Commercial Property Assessed Clean Energy

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Property assessed clean energy (PACE) is a financing tool that allows property owners to finance the upfront cost for qualified energy, water, resilience, and public benefit projects with funding through a voluntary assessment on the property tax bill. **Commercial PACE (C-PACE)** programs are the most prevalent type of PACE policy and program in the United States and are the focus of this profile.

Green banks and third-party financiers typically provide the capital for PACE projects. Regardless of the financier, the local government typically acts as the payment collector and remitter[1]. Utility cost savings or revenue from renewable energy may help the owner cover the cost of the assessment, and a property lien secures the investment if there is a foreclosure. Like other assessments collected as property tax, in the event of foreclosure, any past due payments related to the PACE lien take priority over the mortgage and other loans. States and local governments develop the legal, regulatory, and procedural framework for PACE and work with specialty program administrators and finance providers to implement PACE programs, with utilities helping to advertise this financing method to their customers.

One of the main benefits of PACE for property owners is that it can be used to cover 100% of the upfront cost of an energy or resilience upgrade. The investments are then repaid over the useful life of the installed equipment. The longer payback period – and lower annual or semi-annual payments – can make upgrades more affordable for property owners. The assessment stays with the property in the event of a sale (assuming the buyer agrees to the transfer).[2] Therefore, if the property is sold, the buyer can assume the PACE payments and the benefits from the upgrades. If the buyer does not agree to a transfer, the seller may have to pay off the outstanding amount of the PACE assessment. Because property taxes have high rates of payment, there may be lower interest rates, longer loan terms, or a combination of the two. PACE interest rates are usually between 5% and 10% of the total funded amount and allow for flexible payback terms of up to 20 years.[3]

C-PACE programs may provide financing for commercial projects such as multifamily residential properties, commercial properties, industrial buildings, or nonprofit properties. Programs may vary based on the governmental sponsor (statewide vs. local programs), financing structures, and eligible measures.[4] As of 2022, more than 38 states plus the District of Columbia have C-PACE-enabling legislation and 30 states plus the District of Columbia have active programs.[5] There has been more than $4 billion in investment in over 2,900 commercial projects as of November 2022.[6]

Some concerns or barriers that local governments have faced regarding C-PACE programs include uncertainty about the likelihood of property tax foreclosures and uncertainty about the staff labor commitment for program administration. A resource by the Lawrence Berkeley National Laboratory (LBNL) provides information for local governments on these barriers.[7] For example, they find that defaults and tax foreclosures have happened very rarely to date, but that delinquencies (i.e., late payments) do occur. The LBNL resource also indicates that the uncertainty regarding the amount of staff labor required to evaluate and analyze project proposals can be another barrier to the implementation of C-PACE programs.[8]

Only a few states have **Residential PACE (R-PACE)** as of 2022, including California, Florida, Missouri, and Ohio. Most R-PACE programs, which generally cover single-family homes, are administered by non-governmental, third parties that provide private capital to fund the homeowners' energy and resilience improvements.[9] State and local governments may also administer a variety of assessment-based financing programs that are very similar to R-PACE programs, although the eligible improvements are usually limited to drinking water and septic systems.[10] Consumer advocates have expressed a range of concerns over R-PACE including high tax bills and the risk of foreclosure, issues with refinancing or selling, and issues with deceptive or high-pressure sales tactics by contractors.[11]

C-PACE financing generally shares the following key features:

- They provide upfront funding for clean energy projects for building property owners generally in the commercial, multifamily, and nonprofit sectors.
- They use property liens to allow consumers to repay the funding on their property taxes over the long term.
- They permit transferability of the assessment upon sale of the property.

C-PACE financing may be administered by the following entities:

- **State governments** must adopt enabling legislation permitting PACE programs within the state to authorize PACE programs at the local level. In addition, states may administer a statewide PACE financing program (e.g., MinnPACE).[12]
- **Local governments** must adopt legislation authorizing legislation to create a local PACE program following the adoption of statewide enabling legislation. Local governments may also administer their own PACE programs, but they often act as the payment collector, as the repayments are made through property taxes.
- **Third-party administrators** may engage in a contract with a government to manage the program. In these instances, the administrator facilitates the issuance and collection of funds.

Examples from the Field

Milwaukee's C-PACE Financing Program

- The program helps commercial property owners finance energy efficiency, water efficiency, and renewable energy upgrades to their buildings.
- The Milwaukee C-PACE program leverages private capital to provide upfront funding for the improvements and collects payments through special charges added to property tax bills, which allows funding to be paid back over time.

Minnesota PACE (MinnPACE) Program

- The Minnesota C-PACE program funds energy improvements on commercial buildings, multifamily properties with five or more units, and nonprofit buildings. The Saint Paul Port Authority is the primary provider of C-PACE financing in Minnesota
- Program funds can be used to purchase eligible equipment, which includes renewable energy systems (e.g., solar, wind, geothermal), as well as energy efficiency upgrades to heating, ventilation, and air conditioning (HVAC) systems,

lighting, building envelopes, and energy management systems
- The MinnPACE program provides payback periods up to 20 years at fixed interest rates. Financing is limited to 20% of the assessed property value.

CT Green Bank C-PACE Program

- The Connecticut (CT) Green Bank administers a C-PACE program that offers 100% financing for energy improvements for non-residential buildings.
- Funds can be used for projects such as improved lighting, heating and cooling, insulation, adding solar panels, and other upgrades.
- The CT Green Bank offers repayment periods up to 25 years.

Program Characteristics

Here are the typical characteristics of PACE financing.

Program types	Commercial PACE (C-PACE)
Target sectors	Commercial; Nonprofit; Residential: Multifamily; Industrial
Potential funding sources	Private lenders; municipal bonds; public funds
Security required of borrower	Senior lien on property
Repayment mechanism	Property tax assessment
Funding needs	Typically, sponsors must provide a moderate level of funding to make the program successful for as many participants as possible.
Enabling legislation requirement	Required

Reaching Underserved Communities and Addressing Consumer Protections

When developing a financing program, considering the needs of underserved communities early in the process can help decisionmakers create a comprehensive financing program and incorporate consumer protections. Decisionmakers can evaluate how and to what extent marginalized communities and considerations of equity have been included in the policymaking process for developing a financing program by considering the following questions:[13]

- Have marginalized communities participated meaningfully in the policymaking process?
- Does the policy help address the impacts of inequality or inequity, or does it widen existing disparities?
- How will the policy increase or decrease economic, social, and health benefits for marginalized communities?
- Does the policy make energy more accessible and affordable to marginalized communities?

C-PACE can provide financing for improving the energy efficiency of multifamily housing, which can help low- and moderate-income (LMI) households, particularly those in affordable housing. Uptake of C-PACE has been slow for multifamily buildings, with most of the C-PACE funding going toward offices and other non-multifamily commercial buildings.[14] State legislators and C-PACE administrators can employ best practices to increase the use of C-PACE in affordable housing projects such as focusing on housing projects without federal subsidies, which will reduce barriers to funding. State legislators can also consider providing C-PACE financing through the Rental Assistance Demonstration pilot, where public housing is converted to privately owned assisted living units.[15]

This profile does not focus on R-PACE, but some states have adopted more comprehensive consumer protections for R-PACE programs. In California, a coalition of stakeholders reached consensus on a consumer protection and regulatory framework for R-PACE[16,17,18,19] and recent Missouri legislation also seeks to strengthen consumer protections.[20,21,22,23] The mortgage banking industry has generally opposed R-PACE because of its senior-lien status. For example, the Federal Housing Administration (FHA) does not provide FHA-insured mortgages to homes with PACE liens.[24,25]

Many of the financing programs covered in this *Clean Energy Financing Toolkit for Decisionmakers* resource can provide specific benefits to underserved communities by increasing access to clean energy (e.g., lower energy bills, upgraded equipment, improved comfort). However, financing programs that put additional debt on customers could place LMI households at an increased risk if adequate consumer protections are not in place. For example, customers could face penalties for failing to repay program funds, including having their power shut off, adverse credit scores, and in some instances losing their homes. Decisionmakers can implement consumer protection frameworks to address these concerns, including increasing awareness, analyzing the applicant's ability to pay, and requiring disclosure of financing costs. Considerations for consumer protections are specific to each program

Roles and Responsibilities

State and local governments can authorize, fund, implement, and operate C-PACE financing programs. State and local governments may be responsible for identifying a program administrator if the government is not supervising daily operations. In addition, in some instances local governments can play a key role as the payment collector for PACE financing, as funding is repaid through the customer's property taxes.[26] Utilities do not play a significant role in C-PACE financing. Other third parties may provide program funding or could serve as C-PACE administrators

Getting Started

State and local governments should consider these steps and best practices during the design, approval, and management of a C-PACE program:

- Determine legal requirements for establishing the program, including resolutions, ordinances, municipal bonding, public approval, and legislation.
- Determine the target sectors (e.g., commercial, nonprofit, multifamily, industrial).
- Create an action plan with organizational goals, priorities, and constraints for implementing a C-PACE program.
- Engage with key stakeholders to inform the development of the C-PACE program.
- Develop an initial budget for program administration.
- Develop consumer protection policies, regulations, and resources.
- Establish strong program administration and oversight to ensure participants and the community trust the program.
- Identify potential partners for financing, administration, and program management. Develop a trusted network of project financiers and installation providers to ensure they offer funds and services consistently and according to program rules.
- Weigh the program's potential economic and environmental benefits against its costs. Ensure the program is evaluated every few years.

Learn More

- Learn more about C-PACE from the Department of Energy.

- Read more about C-PACE from the National Association of State Energy Officials.

References and Footnotes

[1] ACEEE. 2020. "Property Assessed Clean Energy (PACE)."

[2] U.S. Department of Energy. n.d. "Property Assessed Clean Energy Programs."

[3] ACEEE. 2020. "Property Assessed Clean Energy (PACE)."

[4] DOE. n.d. C-PACE.

[5] PACE Nation. 2022. PACE Programs.

[6] PACE Nation. 2022. PACE Market Data.

[7] LBNL. 2019. Commercial PACE Financing and the Special Assessment Process: Understanding Roles and Managing Risks for Local Governments.

[8] LBNL. 2019. Commercial PACE Financing and the Special Assessment Process: Understanding Roles and Managing Risks for Local Governments.

[9] ACEEE. 2020. "Property Assessed Clean Energy (PACE)."

[10] Sonoma County Energy Independence Program. 2022. Eligible Improvements.

[11] NASEAO. 2018. Residential Property Assessed Clean Energy (R-PACE): Key Considerations for State Energy Officials.

[12] MinnPACE. n.d. Minnesota PACE Financing.

[13] Governments, agencies, and nonprofits have developed equity lenses and frameworks to ensure that issues of race and equity are incorporated throughout policy-making processes. These questions draw from the following frameworks: Institute for Energy Justice, "Section 2 – Energy Justice Scorecard"; City of Seattle, "Racial Equity Toolkit"; and Higher Education Coordinating Commission, "Oregon Equity Lens."

[14] Energy Efficiency for All. 2018. Commercial PACE for Affordable Multifamily Housing.

[15] NRDC. 2018. Can C-PACE be Effective Financing for Multifamily Housing?

[16] California Legislative Information. 2016. AB-2693 Financing requirements: property improvements.

[17] California Legislative Information. 2008. AB-1284 California Financing Law: Property Assessed Clean Energy Program: program administrators.

[18] California Legislative Information. 2017. SB-242 Property Assessed Clean Energy program: program administrator.

[19] Assembly Bill 2693 prohibits participating in the R-PACE program if total amount of annual property taxes would exceed 5% of the property value, provides a three-day window to cancel the contract without penalty, requires the disclosure of costs in a disaggregated manner. Assembly Bill 1284 requires that the program administrator make a good faith effort to determine the ability-to-repay, promotes contractor oversight through increased compliance, and background checks. Senate Bill 242 requires specific documents to be provided to the borrower, including total costs of the lien and the key terms of the financing.

[20] Gerber, C. 2021. Missouri House considers PACE reforms

[21] Missouri House of Representatives. HB 814

[22] Missouri House of Representatives. HB 697

[23] House Bill 814 would require an appraisal for PACE improvements. PACE financing would not be permitted to exceed 90% of the appraised value of the property plus the value of the PACE-financed improvements. House Bill 697 would require the Division of Finance to conduct examinations of local clean energy development boards every two years. It would also require the disclosure of certain project information to property owners.

[24] In 2017, the Federal Housing Administration (FHA), an office within the U.S. Department of Housing and Urban Development (HUD), announced that R-PACE places undue stress on the Mutual Mortgage Insurance Fund and ended its practice of providing FHA-insured mortgages to homes with PACE liens.

[25] U.S. Department of Housing and Urban Development. 2017. Buckley LLp. 2017. "Mortgage Letter 2017-18: Property Assessed Clean Energy (PACE)."

[26] Note that while local governments can serve as the administrator and play a key role in collecting repayments, there are emerging variations where payments can be made directly to third-party financiers. Find out more from this resource from the Lawrence Berkeley National Laboratory.

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