

**Center for Global Energy, International Arbitration, and
Environmental Law
The University of Texas-School of Law**

*Research Paper No. 02-13
April 2013*

PACE IN TEXAS

The Future of Contractual Assessment Financing for Conservation Improvements

Jeremy Brown



ENERGY CENTER

The Center for Global Energy,
International Arbitration and
Environmental Law

THE UNIVERSITY OF TEXAS SCHOOL OF LAW

Center for Global Energy, International Arbitration and Environmental Law
University of Texas School of Law
University of Texas School of Law
727 E. Dean Keeton St., Austin, TX 78705
Campus Mail Code: D1800
<http://www.utexas.edu/law/academics/centers/energy/>

© Copyright 2013 All rights reserved

About the Energy Center: The Center for Global Energy, International Arbitration, and Environmental Law (“Energy Center”) at The University of Texas School of Law’s mission is to educate students about the law, policy, and commercial realities related to the production of energy, protection of natural resources, and the use of international arbitration to resolve commercial disputes. In addition to offering a robust course curriculum, the Center sponsors interdisciplinary research and policy analyses and provides a forum for lawyers, scientists, economists, policy makers, and stakeholders to explore solutions to the world’s most pressing energy and environmental problems. The center is engaged in research on a number of issues, including oil and gas law, the law of wind energy, incentives for renewable energy, and the policy implications of climate change for the Endangered Species Act.

About the Author: Jeremy Brown is a research fellow at the Energy Center. His current research focuses on the management and funding of water resources. He previously practiced energy and environmental law at Orrick, Herrington & Sutcliffe and the Natural Resources Defense Council.

Contents

Executive Summary:.....	3
Introduction:	4
Part I – How PACE Works	6
Part II – FHFA Litigation	7
Part III – Rulemaking	8
Part IV – Trends in PACE	9
Commercial and Industrial Property.....	9
Multi-Jurisdictional Collaboration.....	10
Third Party Lenders	11
Lender Consent.....	11
Water Conservation	12
Part V – SB 385 and Trends in PACE.....	14
Eligible Participants.....	15
Jurisdictions	15
Funding Models.....	15
Public Purpose	16
Lien.....	18
Underwriting Criteria	18
Appendix A: PACE by State	20

Executive Summary:

Twenty-eight states have passed Property Assessed Clean Energy (PACE) enabling legislation but most – including Texas – do not have fully operational PACE programs. In some instances, this failure of PACE law to translate into concrete action may be due to drafting defects or to evolving PACE best practices that have rendered early-adopted laws obsolete. In other instances, it may stem from the chilling effect of actions by mortgage regulators.

In March 2013, the Ninth Circuit Court of Appeals resolved the last of a series of legal challenges against mortgage regulators, establishing a period of at least temporary regulatory stability. Meanwhile, PACE supporters have continued to trumpet the investment and environmental opportunities in commercial, industrial and multifamily real estate retrofits. Several states have tried to capture these tailwinds by adopting or amending PACE statutes in ways that facilitate non-residential PACE and incorporate lessons learned from pilot programs and recent policy debates.

Texas is such a state. Bills introduced this legislative session – S.B. 385 and H.B. 1094 – would reconfigure PACE statutes first enacted in 2009 by expanding PACE to encompass water conservation and steering financing toward commercial, industrial and multifamily properties. If they pass, the bills could serve as a blueprint for other states that either have not passed PACE legislation or have PACE laws on the books that have yet to spawn actual PACE programs.

Introduction:

Property Assessed Clean Energy (PACE)¹ allows property owners to voluntarily subject their properties to tax assessments. The assessments are similar to those historically used to pay for public projects like sidewalks or streetlights² but instead finance conservation improvements on privately owned property.

PACE was pioneered in the late 2000s and quickly captivated environmental policymakers. The Department of Energy distributed PACE seed grants³ and the White House identified PACE as a key pillar of its strategy for stimulating economic activity by making American buildings more energy efficient.⁴ In three years, more than half of the states and the District of Columbia passed PACE enabling legislation.

PACE was appealing in part because it was designed to overcome certain market barriers to efficiency improvements by securing financings with senior tax liens⁵ on the titles of improved properties. Although senior liens are a standard feature of conventional tax assessments, they roused the concerns of the mortgage industry, which feared that PACE liens would expose existing mortgage liens to greater risk.

These concerns prompted the Federal Housing Finance Agency (FHFA) – the agency that regulates the secondary mortgage market – to issue a directive that effectively prohibited senior PACE liens on mortgaged single-family dwellings. The move cast the future of PACE into doubt. Local governments, environmental nonprofits, and energy efficiency businesses urged the FHFA to repeal its directive and lobbied Congress to pass superseding legislation.⁶ Eventually, PACE proponents filed several lawsuits against the FHFA, alleging the agency had violated the Administrative Procedure Act (APA).⁷ By March 2013, courts had rebuffed the last of these challenges and snuffed any lingering chances that PACE could be applied to residential projects on a broad scale.

The FHFA intervention stunted the development of PACE programs. Indeed, most of the states that had passed PACE enabling legislation never launched operational programs. In some instances, this failure of PACE law to translate into concrete action may have been due to drafting defects or to evolving PACE best practices that rendered early-adopted laws obsolescent. In other instances, it may have stemmed from the chilling effect of actions by residential mortgage regulators. Nevertheless, while PACE was technically legal in much of the country, and several jurisdictions had launched well-capitalized PACE programs⁸, the overwhelming majority of states either had never approved PACE or had only paper tiger versions.

In 2013, in response to a record-breaking drought, Texas legislators introduced numerous bills meant to promote water conservation, including a bill that would overhaul the PACE statutes the state originally adopted in 2009. Sponsored by State Sen. John Carona, S.B. 385 would reorient PACE around non-residential property and expand it to allow financing for water conservation

improvements. (Its companion bill is H.B. 1094, introduced by state Rep. Jim Keffer.) The bill has attracted support from a much broader coalition than the state's original PACE enabling legislation did, generating enthusiasm among industries and trade associations that had largely sat out earlier PACE discussions.

In this white paper, the Center for Global Energy, International Arbitration and Environmental Law uses S.B. 385 as a springboard for discussing the state of PACE. The first part explains the mechanics of PACE. The second part reviews PACE litigation. The third part recaps the formal PACE rulemaking the FHFA undertook in 2012 as a result of the litigation. The fourth part discusses the concurrent developments in PACE state law and best practices. The fifth part explores that ways that S.B. 385 builds upon these trends could serve as a model for other states interested in enacting or revising PACE statutes.

Part I – How PACE Works

PACE was designed to address market barriers that discourage property owners from installing energy efficiency and renewable energy improvements. Because many such improvements could save money over time, property owners have natural economic incentives to install them. But market barriers – like extended payback periods and lack of access to capital – bury or distort incentives.⁹

In its most basic form, PACE has three principal features:

1. PACE provides a property owner with upfront financing for a qualified improvement and allows the property owner to repay the debt over the life of the improvement. Since improvements are supposed to reduce utility costs more than enough to cover repayment obligations, the improvements should prove cash flow positive.
2. PACE secures a financing with a senior lien that runs with the property; if an owner transfers the property, the next owner inherits the debt. Attaching the debt to the property reduces the risk that installing an improvement will cause a property owner to incur a loss by transferring before an improvement has fully repaid itself.
3. An owner repays PACE debt through a line-item on property tax bills. The debt would thus take the form of a tax assessment and not necessarily be considered part of a debt load that must be reported on balance sheets. Additionally, because many leases allow landlords to pass taxes and utility charges through to tenants, landlords may hold tenants who receive the benefits of improvements responsible for the cost of the improvements.

Part II – FHFA Litigation

In 2010, as PACE policies proliferated and the real estate market remained in the doldrums, mortgage regulators began raising concerns about PACE. They claimed the senior status of PACE liens diminished the value of mortgage liens and shifted risks to mortgage holders.¹⁰ They warned PACE improvements could perform worse than expected and fail to generate intended savings. And they said PACE liens and even improvements could depress property prices and crimp transferability.

These concerns came to a head in July 2010, when the FHFA issued a directive¹¹ informing Fannie and Freddie Mac – two government sponsored enterprises (GSEs)¹² that it regulates and that effectively control the secondary mortgage market – that PACE debts raised “significant safety and soundness concerns.”¹³ The agency explained that “[f]irst liens established by PACE loans are unlike routine tax assessments and pose unusual and difficult risk management challenges for lenders, servicers and mortgage securities investors. The size and duration of PACE loans exceed typical local tax programs and do not have the traditional community benefits associated with taxing initiatives.”¹⁴ The FHFA instructed the GSEs to address PACE programs by undertaking “actions that protect their safe and sound operations.”¹⁵

Three other independent federal agencies – the Office of the Comptroller of the Currency,¹⁶ the Federal Deposit Insurance Corporation,¹⁷ and the National Credit Union Administration¹⁸ – issued similar letters. These agency actions hobbled residential PACE lending and inspired seven court challenges – four in California, which were consolidated into a single proceeding,¹⁹ two in New York²⁰ and one in Florida.²¹

Only the California case succeeded. In it, the plaintiffs contended the FHFA failed to comply with the APA when it issued its PACE directive.²² The FHFA countered that it was not obligated to comply with the APA because it had acted as “conservator” rather than as a regulator at the time it issued the directive.²³ As the court explained, the law that created the FHFA – the Housing and Economic Recovery Act of 2008²⁴ – gave the agency regulatory authority over the GSEs²⁵ and also authorized it to serve as a conservator²⁶ for GSEs under certain circumstances.²⁷ In September 2008, the FHFA director had determined the GSEs were undercapitalized and assumed conservatorship. In July 2010, the agency was thus concurrently serving as both regulator and conservator. But the directive did not specify in which capacity the agency was acting.

In August 2012, the court sided with the plaintiffs and found that the FHFA had been acting as a regulator; as a result, the directive amounted to a new regulation that should have been promulgated according to formal APA procedures.²⁸ In March 2013, the Ninth Circuit reversed the district court and joined the Second²⁹ and Eleventh Circuits³⁰ in holding that the FHFA acted as conservator.³¹

Part III – Rulemaking

In August 2011, before publishing its decision, the California court issued a preliminary injunction requiring the FHFA to promulgate a PACE policy through APA notice-and-comment procedures.³² In response, the FHFA published an Advance Notice of Rulemaking in January 2012 and sought comments on whether the restrictions set forth in the July 2010 directive and supplemental February 2011 guidance should be maintained in a new formal rule.³³ The Ninth Circuit ultimately stayed the injunction³⁴ but not before the FHFA received about 400 substantive comments³⁵ and, in June 2012, published a Notice of Proposed Rulemaking and Proposed Rule on PACE underwriting standards for the GSEs.³⁶

Environmental nonprofits,³⁷ jurisdictions with PACE programs,³⁸ affiliated politicians³⁹ and businesses in the efficiency and renewable industry⁴⁰ generally expressed support and assured that PACE would not subject the mortgage industry to heightened financial risks or impair the marketability of PACE-encumbered properties. Real estate industry trade groups – such as the National Association of Realtors, National Association of Home Builders and the American Land Title Association – expressed doubts, particularly about first-lien PACE debt.

After analyzing the arguments and evidence that both sides had presented, the FHFA concluded that “first-lien PACE programs would materially increase the financial risks borne by mortgage holders.”⁴¹ The agency proposed a three-pronged rule that would enshrine the substance of the July 2011 directive:

1. The Enterprises shall immediately take such actions as are necessary to secure and/or preserve their right to make immediately due the full amount of any obligation secured by a mortgage that becomes, without the consent of the mortgage holder, subject to a first-lien PACE obligation. Such actions may include, to the extent necessary, interpreting or amending the Enterprises’ Uniform Security Instruments.
2. The Enterprises shall not purchase any mortgage that is subject to a first-lien PACE obligation.
3. The Enterprises shall not consent to the imposition of a first-lien PACE obligation on any mortgage.⁴²

At a practical level, such a rule would have continued to limit the growth of residential PACE financing and perhaps created more complications than the directive since revising it would have required a new rulemaking. The court-ordered rulemaking thus benefitted PACE only in as much as it galvanized supporters and exposed the agency to the possibility of further administrative challenges.⁴³ In any event, the Ninth Circuit vacated the district court decision, freeing the agency to abandon its rulemaking.⁴⁴ The rulemaking remains relevant, however, for the record it created of PACE-related issues and stakeholder positions.

Part IV – Trends in PACE

Between 2008 and 2010, PACE policies spread rapidly, with numerous states passing enabling legislation.⁴⁵ The FHFA intervention slowed this growth and forced PACE advocates to recalibrate PACE in ways that would leverage its potential as a financing mechanism without ruffling financial regulators. At the same time, pilot programs helped to develop the best practices and institutional frameworks⁴⁶ that could support broader scale application of PACE.

These developments have driven at least five programmatic and legislative trends:⁴⁷ (A) a focus on commercial and industrial property; (B) more extensive cross-jurisdictional collaboration; (C) greater involvement by third party lenders; (D) increased concern for lender consent; and (E) the expansion of PACE to water conservation improvements.

Commercial and Industrial Property

In introducing PACE, supporters initially focused on residential properties.⁴⁸ But the FHFA directive and litigation have sharply limited the potential of single-family residential PACE. The FHFA could revive residential PACE by reversing its directive but has shown no inclination to do so. Similarly, Congress could override the FHFA. It has failed to pass PACE bills twice in recent years⁴⁹ but the drumbeat continues, with Brookings recently publishing a report calling for federal legislation.⁵⁰

As far back as 2010, Michigan adopted enabling legislation that authorized only non-residential PACE.⁵¹ But now, with the FHFA controversy settled and single-family residential PACE seemingly stalled indefinitely, programs have turned with a renewed focus toward the commercial and industrial sectors, both of which use significant amounts of energy and water.⁵² Commercial office buildings, for instance, produce about 20 percent of the country's annual greenhouse gas emissions.⁵³

Tactically, permitting PACE only for commercial, industrial and multi-family property may help to insulate PACE politically from associations with the FHFA controversy and preserve the continued viability of the PACE programs that do move forward. And legally, because securitization agreements are more standardized and rigid for residential mortgage backed securities (RMBS) than for commercial mortgage backed securities (CMBS),⁵⁴ CMBS documents could accommodate PACE encumbrances more readily than RMBS documents could.

Nonprofits such as the Carbon War Room⁵⁵ and the Environmental Defense Fund have identified PACE as offering a means of financing the conservation improvements for which market preferences and land use regulations are likely to increase demand⁵⁶ (Studies have found a mounting demand for green buildings⁵⁷ and cities have increasingly incorporated energy and water conservation guidelines into their building codes.⁵⁸) All told, the Department of Energy has cited figures estimating that nationwide there could be \$2.5 billion to \$7.5 billion worth of commercial PACE financing potential per year by 2015.⁵⁹

Not surprisingly, commercial PACE programs have since grown in number and scale.⁶⁰ In March 2011, a study from the Clinton Climate Initiative and Lawrence Berkeley National Laboratory identified only four PACE commercial programs and found that they had financed \$9.7 million worth of improvements.⁶¹ Later that year, Barclays and Lockheed Martin announced plans to invest as much as \$650 million in PACE-financed commercial improvements in metropolitan Miami and Sacramento.⁶²

As of February 2013, 16 PACE programs were accepting applications for commercial projects. Most had started within the past year,⁶³ including a California coalition of 14 counties and 126 cities that had launched a commercial PACE program⁶⁴ and a San Francisco municipal program that for its first project initiated the largest-ever PACE commercial financing – \$1.6 million worth of upgrades to the corporate headquarters of the real estate company ProLogis.⁶⁵

In Texas, PACE advocates have emphasized the potential business opportunities for lenders to deliver a new form of collateral-based financing to the industrial sector. The state consumes more electricity than any other, in part because it is home to a high concentration of energy-intensive industries, including aluminum, chemicals, forest products, glass, and petroleum refining. According to the Energy Information Administration, industry accounts for almost half of the state's energy use, with the residential sector consuming 14.4 percent and the commercial sector 12.6 percent.

Although some states may prefer not to abandon residential PACE,⁶⁶ the momentum for commercial PACE seems likely to grow. This year, five PACE bills have been filed in state legislatures.⁶⁷ Four of them, in their most current versions, would exclude single-family residential properties.⁶⁸ (Utah, for instance, defines an “energy efficiency upgrade” as an “improvement that is permanently affixed to commercial or industrial real property that is designed to reduce energy consumption.”) Because of the parallels between multi-family and commercial properties, certain legislation has preserved PACE financing for multi-family properties. As introduced, for instance, S.B. 385 would have authorized PACE for all “privately owned property”; the version passed by the state Senate would authorize it for all “privately owned commercial or industrial real property or residential real property with five or more dwelling units.”

Multi-Jurisdictional Collaboration

Increasingly, cities and counties have collaborated to form umbrella PACE organizations. In California, existing joint powers authorities have launched at least two statewide PACE programs.⁶⁹ In Central Florida and South Florida, local governments have banded together to form regional PACE programs.⁷⁰ In 2012, Connecticut amended its PACE statutes to create a state commercial PACE program that municipalities could join.⁷¹ A bill now pending in the Massachusetts legislature would do the same.⁷²

A policy advisor to the Connecticut program described the draw of a statewide program thusly: “We are a small state. We have 169 municipalities; we don’t have county government. Getting to

scale would have been very difficult if we didn't have the ability to aggregate at the state and local level.”⁷³ Indeed, through coordination, local governments may develop PACE programs with broader geographic reach. They may achieve administrative economies of scale and, thanks to their size, obtain better bond ratings and lower interest rates. And they may provide agencies that would otherwise be too small for bond markets⁷⁴ with a means of accessing municipal financing.

Third Party Lenders

At the pilot stage, PACE programs generally relied on state and federal grants or bond proceeds. Since then, funding techniques have evolved. At present, there are three widely recognized funding models.⁷⁵ In the first – the warehouse model – local governments or third party investors fund programs through credit lines or other sources of internal capital.⁷⁶ In the second – the pooled bond model – a local government aggregates PACE projects and issues bonds sufficient to simultaneously fund all the projects.⁷⁷ In the third – the open-market model – the borrower obtains third party financing independently.

Although early PACE programs relied on warehouse⁷⁸ and pooled bond models, the open-market model has become increasingly popular.⁷⁹ The finance director from the Clinton Climate Initiative has explained the appeal: “After several years of developing the ‘open market’ PACE model, we’re convinced that programs of this type remain one of the most sustainable ways to leverage private capital for energy efficiency investments in existing commercial buildings.”⁸⁰ New PACE legislation generally authorizes the use of multiple models, including the open market model.

Lender Consent

The most contentious aspect of PACE financing is that it is secured by a senior lien.⁸¹ Originally, PACE proponents viewed this form of security as a selling point rather than as a liability. The District of Columbia PACE statute features a relatively representative lien provision: “A lien for an unpaid Special Assessment, including penalty and interest, shall attach to the real property in the same manner as, and with a priority immediately junior to, a lien for delinquent real property tax.”⁸² More aggressively, in enabling legislation it enacted in 2010, Florida required PACE borrowers to provide mortgage holders or servicers with notice at least 30 days before contracting for PACE financing but did not require the owner to obtain consent and expressly invalidated any provision in any existing *or future* mortgage or other loan agreement that would deem the PACE financing a breach.⁸³

Louisiana’s enabling legislation did require consent for PACE commercial improvements costing more than \$100,000,⁸⁴ but it was not until the FHFA made an issue of lien seniority that a meaningful number of states began to incorporate lender consent into their PACE statutes. In 2011, New Hampshire amended⁸⁵ its enabling legislation⁸⁶ – which had merely required lender notice – so that PACE liens would respect the priority of private liens and become junior to all

existing liens. Vermont⁸⁷ and Oklahoma⁸⁸ went further and amended their PACE statutes to subordinate PACE liens junior to all existing liens and to all future mortgage liens.

The shift away from residential to nonresidential financing⁸⁹ has minimized the need to structure PACE programs so that satisfy FHFA requirements. Still, to avoid similar conflicts over commercial mortgages, the PACE legislation introduced this year generally includes lender consent requirements.

Water Conservation

Almost all PACE enabling statutes have focused on energy improvements. But there is no reason that PACE cannot be used for other sorts of improvements. PACE is modeled after the property tax assessments that have traditionally financed public improvements such as roads, streetlights, and schools. PACE is different because it finances improvements on privately owned rather than publicly owned property.

Using public finance mechanisms for private-side improvements is not without precedent, though. Massachusetts allows condominium owners to enter into “betterment agreements” with local governments to finance septic upgrades.⁹⁰ California permits county service areas to conduct “[g]eologic hazard abatement on public or private property or structures where the board of supervisors determines that it is in the public interest to abate geologic hazards.”⁹¹ And there are ample examples of local governments using municipal bonds to subsidize private enterprises intended to promote economic development.⁹²

Still, contractual assessments remain relatively novel, with PACE as their most visible and widespread manifestation. But such mechanisms could be used broadly, to finance any private-side improvement deemed to serve a public purpose, and PACE is increasingly spreading beyond its energy efficient roots. In Florida, for instance, PACE can be used to hurricane-proof properties by financing wind-resistant improvements.⁹³ And more and more, states have chosen to channel PACE financing toward water conservation, which faces many of the same market barriers as energy efficiency.⁹⁴

In 2009, California amended its PACE statutes to permit the financing of water conservation improvements.⁹⁵ In 2010, Wisconsin⁹⁶ followed suit and Georgia – which was just starting to emerge from its worst drought on record⁹⁷ and had recently lost a water war to neighboring states⁹⁸ – passed enabling legislation⁹⁹ that authorized PACE water conservation improvements. And so far in 2013, four states – Arizona,¹⁰⁰ Arkansas,¹⁰¹ Texas, and Utah – have considered PACE legislation with water provisions. In fact, the only PACE bill introduced this year that has not included water is from comparatively water-plentiful Massachusetts.¹⁰²

PACE water has gained the most ground in the West but even there progress until recently has been limited. Of the 17 Western states,¹⁰³ nine¹⁰⁴ have passed PACE enabling legislation. Until this year, however only one of those states – California – had PACE statutes expressly authorizing the PACE-financing of water conservation improvements. Even Colorado, a PACE pioneer, does not have a water provision in its statutes. The same is true of Wyoming, which

passed its original enabling legislation after states Wisconsin, California, and Georgia had shown the role PACE could play in water conservation.

It is possible that PACE statutes that do not contain express water provisions would nonetheless authorize financing for water improvements. As of this year, Utah¹⁰⁵ authorizes PACE-financing of “energy efficiency upgrades,” a term that is defined to include “measures to reduce the consumption of water, through conservation or more efficient use of water,”¹⁰⁶ such as low-flow toilets and showerheads, hot water heater timer systems and rain catchment systems. That Utah defines “energy efficiency” broadly enough to include water conservation suggests that energy-only PACE enabling statutes in other states could perhaps be interpreted to encompass water. Given the parallels¹⁰⁷ – and the nexus¹⁰⁸ – between energy and water, such an interpretation of energy efficiency has practical resonance but legally would still be a stretch, considering the counterexamples of the states with express water provisions and the illustrative lists of authorized energy-specific improvements included in many statutes.

Part V – SB 385 and Trends in PACE

For decades, the Texas population has grown rapidly.¹⁰⁹ Even during the recent recession, Texas suffered less than other states¹¹⁰ and was heralded as an economic miracle.¹¹¹ But Texas leaders have expressed concerns that, unless the state acts, it will not have sufficient resources – specifically electricity or water – to sustain growth. In 2012, the Electric Reliability Council of Texas commissioned a study that found the capacity for generating electricity has not kept pace with demand.¹¹² News reports warned of the possibility of California-style energy crisis, with rolling blackouts and economic disruptions.¹¹³ The situation was so rife with uncertainty that one state senator rued that “we’re basically rolling the dice here.”¹¹⁴

At the same time, Texas has grappled with the effects of a protracted drought. In 2010, the state entered into a drought that is on course to become the second worst on record.¹¹⁵ The Texas Water Development Board has warned that the state is not prepared to meet the water needs of an increasing population and that a major drought could cripple its economy.¹¹⁶ The speaker of the Texas House of Representatives has fretted about losing businesses to states with more secure water supplies.¹¹⁷ Acting on such concerns, the legislature in its current session is considering more than 60 water-related bills,¹¹⁸ covering subjects as varied as xeriscaping¹¹⁹ and hydraulic fracturing.¹²⁰ The marquee legislation would establish a \$2 billion revolving fund to finance water infrastructure.¹²¹

S.B. 385 has likewise been touted as an effort to save water.¹²² In 2009, before the FHFA issued its directive, Texas passed PACE enabling legislation, as H.B. 1937. Even as the American Council for an Energy Efficient Economy held out H.B. 1937 as a source of model language,¹²³ the legislation had shortcomings that prevented PACE programs from developing in Texas. The bill did not grant municipalities bonding authority, leaving them with limited means of capitalizing PACE programs. It restricted the potential scale of PACE in Texas by failing to allow public entities other than municipalities – such as counties or river authorities – to operate PACE programs. And it restricted PACE to its original purpose of financing only energy improvements.

S.B. 385 would revive PACE. The bill has attracted broad-based support. Environmental nonprofits like the Nature Conservancy and the Environmental Defense Fund that have backed PACE elsewhere have registered their support of SB 385.¹²⁴ So have prospective industrial borrowers like Dow Chemical¹²⁵ and Dixie Chemical¹²⁶ and trade groups such as the Texas Association of Business.¹²⁷ Perhaps most impressively, the bill has found support from the same sort of financial and real estate industry stakeholders who had voiced concerns about PACE during the aborted FHFA rulemaking.¹²⁸

As S.B. 385 winds through the legislative process and is implemented – and ultimately comes to serve as a model for other states¹²⁹ – five key features of the bill warrant particular attention: (A) the types of property owners that would be eligible to participate in PACE programs; (B) the jurisdictions that could operate PACE programs; (C) the potential involvement of third party

lenders; (D) the provisions that would help to regulate the investment of public funds or credit in privately owned property; and (E) the requirement for lender consent; and (F) the underwriting standards intended to reduce risks to both lenders and borrowers.

Eligible Participants

H.B. 1937 broadly authorized PACE financings on “residential, commercial, industrial, or other real property.”¹³⁰ S.B. 385 would sharply circumscribe the pool of potential borrowers. It would permit local governments to enter into contractual assessments with “record owners of real property” but it defines “real property” as “privately owned commercial or industrial real property or residential real property with five or more dwelling units.” This definition excludes the single-family properties that fall within the ambit of FHFA regulations and ensures that PACE financing will remain available for commercial and industrial sectors, which offer tremendous opportunities for energy and water savings.

By restricting PACE to “privately owned” property, S.B. 385 prevents local governments from using PACE programs to lend to themselves. Governments at all levels have extensive real estate holdings that would benefit from conservation improvements. In many instances, state and federal laws have established more stringent conservation standards for government buildings than for private buildings.¹³¹ In this legislative session, for instance, State Rep. Chris Turner has introduced H.B. 1854, which would allocate \$250 million to the Texas Facilities Commission to make state buildings more energy and water efficient.

But the distinction between public and private buildings may not always be clear. The General Land Office, for instance, runs a program that identifies underused state-owned properties.¹³² Frequently, the state leases these properties. The leases may be long-term but, because the state remains the owner of record, the properties could not participate in PACE programs.

Jurisdictions

Existing Texas PACE statutes allow municipalities but not other types of government agencies to enter into contractual assessments. S.B. 385 would amend the statutes to allow both municipalities and counties – an important step in opening up PACE financing to property owners that live in unincorporated areas. Additionally, the bill would permit local governments jointly operate PACE programs.

Funding Models

Under H.B.1937, as in most early PACE programs, only local governments acted as lenders. The bill failed, however, to give local governments the authority to issue municipal bonds to fund their PACE programs. S.B. 385 would grant this authority while also allowing programs to follow the open market model. The open market model could save PACE jurisdictions the administrative and financial costs of serving as lenders. The Texas Association of Business has

written to the state Senate Committee on Intergovernmental Relations, for instance, to tout that unlike alternative funding mechanisms such as tax credits or financial incentives, PACE “puts no public funds at risk.”

At the same, PACE could free borrowers to shop among potential lenders for those offering the most attractive terms. And it could give lenders an opportunity to cultivate a new line of business in PACE loans. Mortgage lenders might be more likely to consent to a PACE lien if also providing the PACE loan, for instance; and lenders could expand their collateral-based financing beyond their traditional mortgage businesses, particularly by delivering debt to the industrial sector.

Public Purpose

Most state constitutions include so-called gift clauses; in the Texas constitution, the clause is found at Article III, Section 52(a), and provides in relevant part: “Except as otherwise provided by this section, the Legislature shall have no power to authorize any county, city, town or other political corporation or subdivision of the State to lend its credit or to grant public money or thing of value in aid of, or to any individual, association or corporation whatsoever, or to become a stockholder in such corporation, association or company.”¹³³ The clause is intended to prevent “gratuitous” gifts of public assets.¹³⁴

The warehouse and pooled bond models of PACE channel public funds or at least public credit toward improvements on privately owned property, and even the open market model relies upon the public tax apparatuses to service loans. PACE financing thus comes closer to violating gift clauses than conventional assessments used to finance publicly owned improvements.

In interpreting the gift clause, courts have formulated a test requiring that an expenditure serves a public purpose. Courts have generally deferred to legislation determinations of what constitutes a public purpose. To avoid adverse judicial findings, however, Texas has added amendments to the state constitution expressly declaring that certain expenditures that could be seen as sitting on the wrong side of the gift clause do serve a public purpose.

This legislative session, State Representative Allan Ritter has introduced a joint resolution that, if passed, would ask voters in the next general election whether to amend the Texas constitution by carving out an exception to the gift clause for private-side water conservation improvements.¹³⁵ The resolution applies only to water conservation – not to energy efficiency or onsite renewables. While it would help reduce the litigation exposure for PACE programs and eliminate the risk that a court might find bond-financing private-side improvements violates the gift clause, it is not strictly necessary.

An existing gift clause carveout allows public expenditures to be put toward economic development.¹³⁶ In their enabling legislation, several states have included declarations that PACE serves a public purpose by reducing environmental impacts *and* promoting economic development. The Oregon legislation identifies “stimulat[ing] job growth” as a goal of PACE.¹³⁷ More thoroughly, the Colorado legislation states: “The commitment of a significant amount of

sustainable funding for increased construction of new energy improvements will create jobs and stimulate the economy: (A) by directly creating jobs for contractors and other persons who complete new energy improvements; and (B) by reinforcing the leadership role of the state in the new energy economy and thereby attracting new energy manufacturing facilities and related jobs to the state.”¹³⁸ PACE enabling legislation recently passed in Arkansas puts even greater emphasis on economic development; the legislation is titled “An Act to Create Jobs, Retain Wealth, and Grow Arkansas’ Economy by Enabling Property Assessed Clean Energy Financing.”¹³⁹

Though the precise economic impact may be difficult to quantify, PACE improvements would collectively spur economic development. The expenditures would not have the singular scale of big-ticket economic development projects like new factories or corporate headquarters that public expenditures have traditionally been used to entice. Still, the expenditures would in a general sense drive economic activity just as any other spending would. And perhaps less directly but more significantly, PACE improvements would in the aggregate act as an investment in infrastructure that promotes long-term economic development by helping the state obtain energy and water security.¹⁴⁰

Even assuming PACE was deemed not to promote economic development, however, PACE programs would probably prove constitutional¹⁴¹ in Texas if structured to include a few key features. In a 2007 opinion, the Texas Attorney General found that a public improvement district could use public funds to construct a seawall on privately owned property in Port Isabel.¹⁴² There is a critical distinction between the seawall in the attorney general opinion and a PACE improvement: the local government was paying outright for seawall rather than merely lending the upfront financing, as would be the case under PACE. Nevertheless, the opinion provides guidance.

The attorney general explained that the gift clause permits expenditures that “incidentally” benefit private parties so long as three requirements are met.¹⁴³ First, the primary aim of the expenditure must be to benefit a public purpose rather than private parties. Second, the public entity making the expenditure must “retain sufficient control over the transaction to ensure that the public purpose is accomplished and to protect the public’s investment in it.”¹⁴⁴ Third, the public must actually receive a benefit in return for the expenditure.

S.B. 385 § 399.115(d) finds that PACE bonds would further seven public purposes: “(1) improvement of the reliability of the state electrical system; (2) conservation of state water resources consistent with the state water plan; (3) reduction of energy costs; (4) economic stimulation and development; (5) enhancement of property values; (6) enhancement of employment opportunities; and (7) reduction in greenhouse gas emissions.” Additionally, the bill permits local governments to make public purpose findings.¹⁴⁵ Given the deference courts show toward legislative determinations of public purpose, and the many such determinations that other states and local governments have made, PACE programs in Texas could probably pull from such proven determinations to satisfy the public benefit factor.¹⁴⁶

As for the second factor, S.B. 385 includes several provisions that together provide PACE programs with “sufficient control” over PACE-financed improvements to protect public

investments and ensure that they are not altered or removed. Most basically, the improvements must be permanently affixed. And S.B. 385, requires local governments to conduct baseline reviews for all proposed improvements.¹⁴⁷ Once improvements are installed, local governments must obtain “verification” that the improvements are operating properly.¹⁴⁸

Finally, the public must receive the intended benefit. To guard against performance risk, programs may incorporate quality-control mechanisms, such as requiring borrowers hire pre-approved contractors or install only improvements that have been shown to meet certain performance standards.¹⁴⁹ The programs may obtain baseline audits prior to installation and then subsequent performance audits to confirm that an improvement is achieving its intended result. And borrowers may obtain – out of their own interest or at the request of lenders – insurance. Insurance policies may protect against improvements that fail to perform as expected or against externalities such as falling prices that cause the monetary savings achieved by the improvements to be less than expected.¹⁵⁰

Lien

SB 385 dodges most of the lien-related issues in two ways. First, it does not authorize PACE financing for single-family dwellings. Second, it would require that a property owner notify a mortgage holder and obtain written consent before taking on PACE debt.¹⁵¹ This requirement is in keeping with the generally stricter lender-consent requirements in commercial mortgages¹⁵² and would ensure that mortgage holders approve of any increased risks they could face as a result of the PACE debt. But that is not to imply that the mortgage holders would not benefit from PACE: according to PACE proponents, financed improvements could increase the values of underlying properties to a degree¹⁵³ that compensates for increased risk; and mortgage holders could find markets for themselves as PACE lenders.

Underwriting Criteria

To mitigate lender concerns, PACE programs have standardized and strengthened underwriting criteria.¹⁵⁴ PACE is distinct from traditional personal finance in that the debt runs with the property and not with the property owner. An initial property owner who would satisfy assorted creditworthiness conditions may be succeeded by a subsequent property owner who would not satisfy those conditions (though if a subsequent property owner sought a mortgage, the mortgagee would have upfront knowledge of the PACE lien and could negotiate mortgage terms accordingly). Nonetheless, to reduce lender risk, PACE programs often establish underwriting criteria as to the property owners who originally enter into PACE agreements.

To that end, S.B.385 requires that a PACE program establish “a method... for ensuring that property owners requesting to participate in the program demonstrate the financial ability to fulfill financial obligations to be repaid through contractual assessments.”¹⁵⁵ The legislation sets forth three non-exclusive criteria that a would-be borrower must meet, including that borrower owns the property to be improved, is current on mortgage and property tax payments and is not insolvent or in bankruptcy proceedings.¹⁵⁶ Additionally, the legislation directs a PACE program

to require “an appropriate ratio of the amount of the assessment to the assessed value of the property.”¹⁵⁷

Appendix A: PACE by State¹⁵⁸

No Enabling Legislation	Enabling Legislation But No Programs	Enabling Legislation, Developing Programs	Enabling Legislation, Operational Programs
Alabama	Arkansas ¹⁵⁹	Georgia	California
Alaska	Colorado ¹⁶⁰	Louisiana	Connecticut
Arizona ¹⁶¹	Hawaii ¹⁶²	Missouri	Florida
Delaware	Illinois	New Mexico	Maine
Idaho	Maryland	Utah	Michigan
Indiana	Massachusetts	Virginia	Minnesota
Iowa	New Hampshire		New Jersey
Kansas	Nevada		New York
Kentucky	North Carolina		Ohio
Mississippi	Oklahoma		Wisconsin
Montana	Oregon		Vermont
Nebraska	Texas		
North Dakota	Wyoming		
Pennsylvania			
Rhode Island			
South Carolina			
South Dakota			
Tennessee			
Washington			
West Virginia			

¹ For a general overview of PACE, see U.S. DEP'T OF ENERGY, ENERGY EFFICIENCY AND RENEWABLE ENERGY, *Solution Center: Property-Assessed Clean Energy (PACE) Programs*,

<http://www1.eere.energy.gov/wip/solutioncenter/financialproducts/PACE.html> (last updated Apr. 3, 2013).

² PACE had its origins in a California regional planning document. ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS, MONTEREY BAY REGIONAL ENERGY PLAN 1 (2006), *available at* <http://www.ccag.ca.gov/pdf/USTF/docs/AMBAGPartIFINAL11April06.pdf>. Berkeley, California, deployed the first PACE program, using \$336,550 in bond proceeds to finance solar photovoltaic installations on residential property. CITY OF BERKELEY, OFFICE OF ENERGY AND SUSTAINABLE DEVELOPMENT, BERKELEY FIRST FINAL EVALUATION 1 (Nov. 2010), *available at*

http://www.ci.berkeley.ca.us/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/Berkeley%20FIRST%20Final%20Evaluation%20current.pdf.

³ The American Recovery and Reinvestment Act of 2009 allocated \$80 billion to assorted energy and environmental projects, including \$49.6 million for an Energy Efficiency and Conservation Block Grant Program. American

Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115. *See also*, Cal. ex rel. Harris v. Fed. Housing Fin. Agency, 2012 U.S. Dist. LEXIS 112442, 10-11 (N.D. Cal. Aug. 9, 2012)

⁴ *See* WHITE HOUSE MIDDLE CLASS TASK FORCE AND WHITE HOUSE COUNCIL ON ENVTL. QUALITY, RECOVERY THROUGH RETROFIT, (October 2009), *available at*

http://www.whitehouse.gov/assets/documents/Recovery_Through_Retrofit_Final_Report.pdf.

⁵ PACE literature varyingly describes the lien as “senior lien,” “first lien” or “priority lien.” All terms mean “having or taking a lien-priority interest ahead of or senior to a first mortgage on the same property, or otherwise subordinating the security interest of the holder of a first mortgage to that of another financial obligation secured by the property.” Enterprise Underwriting Standards, 77 Fed. Reg. 36086, 36110 (proposed June 15, 2012) (to be codified at 12 CFR pt. 1254).

⁶ *See* H.R. 5766, 111th Cong. (2010), *available at* <http://www.govtrack.us/congress/bills/111/hr5766>; H.R. 2599, 112th Congress (2011), *available at* <http://www.govtrack.us/congress/bills/112/hr2599>.

⁷ Administrative Procedure Act, 5 U.S.C. §§ 551-59, 701-06, 1305, 3105, 3344, 5372, 7521 (2012). For a discussion of the legal challenge, *see infra* Part II.

⁸ Currently, across the United States, there are 12 operational PACE programs, with more in development. PACENow, *List of PACE Programs*, <http://pacenow.org/resources/all-programs> (last visited Apr. 10, 2013).

⁹ *See* KENNETH GILLINGHAM & KAREN PALMER, RESOURCES FOR THE FUTURE, BRIDGING THE ENERGY EFFICIENCY GAP: INSIGHTS FOR POLICY FROM ECONOMIC THEORY AND EMPIRICAL ANALYSIS 6-7 (January 2013), *available at* <http://www.rff.org/RFF/Documents/RFF-DP-13-02.pdf>; HANNAH CHOI GRANADE ET AL, MCKINSEY GLOBAL ENERGY AND MATERIALS, UNLOCKING ENERGY EFFICIENCY IN THE U.S. ECONOMY ix (July 2009), *available at* http://www.mckinsey.com/client_service/electric_power_and_natural_gas/latest_thinking/unlocking_energy_efficiency_in_the_us_economy.

¹⁰ *E.g.*, Lender Letter from Fannie Mae to All Fannie Mae Single-Family Sellers and Servicers, re: Property Assessed Clean Energy Loans, May 5, 2010, *available at* <https://www.fanniemae.com/content/announcement/111006.pdf>; Letter from Patricia J. McClung, V.P. of Offerings Mgmt., Freddie Mac, to Freddie Mac Seller/Servicers, re: First Lien Mortgages and Energy Efficient Loans, May 5, 2010, *available at* <http://www.freddiemac.com/sell/guide/bulletins/pdf/iltr050510.pdf>.

¹¹ FED. HOUS. FIN. AGENCY, STATEMENT ON CERTAIN ENERGY RETROFIT LOAN PROGRAMS (July 6, 2010), *available at* <http://www.fhfa.gov/webfiles/15884/PACESTMT7610.pdf>.

¹² For an explanation of GSEs, *see* GOVERNMENT-SPONSORED ENTERPRISES, WHITE HOUSE BUDGET FOR FISCAL YEAR 2013, *available at* <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2013/assets/gov.pdf>.

¹³ FED. HOUS. FIN. AGENCY, *supra*, note 11 at 1.

¹⁴ *Id.* at 1-2.

¹⁵ *Id.* at 2.

¹⁶ Office of Comptroller of the Currency, Supervisory Guidance, OCC 2010-25, to Chief Executive Officers of All National Banks, Department and Division Heads, and All Examining Personnel, re: Property Assessed Clean Energy (PACE) Programs (July 6, 2010), *available at* <http://www.occ.gov/news-issuances/bulletins/2010/bulletin-2010-25.html>.

¹⁷ Federal Deposit Insurance Corporation, Financial Institution Letter, FIL-37-2010, Alert on FHFA Statement Relative to Concern with Certain Energy Lending Programs (July 6, 2010), *available at* <http://www.fdic.gov/news/news/financial/2010/fil10037.pdf>.

¹⁸ National Credit Union Administration, Regulatory Alert to All Federally-Insured Credit Unions, re: Potential Risks of Property Assessed Clean Energy Loans, (July 6, 2010), *available at* <http://www.ncua.gov/Legal/Pages/RA2010-10.aspx>.

¹⁹ The State of California, the City of Palm Desert, the Sierra Club, and Sonoma and Placer counties filed lawsuits that the court dispensed with in a single opinion, Cal. ex rel. Harris v. Fed. Housing Fin. Agency, 2012 U.S. Dist. LEXIS 112442 (N.D. Cal. Aug. 9, 2012), *vacated*, 2013 U.S. App. LEXIS 5372 (9th Cir. Mar. 19, 2013).

²⁰ *Town of Babylon v. Fed. Hous. Fin. Agency*, 790 F. Supp. 2d 47 (E.D.N.Y. 2011) and *NRDC, Inc. v. Fed. Hous. Fin. Agency*, 815 F. Supp. 2d 630 (S.D.N.Y. 2011). The Second Circuit heard appeals in tandem and upheld both cases. *Town of Babylon v. Fed. Hous. Fin. Agency*, 699 F.3d 221 (2d Cir. 2012).

²¹ *Leon Cnty v. Fed. Hous. Fin. Agency*, 816 F. Supp. 2d 1205 (N.D. Fla. 2011).

²² *Cal. ex rel. Harris*, 2012 U.S. Dist. LEXIS 112442, at *6.

²³ *Id.* at * 30-32.

²⁴ Pub. L. 110-289, 122 Stat. 2654.

- ²⁵ 12 U.S.C. §§ 4511(b), 4513(b), 4513(a)(1)(A), 4513(a)(1)(B)(i)-(v) (2012).
- ²⁶ As conservator, the FHFA succeeds to “all rights, titles, powers, and privileges of the regulated entity” and may take actions “necessary to put the regulated entity in a sound and solvent condition.” 12 U.S.C. §§ 4617(b)(2)(A), (b)(2)(D)(i)-(ii) (2012).
- ²⁷ 12 U.S.C. § 4617.
- ²⁸ Cal. ex rel. Harris v. Fed. Housing Fin. Agency, 2012 U.S. Dist. LEXIS 112442 (N.D. Cal. Aug. 9, 2012).
- ²⁹ Town of Babylon v. Fed. Hous. Fin. Agency, 699 F.3d 221 (2d Cir. 2012).
- ³⁰ Leon Cnty. Fla. v. Fed. Hous. Fin. Agency, 700 F.3d 1273 (11th Cir. 2012).
- ³¹ Cnty. of Sonoma v. Fed. Hous. Fin. Agency, 2013 U.S. App. LEXIS 5372 (9th Cir. Mar. 19, 2013).
- ³² Cal. ex rel. Harris v. Fed. Hous. Fin. Agency, 2011 U.S. Dist. LEXIS 96235 (N.D. Cal. Aug. 26, 2011).
- ³³ Mortgage Assets Affected by PACE Programs, 77 Fed. Reg. 3958 (advance notice of proposed rulemaking Jan. 26, 2012) (to be codified at CFR pt. 1254).
- ³⁴ *Cnty. of Sonoma*, 2013 U.S. App. LEXIS 5372 at *1.
- ³⁵ The agency also received about 33,000 non-substantive, form comments. Enterprise Underwriting Standards, 77 Fed. Reg. 36086, 36089 (proposed June 15, 2012) (to be codified at 12 C.F.R. pt. 1254).
- ³⁶ *Id.* at 36086.
- ³⁷ The agency received comments from: the Natural Resources Defense Council; Great Lakes Environmental Law Center; Environmental Defense Fund; Sierra Club; and Connecticut Fund for the Environment. *See id.* at 36090–96.
- ³⁸ The agency received comments from: Babylon, New York; Sonoma County, California; the Office of the Mayor of the City of New York; Palm Desert, California; Placer County, California; Leon County, Florida; Boulder County, Colorado; Santa Clara County, California; the Florida PACE Funding Agency; and the Metropolitan Washington Council of Governors. *See id.* at 36090–99.
- ³⁹ The agency received comments from: Senator Michael Bennet, Senator Chris Coons, Senator Jeff Merkley; Senator Mark Udall, Senator Patrick Leahy; Senator Bernie Sanders; California State Senator Fran Pavley; and California Assembly member Jared Huffman. *See id.* at 36089–95.
- ⁴⁰ The agency received comments from Environmental Entrepreneurs; Renewable Funding; Renovate America; Solar Energy Industries Association; and Ygrene Energy Fund. *See id.* at 36091–98.
- ⁴¹ Enterprise Underwriting Standards, 77 Fed. Reg. 36086, 36099 (proposed June 15, 2012) (to be codified at 12 C.F.R. pt. 1254).
- ⁴² *Id.* at 36107
- ⁴³ The Northern District declined to rule on allegations that the directive was arbitrary and capricious under the APA or and a violation of the National Environmental Policy Act. Cal. ex rel. Harris v. Fed. Hous. Fin. Agency, 2012 U.S. Dist. LEXIS 112442, *52-53 (N.D. Cal. Aug. 9, 2012). After the agency had finalized the rule, the plaintiffs could have brought these same claims again.
- ⁴⁴ Cal. ex rel. Harris v. Fed. Hous. Fin. Agency, 2013 U.S. App. LEXIS 5372 (9th Cir. Mar. 19, 2013).
- ⁴⁵ PACE Financing, DSIRE SOLAR (Database of State Incentives for Renewable Energy), <http://www.dsireusa.org/solar/solarpolicyguide/?id=26> (last visited Apr. 12, 2013).
- ⁴⁶ PACE has evolved to the point that there is an expectation PACE bonds will securitized in 2013. *Commercial Property Assessed Clean Energy (PACE) Securitization*, SECURITIZATION INTELLIGENCE (Feb. 5, 2013), <http://www.securitizationintelligence.com/Article/3151457/Default/Commercial-Property-Assessed-Clean-Energy-PACE-Securitization.html#URkOQKWrl6E>.
- ⁴⁷ The data set of PACE legislation is too small to conclusively establish trends but certain types of provisions have nonetheless become more frequent.
- ⁴⁸ *See, e.g., Town of Babylon v. Fed. Hous. Fin. Agency*, 790 F. Supp. 2d 47, 51 (E.D.N.Y. 2011) (describing plaintiff town’s PACE program, the “Long Island Green Homes Program”); Jonathan R. Sichtermann, *Slowing the PACE of Recovery: Why Property Assessed Clean Energy Programs Risk Repeating the Mistakes of the Recent Foreclosure Crisis*, 46 VAL. U. L. REV. 263 (2011) (“[PACE] programs are one financing method that allow local governments to use special assessment districts to finance these home installations.”); Jeffrey Hoops, *Setting the Pace for Energy Efficiency: The Rise, Fall, and (Potential) Return of Property Assessed Clean Energy*, 89 WASH. U. L. REV. 901, 902 (2012) (“PACE is a promising, common-sense program that could enable homeowners to do their part to combat climate change”).
- ⁴⁹ H.R. 5766, 111th Cong. (2010), available at <http://www.govtrack.us/congress/bills/111/hr5766>; H.R. 2599, 112th Congress (2011), available at <http://www.govtrack.us/congress/bills/112/hr2599>.

⁵⁰ DEVASHREE SAHA, BROOKINGS, STRENGTHEN FEDERALISM: ENACT LEGISLATION SUPPORTING RESIDENTIAL PROPERTY ASSESSED CLEAN ENERGY FINANCING (PACE) (November 2012), *available at* <http://www.brookings.edu/~media/Research/Files/Papers/2012/11/13%20federalism/13%20housing%20energy%20efficiency.pdf>.

⁵¹ H.B. 5640, Sec. 3(g), 95th Leg., Reg. Sess. (Mich. 2010) (“‘Property’ means privately owned commercial or industrial real property located within the local unit of government.”), *available at* <http://www.legislature.mi.gov/documents/2009-2010/publicact/pdf/2010-PA-0270.pdf>.

⁵² For a description of current PACE programs, *see* PACENow, *List of PACE Programs*, <http://pacenow.org/resources/all-programs> (last visited Apr. 10, 2013).

⁵³ ENERGYSTAR, COMMERCIAL REAL ESTATE: AN OVERVIEW OF ENERGY USE AND ENERGY EFFICIENCY OPPORTUNITIES 1 (undated), *available at* http://www.energystar.gov/ia/business/challenge/learn_more/CommercialRealEstate.pdf.

⁵⁴ For a comparison, *see* Anna Galpern, *Rewriting Frankenstein Contracts: Workout Prohibitions in Residential Mortgage-backed Securities*, 82 S. CAL. L. REV. 1075 (2009).

⁵⁵ For a description of the Carbon War Room, *see* Joel Kirkland, *Branson's 'Carbon War Room' Puts Industry on Front Line of U.S. Climate Debate*, N.Y. TIMES, Apr. 22, 2010, <http://www.nytimes.com/cwire/2010/04/22/22climatewire-bransons-carbon-war-room-puts-industry-on-fr-73959.html?pagewanted=all>.

⁵⁶ Justin Gillis, *Of Beach Sand, 'War' and Carbon*, N.Y. TIMES, Sept. 20, 2011, <http://green.blogs.nytimes.com/2011/09/20/of-beach-sand-war-and-carbon/>.

⁵⁷ *E.g.*, CERES, ENERGY EFFICIENCY AND REAL ESTATE: OPPORTUNITIES FOR INVESTORS 2 (2009), *available at* <http://www.ceres.org/resources/reports/energy-efficiency-and-real-estate-opportunities-2009>.

⁵⁸ *See* COLUMBIA LAW SCHOOL, CENTER FOR CLIMATE CHANGE LAW, *Municipal Law Databases*, <http://web.law.columbia.edu/climate-change/resources/model-ordinances/municipal-law-databases> (last visited Apr. 10, 2013), for a database of local green building incentives.

⁵⁹ U.S. DEPARTMENT OF ENERGY, ENERGY EFFICIENCY AND RENEWABLE ENERGY, COMMERCIAL PROPERTY ASSESSED CLEAN ENERGY (PACE) PRIMER 5 (undated), *available at* <http://www.drivecms.com/uploads/sonomacountyenergy.org/Municipal%20Resources/Resources/Best%20Practices/DOE-Commercial-PACE-Primer.pdf>.

⁶⁰ Leo Wiegman, *A Handful of States Are Reimagining Property Assessed Clean Energy Financing*, STATE AND LOCAL ENERGY REPORT (Aug. 6, 2012), <http://www.stateenergyreport.com/2012/08/06/pace-makers>.

⁶¹ CLINTON CLIMATE INITIATIVE, LAWRENCE BERKELEY NATIONAL LABORATORY AND RENEWABLE FUNDING, POLICY BRIEF: PROPERTY ASSESSED CLEAN ENERGY (PACE) FINANCING: UPDATE ON COMMERCIAL PROGRAMS 2 (March 2011), *available at* <http://eetd.lbl.gov/ea/ems/reports/pace-pb-032311.pdf>.

⁶² Justin Gillis, *Tax Plan to Turn Old Buildings 'Green' Finds Favor*, N.Y. TIMES, Sept. 20, 2011, at B1.

⁶³ *See* KATRINA MANAGAN & KRISTINA KLIMOVICH, INSTITUTE FOR BUILDING EFFICIENCY, ISSUE BRIEF: SETTING THE PACE: FINANCING COMMERCIAL RETROFITS 3 (February 2013), *available at* http://www.uli.org/wp-content/uploads/ULI-Documents/SettingthePACE_Feb2013.pdf.

⁶⁴ CAL. STATEWIDE CMTYS. DEV. AUTH., CALIFORNIAFIRST, *Local Governments Launch Ambitious CaliforniaFIRST Energy Efficiency Program*, (Sept. 18, 2012), https://californiafirst.org/news/local_governments_launch_ambitious_californiafirst_energy_efficiency_program-2886 [hereinafter CALIFORNIAFIRST PROGRAM].

⁶⁵ Justin Gerdes, *San Francisco Announces Biggest Commercial Clean Energy PACE Retrofit*, FORBES, Nov. 19, 2012, <http://www.forbes.com/sites/justingerdes/2012/11/19/san-francisco-announces-biggest-commercial-clean-energy-pace-retrofit>.

⁶⁶ *See, e.g.*, CONN. GEN. STAT. § 7-121N, an omnibus bill that Connecticut passed in 2011 and that makes residential and non-residential properties eligible for PACE financing.

⁶⁷ S.B. 177, Sec. 46 (e)(1), 188th Gen. Ct., Reg. Sess. (Mass. 2013), *available at* <http://www.malegislature.gov/Bills/188/Senate/S177> (“The agency may enter into a financing assessment agreement with the property owner of qualifying commercial or industrial property”).

⁶⁸ In Arkansas, Senate Bill 640 would expressly authorize PACE financing for commercial, industrial and residential properties. S.B. 640, Sec. 1, 8-15-102(5), 89th Gen. Assemb., Reg. Sess. (Ark. 2013). In Massachusetts, Senate Bill 177 would amend existing PACE statutes to create a statewide commercial program. S.B. 177, *supra* note 67.

Because no operational PACE programs currently exist in Massachusetts, the creation of a commercial-only program implies that is where the state has charted its policy priorities.

⁶⁹ See CALIFORNIAFIRST PROGRAM, *supra* note 64; PACIFIC HOUSING AND FINANCE AGENCY, CALIFORNIA PACE PROGRAM *6 (June 2, 2010), available at http://www.tularewib.org/documents/CA_PACE_Michael_Chapin.pdf.

⁷⁰ FLORIDA PACE FUNDING AGENCY CHARTER AGREEMENT 6 (June 22, 2011) available at <http://www.floridapace.gov/about/charter>.

⁷¹ S.B. 501, Sec. 157, 2012 Leg., Spec. Sess. (Conn. 2012).

⁷² S.B. 177, 188th Gen. Ct., Reg. Sess. (Mass. 2013).

⁷³ Justin Gerdes, *Connecticut To Launch First Statewide Commercial Clean Energy PACE Program*, FORBES (Jun. 28, 2012), <http://www.forbes.com/sites/justingerdes/2012/06/28/connecticut-to-launch-nations-first-statewide-commercial-pace-program>.

⁷⁴ Smaller governments may not have the resources to pay the transaction costs of bond issuances or to in-house expertise to carry out all duties required under bond indentures.

⁷⁵ E.g., VERMONT PUB. SERV. DEP'T, COMMERCIAL PACE STUDY 1 (January 2013), available at <http://www.leg.state.vt.us/reports/2013ExternalReports/285688.pdf>.

⁷⁶ MARK ZIMRING, LAWRENCE BERKELEY NAT'L LABORATORY, COMMERCIAL PACE STATUS UPDATE (April 5, 2012), available at <http://www.naseo.org/committees/financing/notes/2012-04-05-Zimring.pdf>.

⁷⁷ E.g., KNN PUBLIC FINANCE, SONOMA COUNTY ENERGY, FINANCING FEASIBILITY ANALYSIS FOR PROPERTY ASSESSED CLEAN ENERGY (PACE) PROGRAMS (undated), available at http://www.drivecms.com/uploads/sonomacountyenergy.org/Municipal%20Resources/Document%20Library/Feasibility%20Studies/FeasibilityAnalysis_SecondStagePACEFinancings.pdf.

⁷⁸ *PACE Financing*, DSIRE SOLAR (Database of State Incentives for Renewable Energy), <http://www.dsireusa.org/solar/solarpolicyguide/?id=26> (last visited Apr. 12, 2013) (noting that Maine received \$30 million for its PACE program from the Department of Energy's Better Buildings Program).

⁷⁹ S.B. 425, 2011-2012 Leg., Reg. Sess. (Wis. 2011).

⁸⁰ Press Release, Office of the Mayor, City and County of San Francisco, Mayor Lee Announces Launch of Innovative Green Financing Program for Commercial Buildings (Oct. 31, 2011) available at <http://www.sfmayor.org/index.aspx?page=589>.

⁸¹ See *supra* Part II.

⁸² D.C. CODE § 47-895.33(c)(1) (2012).

⁸³ H.B. 7179, 2010 Leg., Reg. Sess. (Fla. 2010).

⁸⁴ H.B. 973, 2010 Leg., Reg. Sess. (La. 2010).

⁸⁵ H.B. 144, 2011 Leg., Reg. Sess. (N.H. 2011).

⁸⁶ H.B. 1554, 2010 Leg., Reg. Sess. (N.H. 2010).

⁸⁷ In 2009, Vermont passed H.446. H. 446, 2009 Leg., Reg. Sess. (Vt. 2009). In 2011, H.56, which included a provision that made all residential liens subordinate to existing liens and even subordinate to future mortgage liens passed the Vermont Legislature. H. 56, 2011 Leg., Reg. Sess. (Vt. 2011).

⁸⁸ S.B. 102, 2011 Leg., Reg. Sess. (Okl. 2011) § 1(C).

⁸⁹ See *supra* Part IV.B.

⁹⁰ MASS. GEN. LAWS ch. 111, § 127B1/2 (2012).

⁹¹ CAL. GOV'T CODE § 25213(q) (2012).

⁹² E.g., Hart H. Spiegel, *Financing Private Ventures with Tax-Exempt Bonds: A Developing "Truckhole" in the Tax Law*, 17 STAN. L. REV. 224, 226-27 (1965).

⁹³ See FLA. STAT. ANN. §§ 163.08(1)(b) and 163.08(2)(b)(3) (West 2012).

⁹⁴ The National Association of Regulatory Utility Commissioners has identified six barriers: high upfront costs; performance uncertainties; transaction costs; extended payback periods; and split incentives.

Edwin Orrett, Comments for the State Water Resources Control Board, Development of an Urban Water Conservation Regulatory Program 2 (Sept. 23, 2008), available at

http://www.swrcb.ca.gov/water_issues/programs/water_conservation/docs/urban/edwin_orrett.pdf. See also ETHAN N. ELKIND, UC BERKELEY SCHOOL OF LAW, CENTER FOR LAW, ENERGY & THE ENVIRONMENT, AND UCLA SCHOOL OF LAW, ENVIRONMENTAL LAW CENTER & EMMETT CENTER ON CLIMATE CHANGE AND THE ENVIRONMENT, DROPS OF ENERGY: CONSERVING URBAN WATER IN CALIFORNIA TO REDUCE GREENHOUSE GAS EMISSIONS 2 (May 2011), available at http://www.law.berkeley.edu/files/Drops_of_Energy_May_2011_v1.pdf (identifying "lack of financial incentives to conserve" and "lack of funds for water efficiency measures" as two of the four primary barriers to urban water conservation).

- ⁹⁵ Assemb. B. Amend. 474, 2009-2010 Leg., Reg. Sess. (Cal. 2009-2010). In fact, the legislation allows financing for stormwater.
- ⁹⁶ S.B. 624, 2009-2010 Leg., Reg. Sess. (Wis. 2010).
- ⁹⁷ See Pat Fox, *Lake Lanier water level shrinks to three-year low*, ATLANTA JOURNAL CONSTITUTION (Apr. 6, 2013), <http://www.ajc.com/news/news/lake-lanier-water-level-sinks-to-three-year-low/nTGCd/>; Shalia Dewan & Brenda Goodman, *New to Being Dry, the South Struggles to Adapt*, N.Y. TIMES, Oct. 23, 2007, at A1.
- ⁹⁸ In re Tri-State Water Rights Litig., 639 F. Supp. 2d 1308 (M.D. Fla. 2009).
- ⁹⁹ H.B. 1388, 150th Gen. Assemb., Reg. Sess. (Ga. 2010).
- ¹⁰⁰ The Arizona bill, H.B. 2584, failed but would have permitted financing of improvements capable of making properties “more . . . water efficient or independent, including . . . water conservation systems or water resource management systems.” H.B. 2584 § 48-751(5), 51st Leg., Reg. Sess. (Ariz. 2013)
- ¹⁰¹ S.B. 640, 89th Gen. Assemb., Reg. Sess. (Ark. 2013).
- ¹⁰² S. 177, 188th Gen. Ct., Reg. Sess. (Mass. 2013).
- ¹⁰³ This paper defines the Western states as the continental states that belong to the Western Governors’ Association.
- ¹⁰⁴ California, Colorado, New Mexico, Nevada, Oklahoma, Oregon, Texas, Utah and Wyoming.
- ¹⁰⁵ S.B. 221, 2013 Leg., Gen. Sess. (Utah 2013).
- ¹⁰⁶ *Id.* at Sec. 1 (19)(i-j).
- ¹⁰⁷ Natural utilities, etc.
- ¹⁰⁸ *E.g.*, Elkind, *supra* note 97, at 1, 5-9; AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY, ADDRESSING THE ENERGY-WATER NEXUS: A BLUEPRINT FOR ACTION AND POLICY AGENDA 5 (May 2011); Michael E. Webber, *Will Drought Cause the Next Blackout?*, N.Y. TIMES, July 23, 2012, at A21.
- ¹⁰⁹ D’ANN PETERSEN & LAILA ASSANIE, FED. RESERVE BANK OF DALLAS, THE CHANGING FACE OF TEXAS: POPULATION PROJECTIONS AND IMPLICATIONS 38 (Oct. 2005).
- ¹¹⁰ ROSS C. DEVOL, ET AL, MILKEN INSTITUTE, BEST-PERFORMING CITIES 2012: WHERE AMERICA’S JOBS ARE CREATED AND SUSTAINED 1 (2012), available at <http://www.milkeninstitute.org/pdf/Best-Performing-Cities-Report-2012.pdf>.
- ¹¹¹ *E.g.*, *Growth is Texas’ Secret*, ECONOMIST (Aug. 17, 2011), <http://www.economist.com/blogs/freeexchange/2011/08/labour-markets-1>.
- ¹¹² SAMUEL NEWELL, ET AL, BRATTLE GROUP, ERCOT INVESTMENT INCENTIVES AND RESOURCE ADEQUACY 1 (June 1, 2012), available at <http://www.ercot.com/content/news/presentations/2012/Brattle%20ERCOT%20Resource%20Adequacy%20Review%20-%202012-06-01.pdf>.
- ¹¹³ *E.g.*, Terrence Henry, *So, About that Chance of Rolling Blackouts...*, STATE IMPACT TEXAS, July 10, 2012, <http://stateimpact.npr.org/texas/2012/07/10/ercot-so-about-that-chance-of-rolling-blackouts>.
- ¹¹⁴ Elizabeth Souder, *Here’s How Texas Electricity Regulators Propose Keeping the Lights On: Higher Prices, Strategic Conservation*, DALLAS MORNING NEWS, August 25, 2012, <http://www.dallasnews.com/business/energy/20120825-heres-how-texas-electricity-regulators-propose-keeping-the-lights-on-higher-prices-strategic-conservation.ece>.
- ¹¹⁵ Matthew Tresaugue, *Texas Drought Could Rival State’s Worst Dry Years*, HOUSTON CHRON., Feb. 5, 2013, <http://www.chron.com/news/article/Texas-drought-could-rival-state-s-worst-dry-years-4253137.php>.
- ¹¹⁶ Texas Water Development Board, *Water for Texas 2012: State Water Plan*, 6 (2012); but see Mary Kelly, *Behind the Scary Water Headlines*, AUSTIN AMERICAN STATESMAN, Dec. 15, 2012, available at <http://www.statesman.com/news/news/opinion/behind-the-scary-water-headlines/nTSRX/>.
- ¹¹⁷ Nick Swartsell, *Texas House Speaker Promises Water Focus*, TEXAS TRIB., Sept. 25, 2012, available at <http://joetraus.org/2012/09/texas-tribune-column-texas-house-speaker-promises-water-focus/>.
- ¹¹⁸ Melinda Taylor and Jeremy Brown, *It’s Time to Link Funding for Water Projects to Conservation*, HOUSTON CHRONICLE, March 28, 2013, <http://www.chron.com/opinion/outlook/article/It-s-time-to-link-funding-for-water-projects-to-4392636.php>.
- ¹¹⁹ S.B. 198, 83rd Leg., Reg. Sess. (Tex. 2013), available at <http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=83R&Bill=SB198>.
- ¹²⁰ H.B. 2277, 83rd Leg., Reg. Sess. (Tex. 2013), available at <http://www.capitol.state.tx.us/tlodocs/83R/billtext/pdf/HB02277I.pdf#navpanes=0>.
- ¹²¹ H.B. 4, 83rd Leg., Reg. Sess. (Tex. 2013), available at <http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=83R&Bill=HB4>.

¹²² See Press Release, Thompson & Knight, T&K Organizes Support for Water Conservation, Energy Efficiency Legislation (Feb. 18, 2013) available at <http://www.tklaw.com/tk-organizes-support-for-water-conservation-energy-efficiency-legislation-02-18-2013/>.

¹²³ AMERICAN COUNCIL FOR AN ENERGY EFFICIENT ECONOMY, *Property Assessed Clean Energy (PACE)*, <http://aceee.org/sector/state-policy/toolkit/pace> (last visited Apr. 15, 2013, 3:00 pm).

¹²⁴ Witness List SB 385, Senate Committee Report, Intergovernmental Relations, 83rd Leg., Reg. Sess. (Tex. 2013), available at <http://www.capitol.state.tx.us/tlodocs/83R/witlistbill/pdf/SB00385S.pdf#navpanes=0>.

¹²⁵ *Id.*

¹²⁶ Letter from Michael Gromacki, V.P. of Operations, Dixie Chemical Co., to Chuy Hinojosa, Chairman, Committee on Intergovernmental Affairs (Feb. 25, 2013), available at <http://www.tklaw.com/files/uploads/Documents/Letter%20of%20Support%20from%20Dixie%20Chemical.pdf>.

¹²⁷ Witness List SB 385, *supra* note 129.

¹²⁸ The Real Estate Council of San Antonio, the Texas Building Owners and Managers Association, the Texas Bankers Association and the Independent Bankers Association of Texas have all expressed support. *Id.*

¹²⁹ For the operational nuts and bolts of launching PACE programs, see MERRIAN FULLER ET AL., UC BERKLEY, GUIDE TO ENERGY EFFICIENCY AND RENEWABLE ENERGY FINANCING DISTRICTS (Sept. 2009), available at <http://rael.berkeley.edu/sites/default/files/berkeleySolar/HowTo.pdf>

¹³⁰ H.B. 1937, Sec. 36.001(2), 81st Leg., Reg. Sess. (Tex. 2009),

¹³¹ E.g., Exec. Order No. 13514, 74 Fed. Reg. 52117 (October 8, 2009) available at

http://www.whitehouse.gov/assets/documents/2009fedleader_eo_rel.pdf; Georgia Governor Signs Green Building Standards Executive Order, Am. Tree Farm System (Aug. 15, 2012), <http://www.treefarmssystem.org/georgia-green-building-executive-order>; State of Maine, Office of Governor, Order Regarding the Use of Green Building Standards in State Buildings (Dec. 7, 2011), available at

http://www.maine.gov/tools/whatsnew/index.php?topic=Gov_Executive_Orders&id=323510&v=article2011; Tex.

TEX. COMP. PUB. ACCTS., STATE ENERGY CONSERVATION OFFICE, WATER EFFICIENCY STANDARDS FOR STATE BUILDINGS AND INSTITUTIONS OF HIGHER EDUCATION FACILITIES 5 (Jan. 2011), available at

http://www.seco.cpa.state.tx.us/tbec/docs/SECO_Water_Standards.pdf.

¹³² TEX. GEN. LAND OFFICE, *State Land Reports*, <http://www.glo.texas.gov/what-we-do/state-lands/state-land-reports/index.html> (last visited Apr. 12, 2013).

¹³³ TEX. CONST. art III, sec. 52(a) (West 2012).

¹³⁴ E.g., *Tex. Mun. League Intergov'tl Risk Pool v. Tex. Workers' Comp. Comm'n*, 74 S.W.3d 377, 383 (Tex. 2002); *Walker v. City of Georgetown*, 86 S.W.3d 249, 260 (Tx. Ct. App. 2002).

¹³⁵ H. J. Res. 142, 83rd Leg., Reg. Sess. (Tex. 2013), available at

<http://www.capitol.state.tx.us/BillLookup/History.aspx?LegSess=83R&Bill=HJR142>.

¹³⁶ But Article III, Section 52-a of the state constitution empowers the legislature to finance “the public purposes of development and diversification of the economy of the state, the elimination of unemployment or underemployment in the state, the stimulation of agricultural innovation, the fostering of the growth of enterprises based on agriculture, or the development or expansion of transportation or commerce in the state.” TEX. CONST. art III, sec. 52-a (West 2012).

¹³⁷ H.B. 2626, Sec. 2(2)(f), 75th Leg. Assemb., Reg. Sess. (Or. 2009).

¹³⁸ H.B. 10-1328, 32-20-102, 2010 Gen. Assemb., Reg. Sess. (Colo. 2010).

¹³⁹ S.B. 640, Sec. 1, 8-15-102(5), 89th Gen. Assemb., Reg. Sess. (Ark. 2013).

¹⁴⁰ While Section 52-a does not expressly call out environmental impacts, its emphasis on economic development indirectly signals the significance of the environmental resources needed to sustain economic development. See TEX. CONST. art III, sec. 52-a, *supra* note 142. Much of the momentum to implement the SWP comes from concerns that future water shortfalls could crimp the state economy. E.g., Laylan Copelin, *Could water, power woes threaten state's economy*, AUSTIN AMERICAN-STATESMAN, Jan. 10, 2013, available at

<http://www.statesman.com/news/business/could-water-power-woes-threaten-states-economy/nRjcW>.

¹⁴¹ The gift clause poses the most significant constitutional hurdle. PACE would comport with other constitutional considerations such as the federal contracts and due process clauses. SANJAY RANCHOD, ET AL, PAUL, HASTINGS, JANOFSKY & WALKER LLP, THE CONSTITUTIONALITY OF PROPERTY ASSESSED CLEAN ENERGY (PACE) PROGRAMS UNDER FEDERAL AND CALIFORNIA LAW 6 (May 2010), available at <http://pacenow.org/wp-content/uploads/2012/07/PHJW-PACE-White-Paper-5.28.10-final.pdf>.

¹⁴² Tex. Op. Att’y Gen. No. GA-0528 (March 8, 2007).

¹⁴³ *Id.* at 3.

¹⁴⁴ *Id.*

¹⁴⁵ In this respect, the S.B. 385 is similar to the Michigan PACE enabling statute. *See* H.B. 5640, 95th Leg., Reg. Sess. (Mich. 2010).

¹⁴⁶ In addition to the Oregon and Colorado findings quoted above, *see also, e.g.*, D.C. CODE § 8-1778.02 (2012) (“Energy conservation efforts, including promotion of Energy Efficiency Improvements to residential, commercial, and other real property, are necessary to address the issue of global climate change and to reduce the consumers’ energy costs”).

¹⁴⁷ S.B. 385, Sec. 399.011(a), 83rd Leg., Reg. Sess. (Tex. 2013).

¹⁴⁸ *Id.* at Sec. 399.011(b).

¹⁴⁹ *See, e.g.*, D.C. CODE § 8-1778.46 (2012) (“Establishment of Quality Control Program”).

¹⁵⁰ *See* ENERGI, RISK MITIGATION REFERENCE GUIDE FOR NEW ENERGY FINANCING (2012), *available at* http://www.energi.com/alt_webinar.php; ANTHONY J. BUONICORE, BEPANEWS, ENERGY SAVINGS INSURANCE AND THE NEW ASTM BEPA STANDARD (Nov. 15, 2011); Evan Mills, *Risk Transfer Via Energy-Savings Insurance*, 31 ENERGY POLICY 273 (2002); STEFAN MUELLER, SUSTAINABLE ENTERPRISE MANAGEMENT, INSURING ENERGY EFFICIENCY: HOW INSURERS CAN ENABLE A SHIFT TOWARDS ENERGY EFFICIENT BUILDINGS AND MANUFACTURING (undated), *available at* http://www.sem-advisors.com/files/Insuring_Energy_Efficiency_2011.pdf.

¹⁵¹ S.B. 385, *supra* note 155, at Sec. 399.010

¹⁵² *E.g.*, VERMONT PUB. SERV. DEP’T., COMMERCIAL PACE (PROPERTY ASSESSED CLEAN ENERGY) STUDY 1 (January 2013), *available at* <http://www.leg.state.vt.us/reports/2013ExternalReports/285688.pdf>.

¹⁵³ 77 Fed. Reg. 36091; Sofia V. Dermisi, *Effect of LEED Ratings and Levels on Office Property Assessed and Market Values*, 1 JOURNAL OF SUSTAINABLE REAL ESTATE 24 (2009).

¹⁵⁴ *See* U.S. DEP’T. OF ENERGY, GUIDELINES FOR PILOT PACE FINANCING PROGRAMS (May 2010), *available at* http://www1.eere.energy.gov/wip/pdfs/arra_guidelines_for_pilot_pace_programs.pdf; ANTHONY J. BUONICORE, BEPANEWS, EMERGING BEST PRACTICE FOR UNDERWRITING COMMERCIALY-ATTRACTIVE ENERGY EFFICIENCY LOANS (2012), *available at* http://www.srmnetwork.com/wp-content/uploads/Whitepaper_Underwriting_EE_Loans_FINAL_04-20-12.pdf.

¹⁵⁵ S.B. 385, *supra* note 155, at Sec. 399.009(a)(10).

¹⁵⁶ *Id.* at Sec. 399.009(b)(1).

¹⁵⁷ *Id.* at Sec. 399.009(b)(2).

¹⁵⁸ This chart reflects PACE programs as of April 12, 2013. *Pace Programs*, PACENow, <http://pacenow.org/pace-programs> (last visited Apr. 12, 2013).

¹⁵⁹ Enabling legislation was recently passed. S.B. 640, 89th Gen. Assemb., Reg. Sess. (Ark. 2013).

¹⁶⁰ Boulder County, Colorado, launched a pioneer PACE system but later suspended it because of the FHFA directive and related uncertainty. Laura Snider, *Future brightens for Boulder County's defunct ClimateSmart Loan Program*, DAILY CAMERA, Sept. 10, 2011, http://www.dailycamera.com/boulder-county-news/ci_18867313.

¹⁶¹ Legislation recently failed. H.B. 2584 § 48-751(5), 51st Leg., Reg. Sess. (Ariz. 2013)

¹⁶² Preexisting statutes permitted PACE financing. Hawaii did not need to pass PACE-specific legislation.