Annual Report

June 2013
PACENow's mission is to promote and assist the development of PACE programs by state and local governments and provide leadership and support for a growing universe of energy efficiency and PACE stakeholders.

Images on the front page (from left to right): CaliforniaFIRST PACE program, GreenFinanceSF PACE program, HERO PACE program.

Please share this report widely and invite others to join you in supporting our work.

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PACENow supports Property Assessed Clean Energy financing programs that are driving energy efficiency and clean energy upgrades to buildings. We provide advice, information and resources to PACE stakeholders in a rapidly growing nationwide arena. PACENow promotes team building and networking, educates and informs, solves problems, and overcomes barriers to successful, widescale implementation of PACE.

We are a foundation funded, impartial and consensus driven non-profit service provider to our customers: the government and non-governmental organizations, energy and administrative service companies, real estate owners and managers, law and financial firms, and others who share our goals and commitment to PACE.

This annual report highlights our progress as we build a broad PACE marketplace. Included are examples of the ways that PACENow is leading and helping to make PACE an efficient and effective tool for implementing energy efficiency and renewable energy (EE/RE) upgrades to buildings.
This report will describe in greater detail the progress that is evident in the PACE arena and PACE-Now’s role in driving it. Commercial real estate owners and managers are only now rebounding from an historic collapse in property value and a prolonged global recession. As their outlook improves, EE/RE projects, often for capital needs that have been deferred, become more compelling. In some cases, tenants and employees are demanding sustainability measures. In others, investment may be prodded by local laws requiring audits and the disclosure of energy use.

Advantages of PACE:
- 100% external funding
- Positive cash flow
- Increased building value
- Tenants share costs & savings
- Stays with property upon sale

Table of Contents:
- Introduction .................................................1
- PACE Legislation ..............................................2
- Commercial PACE ...........................................3
- Residential PACE ............................................12
- PACENow’s Market Leadership .....................13
- About PACENow .............................................18
Accelerating PACE

2013 is a turning point for PACE. Two years ago, Sonoma County (CA) and Boulder County (CO), the largest of four commercial PACE programs operating in just two states, accounted for almost all of the $10 million that funded upgrades to 75 buildings.

Today, 15 programs in 7 states and the District of Columbia have raised over $33 million for upgrades to 168 buildings. Ten more programs have launched, and at least seven more are in early stages of planning and development. Many programs have recently completed their first projects. That’s good news, but even better news is that all operating programs, whether they have funded projects thus far or not, report substantial pipeline applications for PACE projects in the works. Within a year, we may see commercial PACE programs funding EE/RE building upgrades in municipalities throughout 17 states.

PACE had its origins in 2008 with pilot programs in California, Colorado, and New York that focused primarily on EE/RE upgrades to single family homes. In July, 2010, the Federal Housing Finance Agency (FHFA) issued the first of many directives that effectively ban Fannie Mae and Freddie Mac from buying or holding mortgages with PACE assessments, stalling though not entirely stopping the growth of residential PACE programs. Over the next year, focus began to shift toward developing PACE programs that address the needs of commercial, industrial, multi-family and agricultural buildings and properties. PACENow would like PACE to be available for all buildings. We have supported legislative and legal efforts in the federal courts that would require the FHFA to recognize the legitimacy of PACE assessments. This report will primarily address the growth and progress of commercial PACE programs that address buildings not effected by the FHFA’s directives.

To help meet the challenges of this dynamic marketplace, PACENow will continue to have four key focus areas in the coming two years.

1. Programs: We will continue to work directly with people and organizations to pass new and improved PACE legislation and launch new programs. Resources will be focused this year and next particularly on support for new PACE program launches that can now draw on a range of effective models that meet varying circumstances, resources, and market preferences.

2. Demand: We have worked successfully over this past year to develop relationships with real estate industry organizations and companies to broaden their awareness and demand for PACE financing. These efforts will be expanded.

3. Lender Support: All commercial PACE programs seek the support of existing mortgage lenders. Early this year, we issued our Lender Support Study, a survey of thirty-five professionals from twenty-five lending institutions. It found that lenders are open minded about approving PACE funded projects for their customers, and approvals by over a score of lenders thus far support this finding. We are working now with JPMorgan Chase, Wells Fargo, and others on toolkit application materials and streamlined approval processes.

4. Funding: Growth in funding volume will both require and allow for the development of a PACE asset class. PACE project financings can be efficiently aggregated and securitized. We are working now with top financing companies, law firms, PACE program administrators, and project funders to develop new, liquid, low-cost financing structures that will tap an enourmous private capital market.
PACE Enabling Legislation

Today, 30 states and the District of Columbia can implement PACE programs. Early interest in PACE centered on homes, and from 2008 through 2010, the efforts of PACENow and others led to quick adoption of PACE legislation in 25 states and the District of Columbia. Shortly after the FHFA ordered Fannie Mae and Freddie Mac to stop buying PACE encumbered mortgages, state legislative efforts to enable PACE slowed noticeably. But in the last two years, as more commercial PACE programs have launched and achieved early stage success, interest in passing or amending flawed legislation has increased.

2012 saw new legislation in New Jersey and the start of legislative efforts in several states. This year, in addition to legislative wins in Arkansas and Utah, we have seen improved legislation pass in Colorado, Connecticut, and Texas. Efforts to pass PACE for the first time are in various stages as well in Arizona, Kentucky, and Pennsylvania. All of these efforts are being driven primarily by an interest in developing commercial PACE programs.
Projects and Programs in Detail
In June 2010, residential programs were very much the focus for PACE financing. Pioneer programs in Sonoma County, Palm Desert, and Yucaipa (CA), and Boulder County (CO) accounted for all commercial PACE funding: about $5 million for upgrades to just 27 buildings (each building represents one project). Commercial PACE was envisioned as part of programs that were in early stage planning and development in San Francisco, Los Angeles, San Diego and Placer County (CA) and in Toledo (OH). Companies like Renewable Funding, Ygrene Energy Fund, FIGTREE Energy Finance, Clean Fund, and Structured Finance Associates were developing strategies to administer, source, and finance commercial PACE projects, in addition to residential ones.

The FHFA’s July, 2010 statement forced a change in thinking. Most PACE program development shifted to commercial applications. Since June, 2010, governments, and a mix of for-profit and non-profit organizations around the United States have initiated strictly commercial PACE program design, launched programs, and begun funding projects. That transition, from residential to commercial, took time, but by mid-2012, commercial PACE programs had really begun taking hold.

Today, we see a vibrant landscape for commercial PACE, with financing available in 10 states and the District of Columbia. Projects have been funded throughout the country, and all 25 operational programs have a substantial number of applications for funding. “Pipeline” used to mean that building owners seemed interested in PACE. Now it means applications for funding. And, new programs are in development in Arkansas, Georgia, Maryland, Ohio, Oregon, Texas, and Utah.

The United States still lacks a nationally accepted call to action on energy efficiency. PACE has evolved as a state and local government initiative in part as the result of that vacuum. For many commercial building owners, reducing energy costs is often a low priority. Broader concerns about the economy have made building owners reluctant to take on any capital projects. Despite these obstacles, PACE is proving its effectiveness. Long-term, 100%, relatively low-cost financing makes projects immediately cash flow positive and increases a building’s value. When energy savings and the financing cost can be shared with tenants and transferred to a new owner upon sale, PACE looks even more compelling. Building owners and managers who have used PACE cite these reasons for choosing PACE financing.
PACENow is in regular contact with all known commercial PACE programs, and the table below provides basic information on those that have launched or are in development throughout the United States (coded to correspond with the preceding maps). The number of buildings upgraded (projects) and dollar amount are reported by programs and in total. We solicit information on pending applications (pipeline) with a known dollar amount for anticipated projects. The table reports all pipeline information that has been shared with us. We believe it understates the total market's pipeline.

<table>
<thead>
<tr>
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<th>Coverage</th>
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</table>

All totals provided by program administrators

Total Buildings Upgraded: 168
Reported Applications for Funding: 141
$100 million in project activity
25 active commercial programs
The Challenge: Santa Rosa Plaza, one of the premier downtown shopping destinations in Northern California, needed a “Cool Roof.” The building is relatively new, it was built in 1971, and it houses a number of well-known tenants: Apple, Best Buy, Abercrombie & Fitch, Burger King, GAP, Michael Kors, GNC, and many others. Building owner - Simon Property Group, which is the largest real estate investment trust, was looking to:

- Increase tenants comfort and satisfaction
- Improve overall building performance
- Reduce energy costs

The Solution: In 2009, PACE was still a relatively new idea and Simon Property Group immediately recognized the benefits of long-term, property tax like structure. The building manager was motivated by economic savings and a desire to support sustainability in general. PACE was a winning solution for Santa Rosa Plaza for the following reasons:

- Zero up-front cash investment
- Ability to pass payments through to tenants
- PACE assessment stays with the property upon sale
- Long-term financing

Project Success: Santa Rosa Plaza was the first large-scale commercial PACE project in California. The Sonoma County Energy Independence Program worked with the building manager from the application up until the project completion. A local utility, PG & E financed an ASHRAE Level 1 audit, which allowed all parties to determined the most effective combination of improvements and financing options. A “Cool Roof” is a highly reflective roofing system that stays up to 60 degrees cooler than a typical roof. “This is just one of the many steps we're taking to reduce our carbon footprint here at Santa Rosa Plaza,” said Laura Kozup, Area Mall Manager at Santa Rosa Plaza. “We recently installed an eco-friendly energy management system that will be an effective complement to the Cool Roof, and we are very grateful to Sonoma County for enabling us to serve as an example to other corporate citizens who are reviewing opportunities to reduce energy costs and create jobs responsibly.”

Building Information:
Size: 699,000 sq. ft.
Year Built: 1971
Building Value: $240 million

Improvements:
Reflective Cool Roof

$463,411 PACE Assessment
10 year term
Fixed 7% rate
PACE to Building Value Ratio: 0.7%
Case Study 2: Prologis completes a comprehensive $1.4 million energy efficiency retrofit

The Challenge: Prologis Inc., the world’s leading owner, operator & developer of industrial real estate, was looking to implement energy efficiency and renewable energy upgrades at its headquarters in San Francisco. Pier 1 was built in 1918 and converted to office space in 2001. The real estate giant has been a tenant for 10 years and the time came to enhance the sustainability of the building. Project goals included:

• Improve overall building performance and comfort
• Reduce energy use by at least 30%
• Allocate savings and funding to five subtenants based on leased space
• Improve cash flow from day 1

The Solution: Prologis chose PACE to fund energy efficiency and renewable energy upgrades. PACE or Property Assessed Clean Energy allows interested property owners to access financing to undertake qualifying energy efficiency and clean energy improvements on their buildings and repay the investment through an additional charge (“assessment”) on their property tax bill. Similar to a sewer tax assessment, capital provided under a PACE program is secured by a lien on the owner’s property tax bill and paid back over time through the energy savings. Prologis recognized that PACE was specifically designed to overcome a number of financial barriers to energy efficiency investment. The following advantages of PACE were especially attractive for Prologis:

• Zero up-front cash investment
• Immediate positive cash flow
• Long-term financing (up to 20 years)
• PACE assessment stays with the property upon sale
• Ability to pass payments through to tenants

Project Success: Prologis hired Johnson Controls Inc., an international energy service company based in Milwaukee, to identify cost effective energy measures. JCI provided a holistic solution that encompassed retrocommissioning of heating and cooling systems, comprehensive interior lighting upgrades, and a 200 kW rooftop solar electric array. Clean Fund, a San Francisco-based private investment firm, offered leading-edge PACE expertise and enabled Prologis to reap the most benefit from this financing. Project highlights include:

• Purchased energy reduced by 32%
• Annual estimated cost savings for Prologis: $98,000
• PACE made it possible for the financing to be allocated pro rata to 5 subtenants
• Projected annual PV production: 245,520 kWh
• Annually, nearly 400,000 kWh will be saved

Building Details:
Size: 151,000 sq. ft.
Year Built: 1918
Assessed Value: $30 million

Improvements:
1,500 new lighting fixtures
200kW Rooftop solar
HVAC overhaul

$1.4 million PACE bond
20 year term
Fixed 6.93% rate
Annual Savings: $98,000
PACE to Building Value Ratio: 5%
Case Study 3: Ann Arbor’s Big Boy restaurant takes advantage of PACE financing

The Challenge: Home of the Original Double Decker - a famous Big Boy restaurant required some energy efficiency upgrades. Property owners, Joe Diequez and Jonathan Marsh, were looking for an innovative way to finance building improvements and replace inefficient cooking equipment. Like many small business owners, they were looking for a long-term financing solution that would ensure that building improvements pay for themselves in 10 years. Project goals included:

- Improve overall building performance and comfort
- Upgrade kitchen equipment
- Reduce utility bills
- Reduce operating costs
- Improve the environment

The Solution: PACE was an obvious solution for the Big Boy owners. The program offered low-cost, low-risk capital and an opportunity to be good stewards of the environment. Sustainability is a City-wide priority in Ann Arbor. In fact, City of Ann Arbor Mayor John Hieftje is an avid supporter of the program: “Our city’s Climate Action Plan calls for reducing greenhouse gas emissions 8 percent from 2000 levels by 2015, and these projects – and others like them – are an important part of helping Ann Arbor reach its sustainability goals.” The following unique advantages of PACE financing motivated Big Boy owners to act:

- Long-term financing (up to 10 years under Michigan PACE law)
- Low interest rates
- Greater long-term property value because of energy efficiency
- Preservation of borrowing capacity

Project Success:
Experienced program administrators conducted a preliminary analysis of utility bills and building credentials and determined that the Big Boy property was an excellent candidate for PACE financing. While the terms of the program required that a pre-qualified auditor perform the energy analysis, the property owners were free to use contractors of their choice to complete the project. Ann Arbor’s PACE program, administered by the Clean Energy Coalition, ensured that Big Boy owners, as all local business owners, received clear and effective education about energy efficiency improvements proposed by the auditor. Lender consent was a swift and simple process as the lender recognized the advantages of PACE. As a result of this project:

- Annual utility costs are expected to be reduced by 19%
- $8,300 in annual savings

Building Details:
Size: 5,000 sq. ft.
Year built: 1981
Assessed Value: $500,000

Improvements:
- Building controls system
- High efficiency HVAC
- Lighting system overhaul
- ENERGY STAR cooking equipment

PACE Assessment: $91,600
10 year term
Fixed 4.75% rate
Projected Annual Savings: $8,300
Estimated Electricity Savings: 57,410 kWh

“If I was any business owner, I would definitely look into the PACE program for any of my capital expenses that I thought would save me energy in the long run.”

Joe Diequez, Plymouth Road Big Boy restaurant owner
T**he Challenge:** A sustainability-minded building manager of a shopping plaza in Norwalk, CT was looking for the most beneficial financing solution to pay for energy efficiency and renewable energy improvements. The 542 Westport Avenue building is a classic-looking family-owned mall. Some of the building tenants include: Bed, Bath & Beyond, the Edge Fitness Club, a local movie theater, and small boutique shops. Project goals included:

- Increase tenants comfort and overall building performance
- Make regular and necessary upgrades
- Improve the environment
- Undertake an aesthetic upgrade

T**he Solution:** Building manager, Robert Hartt with Hartt Realty Advisors, immediately understood the advantages of PACE and introduced the concept to the building owner – the Sarno family. Robert describes the building owners as “very progressive, very forward-thinking.” He further noted that “There is an environmental and economic impact, but they also wanted to show others you can do this.” PACE financing is provided by the Clean Energy Finance and Investment Authority (CEFIA), a statewide “Green bank.” The following advantages of PACE financing were especially attractive to the building owners:

- Zero up-front cash investment
- Long-term financing
- Ability to pass payments through to its tenants
- Tax-assessment nature of PACE financing

P**roject Success:** From the very beginning, this project was driven by the property manager, who approached CEFIA right after the state of Connecticut passed its PACE enabling legislation. Commercial PACE program offers a broad range of benefits to building owners and program staff ensures that businesses have access to most effective financing options. The building manager worked closely with the contractor, Conserv Inc., and C-PACE program staff to identify the most fitting combination of improvements by running a number of project financing scenarios. This project resulted in:

- 158,000 lb in avoided greenhouse gas emissions
- 152,200 kWh of electricity savings annually, and
- Estimated annual savings of $17,500.

B**uilding Information:**
Size: 35,000 sq. ft.
Year Built: 1971
Assessed Value: $25 million

**Improvements:**
- Exterior LED Lighting

$**170,000 PACE Assessment**
13 year term
Fixed 4.5% rate
Estimated Annual Savings: $17,500
Projected Electricity Savings: 152,200 kWh
Case Study 5: First multifamily property used PACE financing in Washington, DC

The Challenge: An affordable multifamily housing property located in Southwestern DC required an energy efficiency upgrade. Built 7 years ago, this building houses low income tenants. The building manager was looking for opportunities to save money without adding additional debt. This property is part of HOPE VI program administered by the US Department of Housing and Urban Development (HUD). Units within the building are individually metered and the tenants’ electricity bills are subsidized through the HUD utility allowance program. Project goals included:

- Improve overall building performance
- Reduce energy costs
- Reduce operating costs

The Solution: PACE financing was especially attractive for this market segment because the property tax assessment repayment mechanism can be accounted for as an operating expense and not debt. Property manager immediately recognized the advantages of PACE. While the initial interest was in solar only, dialogue with DC PACE program staff expanded the scope of improvements to include a number of energy efficiency measures, such as lighting improvements and controls system. The following characteristics of PACE were especially appealing to the property owner:

- Tax-assessment nature of PACE financing
- Zero up-front cash investment
- Immediate positive cash flow
- Long-term financing

Project Success: The DC PACE program provides an attractive financing solution that helps commercial and tax-exempt property owners implement energy efficiency and water conservation improvements. The program sourced this project directly. The building manager was well-versed in energy efficiency and renewable energy technology and financing options. Experienced program staff successfully obtained consent from the lender on the property as well as the investor in the tax credits that made up the bulk of the equity in the project. Project highlights are:

- Energy use reduction of 15%
- 37 kW solar installation will provide 3.5% of required energy
- Annual benefits totalling $40,000
- Project included energy control training for building managers

Building Information:
Size: 112,000 sq. ft.
Year Built: 2007
Building Value: $19 million

Improvements:
- Lighting improvements
- Controls system
- 37kW solar array

$290,000 PACE Assessment
10 year term with 20 years amortization
Fixed 6% rate
Estimated Annual Benefits: $40,000
The PACE marketplace is nascent and complex; for many reasons, no two programs are exactly alike. The underlying PACE mechanism is simple and common to all programs: a local government provides or arranges for financing that is repaid with a property tax like assessment. But each program will reflect different enabling acts, budgetary resources, program administration (in-house or outsourced), and level of community and local government support.

Enough progress has been made to paint a number of contrasts between programs. The most significant ones are briefly described below. We help new programs determine the best model for their individual circumstances.

**Geographic Scope** can range from sole municipality based programs like those in San Francisco and Ann Arbor, to consortium approaches capable of enlisting multiple municipalities like those in Florida, California, and Michigan. Counties with multiple jurisdictions are a variant of the consortium model. Size permits economies of scale, which can result in broader and more cost effective marketing efforts and lower transaction costs. Connecticut’s C-PACE program, administered by the state’s Clean Energy Finance and Investment Authority (CEFIA) provides a standardized approach to PACE that is available to all municipalities within the state.

**Program Administration** can vary greatly as the result of different legal frameworks, resources, and program philosophies. With many degrees of complexity in-between, PACE in Edina (MN) and statewide in Connecticut can illustrate the contrast.

**Edina (MN) Model** – Edina illustrates a bare bones approach to PACE. This Minneapolis neighbor used modified template documents from Sonoma County (available on PACEnow’s website) to put a PACE mechanism in place that allowed Grandview Tire & Auto, a family owned local business, to use PACE to finance solar panels purchased from Blue Horizon Energy. Total cost to Edina was about $11 thousand, and Clean Fund purchased the $34 thousand city issued bond to fund the project. What makes Edina’s model interesting is its simplicity; it’s PACE without a program, and it’s an approach that’s been used elsewhere already to facilitate a building upgrade using PACE when there is no broader programmatic effort in a given municipality.

**Connecticut Model** – At the opposite extreme from Edina, we have Connecticut’s comprehensive approach to a PACE program. PACEnow (and others) began working with CEFIA in 2011 on legislation and program design. The result is a CEFIA led program that each of the state’s 169 municipalities can join. All participants conform to various protocols and guidelines, including benchmarking and audit provisions, and an agreement to provide ongoing measurement and verification data, measures which ensure that building owners realize predicted savings. Connecticut’s comprehensive approach to program administration reflects its public policy objectives, and creates economies of scale that enhance marketing efforts and facilitate aggregation and securitization. Within six months, C-PACE had completed its first project (see case study 4) and is working on a substantial pool of applications for funding.
**Project Funding** has come to be characterized as either “open market,” where programs help arrange funding from any willing provider, or “turnkey,” in which the program administrator arranges sole source funding. PACE projects have been funded in a variety of ways.

- **Government Funds** – Sonoma County’s projects have been funded largely by the County Treasurer with monies managed by that office. Connecticut’s first project was funded with monies made available to CEFIA for that purpose. Direct investment from governments in PACE projects is not expected to be a scalable solution, and both Sonoma and Connecticut would prefer to securitize their investments.

- **Municipal Bonds** – Boulder County (CO), Ann Arbor (MI), and the Port Authority of Toledo - Lucas County (OH) have sold taxable municipal bonds through public offerings and private placements. This method can provide long-term funding and can be accomplished by funding all projects simultaneously when a sufficient volume is reached, or in combination with a warehouse credit line providing interim financing on demand. The investors in PACE secured bond issues will likely be sophisticated institutional investors, like insurance companies, pension funds, or banks.

- **Private Investment Firms** – A number of private firms have been established to fund, or arrange funding, for PACE projects. These include Clean Fund, which has funded a number of projects thus far, Structured Finance Associates, and Samas Capital.

- **Banks** – Financing institutions are expressing an interest and willingness to fund PACE projects, either individually, or as an aggregated bond issue. Ann Arbor State Bank, for example, purchased a bond issued by the City of Ann Arbor that funded four different PACE projects.

People often refer to “PACE Bonds,” but the specific form that an individual PACE project financing takes can vary, mostly as the result of a given state’s statutory framework for assessment funded projects. Those in California, for example, are most often funded with a municipal bond (known as a “mini” bond), issued for each project. In Connecticut, on the other hand, the PACE project financing obligation can take the form of a contract or note instead of a mini bond. Open market programs and turnkey programs can use either form of obligation, and funding can be sourced from the full range of providers described above. Both open market and turnkey funding models allow for aggregation and possible securitization of individual PACE project obligations.

**Commercial PACE projects, by type of property and type of improvement**

2008 - Present

![Commercial PACE projects, by type of property and type of improvement](image)
Residential PACE

The continuing impasse with the Federal Housing Finance Agency (FHFA), Fannie Mae, and Freddie Mac that has significantly stalled residential PACE program development has been a source of disappointment and frustration for PACE proponents. Early PACE programs in New York, Colorado, and California financed thousands of EE/RE projects and demonstrated that PACE was safe and effective for home owners eager to save money and reduce their energy needs. Actual data shows that PACE homes are less likely to default, and many studies have found that homes with EE/RE upgrades sell at higher prices relative to those without.

PACENow supported legislative initiatives and legal efforts to restore residential PACE. Unfortunately, HR 2599, the PACE Assessment Protection Act of 2011, though co-sponsored by a mix of fifty-three House Republicans and Democrats, did not receive support from House leadership. To date, no new legislation has been introduced in either the U.S. House or Senate. And, earlier this year, a U.S. Appellate Court reversed a lower District Court order that had required the FHFA to conduct a rulemaking process regarding PACE. The higher court found that FHFA was acting in its conservator role when it issued its July 2010 statement banning PACE, as opposed to its regulatory role, and was therefore immune to legal challenges.

PACENow will continue to support efforts to work with the FHFA to find reasonable ways for residential PACE programs to be implemented. At the same time, some municipal governments are proceeding with senior lien residential PACE programs. Sonoma County, portions of Riverside County, Palm Desert, Yucaipa, and programs administered by Ygrene Energy Fund and Renovate America provide residential PACE financing.

It remains unclear whether or how FHFA, Fannie Mae, and Freddie Mac will react to the recent Appellate Court ruling. Municipalities and home owners who choose to sponsor and use PACE financing should do so with a full understanding of the possible consequences that the FHFA has alluded to, including finding home owners in breach of the uniform security instrument (the standard mortgage).

Our website serves as a platform to engage with the FHFA. We provide a form letter that can be sent to the Agency’s Acting Director, President Obama, and members of Congress.
PACENow has played an essential role supporting all PACE programs. Increased staffing levels over the past year have allowed us to meaningfully increase our level and scope of service. We provide leadership, information and resources, facilitate networking, assist in program development, help broaden awareness of PACE financing in the real estate industry, and work to overcome barriers to successful and wide scale implementation of PACE financing in many ways, examples of which include the following:

Leadership – We are the national, impartial, consensus driven organization that promotes PACE. Our staff communicates directly with scores of PACE program stakeholders that include local governments, NGOs, private third party program administrators, real estate companies, PACE project funders, Wall Street firms, law firms, and mortgage lenders. We are an international spokesperson for PACE, and regularly share progress with the press, at relevant conferences and in webinars. We play a critical role in building national awareness of PACE.

Networking – We are uniquely positioned to streamline development and implementation of PACE programs by connecting people and organization, primarily in two ways:

1. Program Administrator Call – PACENow hosts a monthly call for program administrators. We develop an agenda for each call that includes a featured presentation by a PACE market participant, an update on the PACE marketplace, and a PACENow moderated discussion that allows administrators to share information and insights.

2. Ad Hoc - On a daily basis, we bridge people in need of information, a specific insight, or service, with those who have relevant experience, perspectives, and services to offer.

“PACENow has really stepped up with effective leadership within the rapidly expanding world of PACE. Their steady and thoughtful approach to convening, facilitating, and communications has provided valuable support, visibility, and a sense of community for all PACE stakeholders. Keep up the good work!”
Rich Chien, GreenFinanceSF

“PACENow provides a valuable base of resource sharing, knowledge and collaboration among PACE market participants. Their neutral position facilitates information flow and ideas that enhance program innovation beyond single agency initiatives.”
Laura Franke, Public Financial Management, Inc.

“PACENow has been an invaluable convener of experts and stakeholders, clearinghouse of critical insight and information from the PACE programs around the county and a cheerleader for this emerging industry that has the potential to simultaneously improve the economy and save the planet. We’re very fortunate here in Florida and around the country to have such a wonderful resource and team in David, Natalie and Kristina.”
Michael Wallander, EcoCity Partners
Information, Data, and Resources – We are the source for information about PACE that we provide through our website, newsletter, and social media. We collaborate directly with stakeholders, particularly those interested in adopting legislation, starting, and operating programs. We make it easy to find examples of legislation, program handbooks, template documents, and case studies of successful projects. Today, our website receives over 5,000 hits a month, 40% of which are returning visitors. The vast majority (92%) are from within the United States, and major referring sites include Bloomberg, Facebook, Energy Center, and organizations like ACEEE.

We are leveraging the power of social media. PACENow is on Facebook, Twitter, and LinkedIn. PACENow’s Facebook page has an audience of nearly 1,000 people, who often engage with our content. We are using social media to broadcast the successes in the PACE market and share the latest developments in EE/RE arenas.

Our newsletter is an invaluable tool for those who wish to stay up-to-date with the developments in the PACE market. Our mailing lists consists of over 3,000 subscribers and is growing every day.

1,000 of Facebook ‘likes’
Active on LinkedIn and Twitter
Over 5,000 website hits a month
**Legislative Efforts** - Our website summarizes the status of legislation and program implementation in every state and provides software that state level advocacy groups can use to develop grassroots networks and support. We have analyzed all PACE enabling statutes and created a summary grid and legislative checklist that we make available on our website. We work directly with individuals and groups to help them design effective legislation, and have contributed to wins this year in:

- **Arkansas** – We worked with Arkansas Advanced Energy Association and others, providing early guidance, advice, and reviewing legislation that was implemented this year. We continue to work with them on program development.

- **Texas** – PACENow has worked for nearly two years with “Keeping PACE in Texas” on a legislation, just passed, that made essential improvements to the previous PACE statute. We will be working closely with “Keeping PACE in Texas” and others to help launch programs in Texas.

- **Utah** – PACENow helped Utah Clean Energy with a PACE bill and is providing ongoing support and advice on program initiation.

We are contributing to ongoing efforts to amend or develop new enabling legislation in:

- **Illinois** – PACENow is working with individuals and organizations on efforts to amend Illinois’ existing PACE statute.

- **Massachusetts** – PACENow reviewed a consulting study that supports a legislative amendment to the existing PACE statute that would allow two state agencies to play a substantial role in establishing a statewide PACE program, similar in some respects to Connecticut’s.

- **Pennsylvania** – We have recently begun working with Penn Future on efforts to introduce new PACE enabling legislation.

**Program Implementation** – With nearly 80% of the US population in states where PACE is enabled, helping to start new programs is an important objective now, and will be in the coming years. We have learned that there are many different ways to implement PACE, and can help those interested in starting programs understand the range of possibilities suitable for their statutory framework and available resources. Our staff is currently working with individuals, organizations, and municipalities on program development in Arkansas, Ohio, Oregon, Texas, and Utah.

"We coordinated with PACENow throughout the process, tapping into their PACE expertise and available resources."
Kevin Emerson, Utah Clean Energy

"Thank you PACENow. We appreciate you providing us a lifeline to best practices in PACE world."
Steve Paterson, Arkansas Advanced Energy Association

"Thanks for all your support from the very beginning."
Charlene Heydinger, Keeping PACE in Texas
Demand Initiatives – A year ago, PACENow began working more closely with the real estate industry to broaden its awareness and understanding of PACE financing. These efforts are beginning to pay off.

1. Industry Organizations – PACENow has focused on the Urban Land Institute (ULI) and the Real Estate Roundtable (RER), two organizations with extensive membership among real estate companies. ULI contributed and lent its name to a February 2013 white paper on the state of commercial PACE programs that we co-authored with Johnson Controls’ Institute for Building Efficiency. We have also been given opportunities to address ULI industry councils and participate in panels to broaden awareness of PACE amongst the real estate community. For example, we will be moderating a panel discussion on completed PACE projects for ULI’s fall meeting. In January, we were invited to attend RER’s Sustainable Property Advisory Committee meeting and have been working with RER and several of its members since, primarily in identifying and helping to implement PACE projects.

2. Market Leaders – PACENow is working directly with Simon Property Group, Prologis, Prudential Real Estate Investors, TIAA-CREF, Forest City, Jones Lang LaSalle, and others, to identify and complete PACE financings that benefit them and serve as examples for all owners of commercial real estate.

Support from Lenders – PACE assessments in arrears are senior to the claims of existing mortgage lenders for properties that fall into default. For this reason, all commercial PACE programs require that lenders be given notice of a pending PACE assessment and request or require a consent (or an acknowledgment) to the PACE assessment. PACENow conducted a ground breaking study, released in January 2013, that surveyed lender attitudes and reactions to PACE. A key finding was that lenders would be willing to support projects that make sense, and to date, more than thirty different lenders have provided their consent to scores of projects. PACENow has compiled a sample resource list of these consenting lenders to help property owners and programs.

We are also working directly with major commercial mortgage lenders, including JPMorgan Chase and Wells Fargo, on standard application materials (that will be available on our website) and ways to streamline the review and approval of applications. As we gather more data on project approvals (and on those turned down), we will be able to provide statistics and advice to PACE programs and building owners that will allow to target their projects more effectively and avoid wasted effort on projects with little chance of success.

Project Database – Early this year, PACENow launched a data collection project to help PACE participants and stakeholders understand the marketplace. We have developed a web based portal that programs are using to provide basic information on the types of buildings and projects that are being implemented. We are also making detailed data available as a resource to all participating programs, and summary data available to the general public on a soon to be implemented “dashboard” on our website. This data is an important resource to all industry players. For example, JPMorgan uses PACE project statistics to make a compelling case to focus bank resources on PACE. Other banks use PACE data internally to encourage their sales force to offer PACE as a financing option.
Scale Financing – PACENow is working with holders of PACE assets (funded projects), major Wall Street financial firms, and law firms to develop a CMBS (Commercial Mortgage Backed Securities) / REMIC (Real Estate Mortgage Investment Conduit) approach to securitizing PACE obligations. It is likely that PACE assessments can be structured in a way that would enable them to be included in a standard CMBS offering, or comprise (with sufficient market volume) a standalone REMIC.

PACENow’s for 2013 – 2015 goals are based on the market needs of PACE stakeholders.

- **Demand:** PACENow is playing an important role in expanding awareness of PACE in the commercial real estate industry by working with industry organizations and individual real estate companies. We will expand this effort over the next two years.

- **New Programs:** As we build awareness and familiarity with PACE financing in the real estate industry, a lack of access to PACE funding will create another barrier to implementing EE/RE projects. PACENow will work closely with governments and groups intent on starting PACE programs, and support those efforts with advice and materials that will draw upon a range of successful PACE program models and be available to all.

- **Financing:** PACENow is uniquely positioned to survey existing funding mechanisms and develop new strategies, instruments, and market participants to implement them. These efforts require the participation of market specialists and in some cases, legal analysis. PACENow will play a leadership role in developing a PACE asset class to attract efficiently arranged, low cost capital to fund PACE projects.

- **Standards:** The PACE market is still nascent. Different approaches to program design, marketing and outreach, and financing are likely to yield varying degrees of success. PACENow is uniquely situated to survey this broad range of practices and begin to hone in on best practices that can streamline future and existing program efforts.

- **Data:** PACENow has developed a comprehensive database on PACE programs, projects, and pipeline applications, which allows participating programs to share information on progress and trends. We also support broader marketplace initiatives to develop protocols for benchmarking, audits, and ongoing measurement and verification, such as the Investor Confidence Project. We will continue to devote resources to maintain and refine the PACE database.

- **Communication:** A year ago we substantially revised our website to make it easier to navigate and provide added functionality. It now receives 5,000 visitors a month. We will continue to improve its functionality and content, and put additional resources into our newsletters, and social media presence.
PACENow is an advocate for Property Assessed Clean Energy, an innovative way of financing energy efficiency and related upgrades to buildings.

Our mission is to promote and assist the development of PACE programs by state and local governments and provide leadership and support for a growing universe of energy efficiency and PACE stakeholders.

- **Leadership:** PACENow provides impartial leadership for a broad coalition of stakeholders, including state and local governments, PACE program administrators, companies providing a range of services to PACE programs, energy service companies, real estate actors, national municipal associations, trade organizations, businesses and business councils, NGOs, and private individuals.

- **Problem Solving:** PACENow leads focused efforts to solve targeted challenges that confront commercial and residential programs.

- **Information Source:** PACENow serves as the trusted source for information about PACE, primarily through our website, webinars, and newsletter.

- **Network Building:** PACENow facilitates discussion and networking among PACE stakeholders and all advocates for energy efficiency.

- **Standardization and Best Practices:** PACENow helps develop and disseminate best practices, guidelines, and standards for PACE.

**Financial Information**

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**Contact Us**

We would like to hear from you. If you have any questions, suggestions, or ideas, please send these to info@pacenow.com. We will respond to all your inquiries.
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Our Team

**David Gabrielson** is PACENow’s Executive Director. He was introduced to PACE while developing Energize Bedford, an energy efficiency financing program for homes in Bedford, New York, where he has served as an elected Councilman since 2008. Before his careers in energy and politics, David spent over 20 years as an investment banker to state and local governments, financing a wide range of capital facilities and programs at national firms including Credit Suisse First Boston and J.P. Morgan. David earned a Bachelor’s degree in Economics at the University of California at Berkeley and holds a Master’s degree in Public and Private Management from Yale University.

**Natalie Trojan** is a Senior Director at PACENow. She joined in June 2012 following a career in consulting and finance with firms such as Natixis Real Estate, BNY Capital Funding, and Deloitte & Touche. Natalie has provided strategic and financial advice and has executed billions in real estate, structured, project, and cross border financings to clients in the real estate, infrastructure, and energy sectors. Natalie is an active member of ULI – the Urban Land Institute, WX – Women Executives in Real Estate, and the Municipal Arts Society. Natalie has an AB in Architecture from Wellesley College, a Master of Regional Planning from UNC Chapel Hill, and an MBA from the Kenan-Flagler School of Business at UNC Chapel Hill.

**Kristina Klimovich** joined PACENow as an Associate in March 2012 and she is committed to promoting energy efficiency in buildings. Kristina is developing and managing PACENow’s outreach strategies (website, social media platforms, newsletter, etc.) and conducting market research on current developments in PACE industry. Kristina is a Master’s graduate in International Affairs from the New School University in New York City, where she researched issues related to welfare & environmental economics, valuation techniques, benefit-cost analysis, and social & economic rights. She was directly exposed to international energy efficiency and renewable energy projects throughout her broad non-profit experience working for advocacy, research, and aid organizations.