Interest Form](#) – The C-PACE Working Group will accept qualified Expressions of Interest from State and Local *Partners* on a rolling basis until further notice. New State and Local *Observers* and *Advisors*, as well as *Market Partners*, are encouraged to join the C-PACE Working Group at any time. For best results, download the form and open and complete in Adobe.

Resources

Lessons in Commercial PACE Leadership: The

Path from Legislation to Launch

Commercial PACE Working Group Year in Review (2018-2019)

C-PACE: A Fact Sheet for State and Local Governments

Commercial PACE Financing and the Special Assessment Process: Understanding Roles and Managing Risks for Local Governments

Residential PACE

Residential PACE allows homeowners to finance energy efficiency, renewable energy and other eligible improvements on their homes using private sources of capital. PACE programs are typically enabled through state legislation, and authorized at the local government level. Municipalities may directly administer residential PACE programs, or through public-private partnerships with one or more PACE providers.

As of 2019, over 200,000 homeowners have made \$5 billion in energy efficiency and other improvements to their homes through PACE financing. Typical home improvement projects include replacement of broken or failing heating and cooling systems and hot water heaters; air sealing and insulation; ENERGY STAR doors, windows, roofing; ENERGY STAR appliances; solar photovoltaic systems; and water conservation and resiliency measures (e.g., seismic retrofits and wind hazard protection). Residential PACE financing programs are currently available in the following states:

- California (10 active programs)

- Florida (4 active programs)
- Missouri (3 active programs).

Resources

Best Practice Guidelines for Residential PACE Financing Programs

Home Energy Score

Return of Residential PACE Webinar

Additional Resources

- [PACENation Resources](#)
- NASEO Publications: [Accelerating the Commercial PACE Market](#)
- NASEO Publications: [Residential Property Assessed Clean Energy \(R-PACE\): Key Considerations for State Energy Officials](#)

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