



PACE Financing for CHP (Property Assessed Clean Energy)

Program Description

Property assessed clean energy financing, known more commonly as PACE financing, is a method of funding energy efficiency and renewable energy improvement projects at residential (r-PACE) and commercial (c-PACE) scales. PACE financing uses a property assessment to repay money borrowed for projects and is secured by a lien on the property, thereby attaching the debt to the property rather than the individual or institution. If the property is sold, the assessment and debt are transferrable with the property to the new owner, who can continue payments and benefit from the savings associated with the property improvement. Securing the loan against real property can also lead to low interest rates due to lower risk of default.

Combined heat and power (CHP) is an ideal technology for PACE financing because it can yield significant savings in a single project and typically has a long project life of 15–20 years. CHP can be an approved project type/technology in the enabling policy for PACE financing programs, which can be enacted at the state or local level. In programs that do not pre-approve CHP, it may still be approved as an energy efficiency measure, since the technology can aid in improving facility efficiency and reducing emissions, which are often goals of PACE programs. To date, c-PACE-financed CHP projects have been limited, as the financing mechanism has flourished in the residential sector and has been slower to gain popularity in the commercial sector.

Program Development and Background

PACE financing derives its authority from state legislation enabling PACE programs to operate by setting up the legal designation for special property assessments and authorizing the financing mechanism. There are currently 36 states, plus the District of Columbia, that have passed PACE-enabling legislation, although the laws and specific programs vary greatly. Several states in the Southeast have active PACE programs:

- Florida passed enabling legislation for PACE in 2010. Over 60 local ordinances have helped establish PACE programs statewide and in localities such as Coral Gables, Orlando, Lee County, and Miami-Dade County.
- Georgia passed enabling legislation in 2016, enabling the City of Atlanta to create a PACE program funded by an initial round of \$500 million in bonds.
- Kentucky launched KY-PACE under state law in 2015, and communities such as Bowling Green and Lexington created local PACE programs as a result.



The Meridian YMCA in Connecticut uses a PACE-financed 60 kW CHP system that provides electricity and hot water.

PHOTO: MERIDIAN YMCA

Once approved at the state level, further work is required before a PACE program can become operational. State or local governments must be authorized to create special assessment districts where the assessments can be levied. The financial institution responsible for providing funding must also be authorized, regardless of whether the funding is supplied by the public government or a private entity. In most states, the local county or city must approve PACE financing to enable its use in the area. This means that while a state may have passed enabling legislation, local authorization is still

needed before PACE financing can be available. Some states (Colorado, Connecticut, Kentucky, Maryland, and Missouri) have centralized PACE programs that will assist local governments in the authorization, administrative, legal, financial, and other responsibilities of implementation.

Program Projects and Results

In 2014, Connecticut's C-PACE program supported CHP projects at YMCAs in Meriden and Milford. Each YMCA installed a 60 kW CHP system, financed by the Connecticut Green Bank, previously known as the Connecticut Clean Energy Finance and Investment Authority (CEFIA). Powered by reciprocating engines, these systems provide hot water for domestic use, space heating, and pool heating at the facilities. To date, these are the only two operational CHP facilities in the United States that have used C-PACE financing.

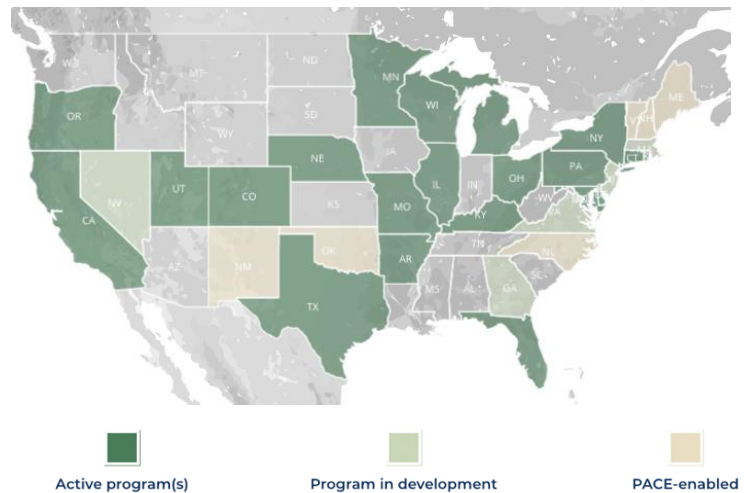
In 2017, the U.S. Department of Energy's (DOE's) Office of Energy Efficiency and Renewable Energy released a financing primer report for CHP, in which PACE financing was identified as one option to overcome economic barriers for the technology.* CHP financed with PACE has been discussed and presented by industry, PACE organizations, state governments, and federal departments, but qualifying CHP for PACE financing often requires working with a local PACE organization in a location where the technology is not pre-approved. However, this process should not present an unreasonable burden or prove to be a notable roadblock.

C-PACE has enabled the investment of \$1.1 billion at over 2,020 commercial projects, primarily energy efficiency and renewable energy investments, at a variety of markets and building types including hospitality, office, retail, industrial, healthcare, and multi-use. Currently, California, Connecticut, and Ohio are among the leaders in PACE utilization.

Benefits

PACE financing has numerous benefits, especially for large capital projects such as CHP installation:

- Projects are 100% financed, with no down payment.
- Projects are financeable for 20+ years (longer than most commercial loans).
- A long payback period can enable a positive cash flow from day one.
- Project "debt" is associated with the property and not the company or individual, making the debt transferable upon sale of the property.
- PACE programs can often obtain low interest rates.
- PACE financing can be treated as off-balance sheet financing, avoiding debt allocation.
- Interest payments can be tax-deductible.
- Project costs and savings can be realized by both property owners and tenants, alleviating tenant-landowner market failures (split incentives).



Pacenetion.org provides information about PACE financing across the United States, including the map above.

For More Information

U.S. DOE SOUTHEAST CHP TECHNICAL ASSISTANCE PARTNERSHIP (CHP TAP)

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For more CHP Resources:

www.sechptap.org

www.energy.gov/chp

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* <https://www.energy.gov/eere/amo/downloads/combined-heat-and-power-chp-financing-primer-june-2017>