

PACE - Property Assessed Clean Energy

Introduction

PACE, or Property Assessed Clean Energy, is a recent adaptation of a financing method that state and local governments in the United States have used extensively to pay for improvements that benefit private property owners and meet a public purpose. Parks, sidewalks, water and sewage treatment systems are commonly financed by placing a special assessment or similar charge on the property tax bill that property owners pay to support their local government functions.

PACE reflects a relatively new public policy goal that state and local governments are embracing to encourage energy efficiency upgrades and on-site renewable energy projects in buildings, which consume nearly half the energy and three quarters of the electricity we generate.

PACE Advantages

PACE was first introduced in 2008 in California, which in that year enacted statewide legislation that allowed the cities of Berkeley and Palm Desert to adopt pilot programs. PACE financing has had very broad appeal among advocates for increased energy efficiency, and to date, 31 states and the District of Columbia (representing nearly 80% of the U.S. population) have adopted PACE enabling statutes. PACE assessment financing is appealing for several reasons:

1. Assessments are commonly used and well understood by local governments and the capital markets that provide project funding.
2. PACE provides funding for 100% of a project's cost, removing the need for owners to use their own funds (the most cited barrier to project implementation).
3. Assessments (and property taxes) have the most senior claim against the subject property's value, including mortgage liens, which at scale, can result in low financing costs.
4. A variety of simple mechanisms can be employed by local governments to create a PACE assessment.
5. Assessment repayments can extend for up to 20 years, matching the expected life of energy up-

grades and making most projects immediately cash flow positive (i.e. the energy savings each year are greater than the assessment payment).

6. Assessments transfer to a new owner upon sale of a property and remain with a property until fully repaid (i.e. they are neither accelerated nor extinguished upon sale, or default).
7. Under many common leases, assessment costs can be shared with tenants, so both the owner and tenants can benefit fairly from project costs and savings.

Early PACE programs were established in California, Colorado, and New York, that focused mostly on energy improvements to single family homes (energy efficiency upgrades to insulation, and heating and cooling systems and renewable energy measures such as solar panels). In 2010, the Federal Housing Finance Agency (FHFA), a regulator established by Congress in 2008 to oversee mortgage giants Fannie Mae and Freddie Mac, objected to PACE's senior lien status. It directed Fannie Mae and Freddie Mac to refrain from buying mortgages with PACE assessments and prohibited them from allowing a PACE assessment to be placed on a mortgage held in their portfolios. The FHFA's action pits the rights of state and local governments to use the assessment financing mechanism to achieve public policy goals against the FHFA's charge to protect Fannie Mae and Freddie Mac from potential losses. Efforts are underway to resolve those differences.

Commercial PACE Programs

In the meantime, PACE programs that focus on energy improvements to all other buildings and properties, including commercial, industrial, agricultural, non-profits (e.g. many private hospitals, universities and schools) and some multi-family housing are being implemented at an increasing rate throughout the United States.¹ These "Commercial PACE" programs have avoided opposition from mortgage lenders and regulators by requiring building owners to obtain the consent of any existing mortgage lender before proceeding with a project.

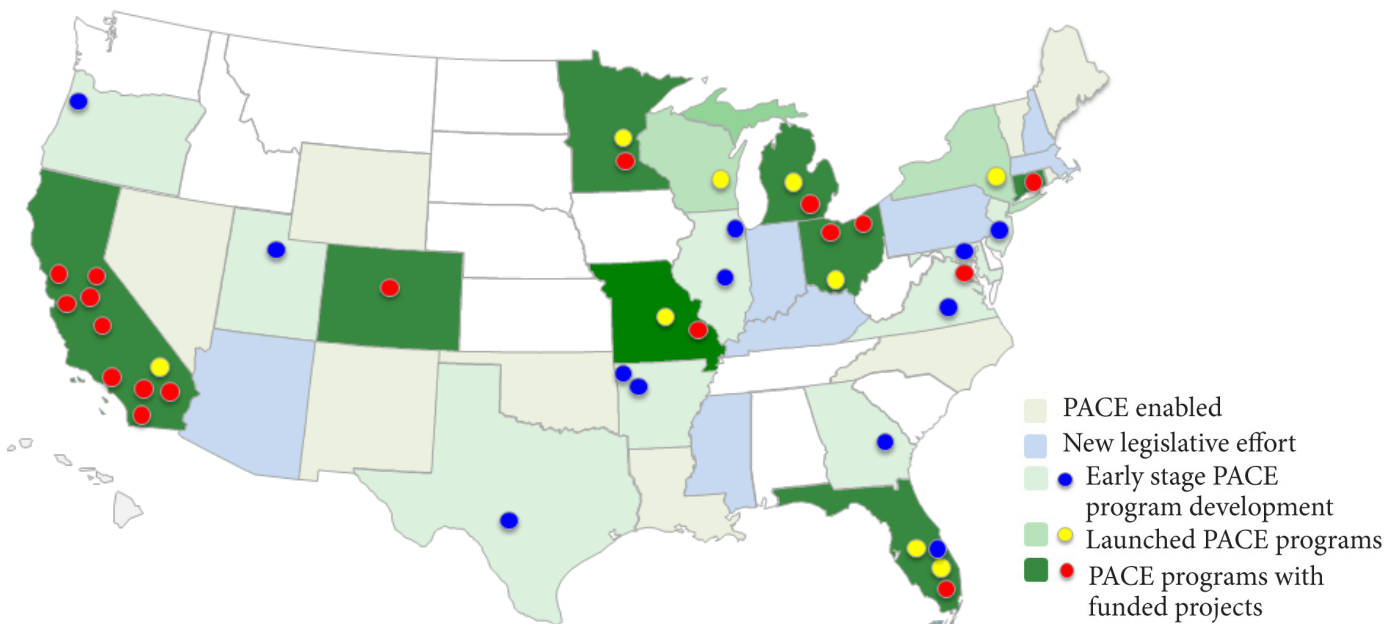
1 - Australia is using Energy Upgrade Agreements (EUAs) in much the same way PACE is used in the U.S. to finance energy upgrades to non-residential buildings.

PACE - Property Assessed Clean Energy

Today, commercial PACE financing is available in nine states (and D.C.) through 26 different programs (or in limited instances, platforms that without function without providing a full range of program services). Twelve new programs are in development in nine additional states. The PACE marketplace is nascent, with projects completed on 200 buildings by 18 programs that have ranged in size from \$5,000 to \$7,000,000. PACE is proving its effectiveness because it works for such a broad range of building types, and can be used to finance any energy saving or energy producing technology², as long as it is permanently affixed to the property (since it becomes part of the collateral that supports claims against the building, including mortgage liens). New programs are in development in another eight states (in a mix of regional and statewide approaches).

PACE Program: Connecticut's C-PACE

In 2013, Connecticut launched a statewide program administered by its Clean Energy Finance and Investment Authority (CEFIA), a public/private corporation of the state. C-PACE established program standards that apply to any of the state's 169 cities and towns, which can voluntarily pass a local law to enlist in the program. C-PACE staff help building owners perform audits to identify measures that will save energy (and increase annual cash flow) and has done substantial marketing to building owners and energy service contractors to broaden their awareness and understanding of how PACE can help their business become more profitable. CEFIA has made money available to fund projects on demand, and is completing a securitization of its existing (roughly) \$10 million portfolio to private investors.



Program Implementation

In PACE enabled states, a range of program implementation models can be used by local governments and both for-profit and non-profit companies are emerging to provide administrative, marketing, and financing services.

Two examples illustrate the range:

2 - PACE can be used to finance water conservation measures in some jurisdictions, and for measures to strengthen buildings against wind storm related damages in Florida.

State legislators who voted to enable PACE see it as a compelling way to create jobs, reduce carbon pollution, and attract private capital to the state.

PACE Platform: Lake County (OH) Port Authority

Simon Property Group, a U.S. based Real Estate Investment Trust (REIT) is the world's largest commercial real estate owner with shopping malls throughout the U.S. and Asia. Simon Property is among the most sophisticated real estate companies in the U.S. in terms of identifying and implementing energy efficiency

PACE - Property Assessed Clean Energy

measures, and had developed a plan, a funding source, and contractors for a project on a property near Cleveland, Ohio. Already experienced with PACE financing, Simon convinced the Lake County Port Authority (a public/private company that operates regional lake port facilities and airports) to place the PACE assessment on the property, collect it, and remit it to the project funder Simon had sourced (an investor from the private capital markets). This “platform” approach to PACE is widely replicable and can be cost effective when there is a critical mass of property owners, contractors, and project funders familiar with PACE.

Financing PACE Projects

Its senior lien makes PACE an attractive investment to prospective project funders, and thus far, projects have been funded on a permanent basis through the sale of bonds, issued by a qualified political jurisdiction (e.g. the City of San Francisco, which placed a \$1.4 million bond with a qualified investor for energy upgrades to the global headquarters of Prologis) and by direct investment by private funds that have been established to invest in the growing PACE market. Large scale adoption of PACE funding by real estate owners will almost certainly lead to the development of a PACE asset class, and wide scale securitization of PACE assets should attract capital investment at very low interest rates.

PACE Market Snapshot, December 2013

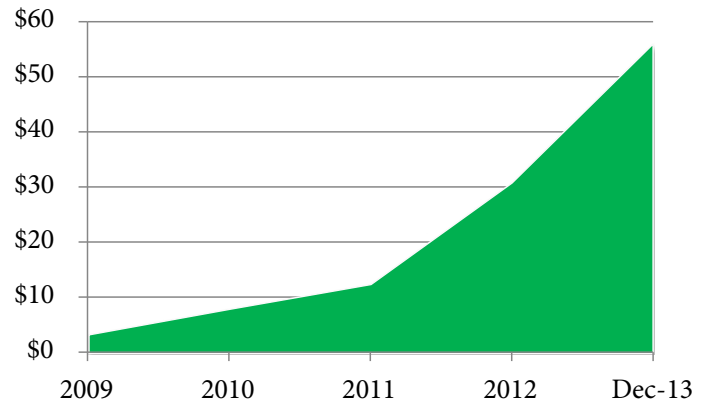
Financing Activity

- 200 commercial PACE projects completed
- Nearly \$56 million in funded projects
- More than \$215 million in PACE project applications

PACE Programs

- 26 active PACE programs/platforms
- 18 PACE programs/platforms with funded projects
- 12 programs in development
- 18 states and DC with PACE programs/platforms
- 9 states and DC with active PACE programs

Cumulative Project Financings, millions



About PACENow

PACENow has become established as a non-profit advocate for PACE program development throughout the United States. It provides resources, information, and a range of services to a growing universe of PACE industry participants, including governments that sponsor and administer PACE programs, companies that provide PACE administrative, marketing, project sourcing and financing services, and other organizations interested in promoting energy efficiency in the built environment. PACENow plays a constructive role in making PACE available more broadly, supporting marketing to real estate owners and contractors, gaining the support of existing mortgage lenders, and developing broad scale financial models.

Contact Us

www.pacenow.org

David Gabrielson
Executive Director
david@pacenow.org

Kristina Klimovich
Director, Communications & Market Research
kristina@pacenow.org