Commercial PACE Financing for Resiliency

BETTER BUILDINGS CHALLENGE

Commercial property assessed clean energy (CPACE) financing can be used to fund resiliency improvements that make buildings more resistant to natural disasters and other threats. Many of these projects have an energy component (e.g. energy efficiency, distributed generation, microgrid), but others do not (e.g. seismic retrofits, wind hardening). Current market trends point toward growing use of CPACE financing for resiliency, with the recent completion of several flagship projects including a $40 million seismic retrofit in California and the first-ever use of CPACE financing for a microgrid in Connecticut. At the same time, CPACE policies and programs are becoming more widespread across the United States. As of March 2018, 33 states plus the District of Columbia have passed legislation enabling PACE, and 20 states plus D.C. have active CPACE programs.

This fact sheet provides an overview for building owners, operators, and occupants who may want to take advantage of CPACE financing to improve resiliency in their facilities. It is part of the Better Buildings CPACE for Resiliency Toolkit.

The Challenges of Resiliency

In 2017, the U.S. experienced an historic number of weather and climate disasters. These events included droughts, floods, freezes, severe storms, tropical cyclones, and wildfires. According to the National Oceanic and Atmospheric Association, the cumulative cost of these disasters exceeded $300 billion, setting a new national record.

Impacts from weather, climate, and other disasters can often be mitigated by improving building resiliency. Resiliency is defined as "the ability to resist being affected by an event…or to return to an acceptable level of performance in an acceptable period of time after being affected by an event," such as a deliberate attack or naturally occurring threats like hurricanes, floods, droughts, earthquakes, fires, and other disasters.

In the case of buildings, resiliency projects typically take the form of retrofits that improve the envelope, structure, or systems of a building. Because energy is one of the more vulnerable aspects of building operation, these improvements often aim to make building energy systems more robust, independent, and/or efficient.

COMMON RESILIENCY PROJECTS

Energy Supply
- Renewable energy
- Combined heat and power (CHP)
- Battery storage
- Backup generation
- Microgrid
- Electric vehicle charging

Resource Conservation
- Efficient lighting and HVAC
- Water efficiency measures
- Building envelope improvements

Structure Hardening
- Seismic retrofits
- Wind-resistant roofs and windows
- Flood mitigation

Resiliency projects can be divided into three categories, shown in the box. **Energy Supply** projects help ensure that critical building systems can continue operating during a grid or fuel supply interruption. **Resource Conservation** projects reduce the energy and water demands of a building, increasing the amount of time it can operate on backup power and reducing the impact of disruptions. **Structure Hardening** projects mitigate property damage, injury, and system outages in the event of disaster.

Resiliency is a critical aspect of risk management that building owners, operators, and occupants need to consider—particularly those located in areas prone to natural disasters. However, resiliency improvements can be difficult to fund and implement. They often come with a high upfront capital cost. While some projects, like energy efficiency retrofits, generate immediate financial returns in the form of energy savings or improved building performance, many do not. Therefore, the benefits of these projects may not be reflected in current cashflows, even if they do provide long-term value by preventing disaster losses and increasing occupant security. Commercial PACE financing can help overcome this challenge by providing long-term financing attached to the property.

Advantages and Limitations of CPACE

Commercial PACE is a financing structure in which building owners borrow money for energy efficiency, renewable energy, or other resiliency projects and make repayments via an assessment on their property tax bill. Commercial PACE may be funded by private investors or government programs, but it is only available in jurisdictions that have passed the required legislation. States like California and Colorado allow the use of CPACE for new construction projects, providing owners and developers a cost-effective way to incorporate energy and resiliency measures from a building's inception. For a complete overview of CPACE, see the Better Buildings CPACE Fact Sheet.

Commercial PACE has several advantages that can make it attractive for building resiliency improvements:

- **Commercial PACE can provide 100% financing for hard and soft costs of qualified resiliency projects.**

  CPACE can be used to cover the cost of a qualified project including, but not limited to: products, materials, professional installation, analysis, design, drafting, engineering, permitting, inspections, and fees. Unlike traditional equipment financing, no deposits are required and the building owners can retain their own capital to put towards their core business.

- **Commercial PACE can often provide long financing terms that improve the cashflow impact for building owners.**

  This is because repaying the financing as a property tax assessment gives added security to lenders, allowing them to offer better terms. Some resiliency projects (particularly those that do not have an energy saving component) generate little or no direct savings, so lower interest rates spread over a long period can smooth out the cashflow impact for building owners. In addition, many resiliency projects involve retrofits to systems or structures that are integral to the operation of a building (e.g. seismic improvements to a foundation) and therefore cannot serve as collateral. The added security of CPACE financing can reduce the lender's risk in the absence of meaningful collateral, resulting in better terms.

- **Commercial PACE financing is connected to the building, not to the individual borrower.**

  This means that the financing arrangement will stay with the property if the owner sells the building. Under normal circumstances, building owners may be disincentivized from investing in the long-term resiliency of their properties, given uncertainty of ownership holding periods. Commercial PACE financing can help overcome this challenge by keeping both the equipment and the financing with the property. In addition, building owners who are having trouble selling their properties in areas prone to disaster may find CPACE-financed resiliency improvements can help attract buyers.

When considering commercial PACE financing, there are a few limitations to keep in mind:

- **The project must be in a county or municipality that has approved CPACE programs within a state that has passed CPACE-enabling legislation.**

  This can make it challenging to use for portfolio-wide resiliency initiatives that span multiple states or regions. Each jurisdiction where CPACE is available has a list of eligible project types.

- **Some CPACE programs have a required level of energy savings that must be realized through the project for it to qualify.**

  This is commonly referred to as the savings to investment ratio (SIR). The SIR requirements can vary among CPACE programs, but generally the ratio must be above one, meaning that savings generated from the project over the term of the CPACE loan exceed the cumulative tax assessment. In some cases, this can make resiliency improvements that do not yield sufficient energy savings ineligible. In other cases, there are exceptions to required SIR for certain types of resiliency measures (e.g. seismic retrofits in California), or SIR can be improved by bundling with additional qualified energy measures. Each program has different rules and requirements that must be understood before moving forward.

Market and Policy Trends

Commercial PACE financing is one of the fastest-growing financing structures in the country. First appearing in 2009, CPACE's popularity increased rapidly, with incumbent banks and financiers as well as new companies entering the market to meet demand. According to PACENation, 33 states and the District of Columbia have passed laws enabling CPACE programs as of March 2018. However, only 20 states plus D.C. have active CPACE programs in operation. Approximately $583 million in CPACE financing has been provided to over 1,230 projects, with more than half of that total occurring since the beginning of 2015. The majority of completed projects fell in the $75,000 - $750,000 size range, though smaller or larger projects are not uncommon. For the latest data, see PACENation's market data and PACE program overview.

Unfortunately, no comprehensive data is available on the size of the CPACE-for-resiliency market in particular, though anecdotal evidence suggests it is growing.

Case Studies

As part of the Better Buildings CPACE for Resiliency Toolkit, the Department of Energy has developed case studies highlighting three recent resiliency projects that took advantage of CPACE financing:

Microgrid Project in Mixed-Use Building
Financed by Greenworks Lending, this $1 million project in Hartford, CT, included energy efficiency, renewable energy, and microgrid improvements as part of broader renovations in a mixed-use housing and retail space. It was the first microgrid financed with CPACE and achieved energy savings of $316,927 in the first year. Read more.

Seton Medical Center Seismic Retrofit
Financed by CleanFund and Petros PACE Finance, this $40 million seismic and energy efficiency retrofit in Daly City, CA, is the largest in the history of CPACE financing. Due to California's mandate regarding seismic safety, this upgrade was not subject to SIR requirements. Read more.

Southern Oaks Rehab and Nursing Center Hurricane-Proofing
Financed by Hannon Armstrong, this $500,000 project in Pensacola, FL, included upgrades to the facility's windows and roof that will allow it to resist hurricane-force winds while improving energy performance. Read more.

Your Next Steps

Do you want to move forward with CPACE financing for resiliency measures in buildings that you own, operate, or occupy? Consider the following next steps:

1. Confirm that applicable CPACE programs are available in your area. Use this tool provided by PACENation to look up your state.
2. Speak with financing providers or connect with a contractor to move your project forward. You can find a list of PACE financiers who are Financial Allies in the Better Buildings Challenge on the Financing Navigator.
3. Learn more about CPACE by reviewing the rest of the CPACE for Resiliency toolkit or reading the CPACE fact sheet.