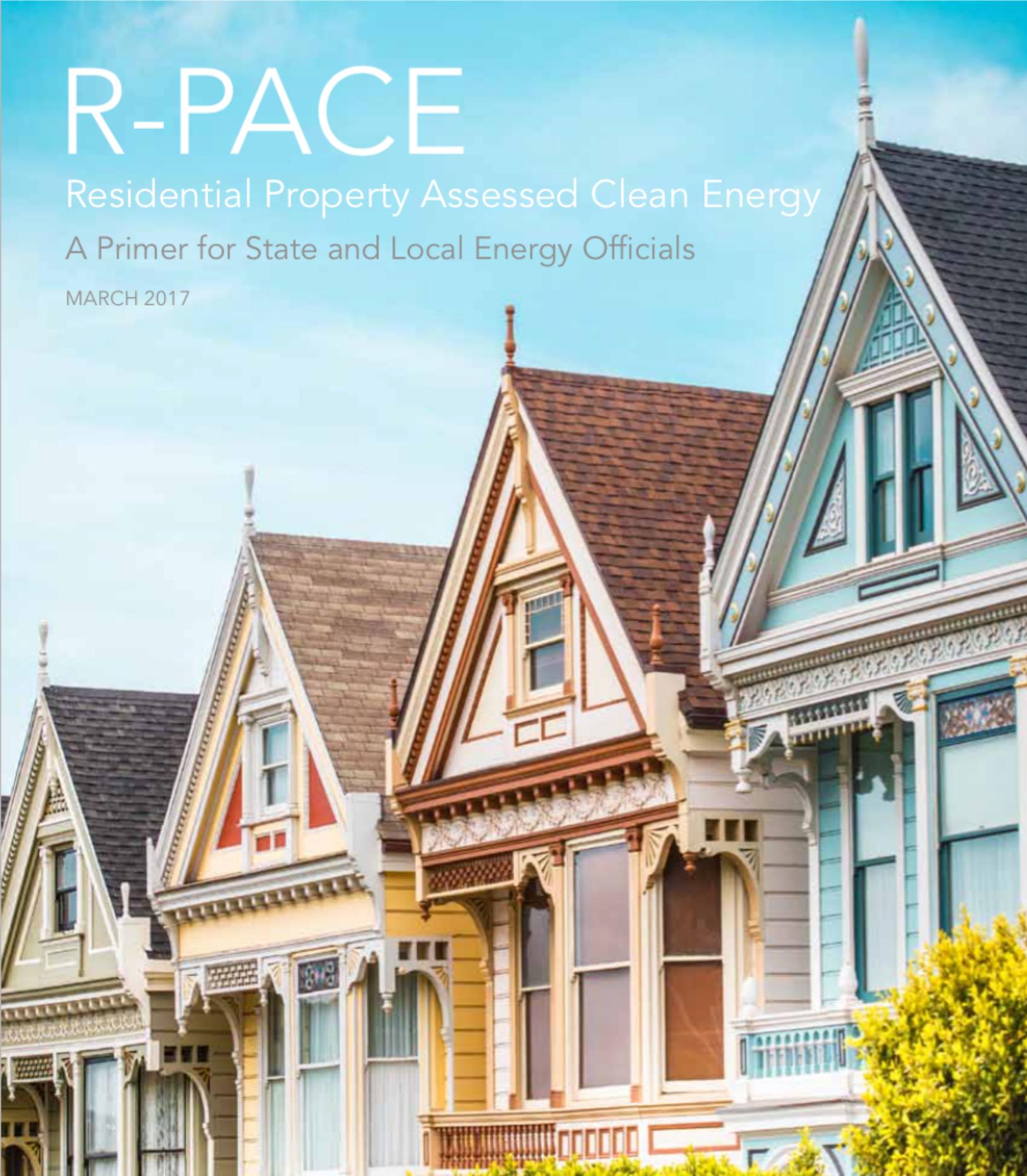


# R-PACE

Residential Property Assessed Clean Energy  
A Primer for State and Local Energy Officials

MARCH 2017



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## About Energy Programs Consortium (EPC)

The purpose of the Energy Programs Consortium (EPC) is to foster coordination and cooperation among state and federal agencies in the areas of energy policy and program development. EPC is a joint venture of the National Association of State Community Services Programs (NASCS), representing the state weatherization and community service programs directors; the National Association of State Energy Officials (NASEO), representing the state energy policy directors; the National Association of Regulatory Utility Commissioners (NARUC), representing the state public service commissioners; and the National Energy Assistance Directors' Association (NEADA), representing the state directors of the Low Income Home Energy Assistance Program.

EPC provides technical assistance to states to develop, implement and oversee energy efficiency, water conservation, transportation, resilience and renewable finance programs. We examine options for states to issue bonds to support the financing of energy projects. We also coordinate efforts with the U.S. Department of Energy (DOE), the National Renewable Energy Laboratory (NREL) and Lawrence Berkeley National Laboratory (LBNL) to provide model documents and other QECB resources.

If you would like more information or if you have information about PACE to share, please contact PACE Program Director Elizabeth Bellis at [ebellis@energyprograms.org](mailto:ebellis@energyprograms.org).

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# EXECUTIVE SUMMARY

The purpose of this report is to provide state and local government officials with a comprehensive resource on residential PACE history, legal and financing structures, terms, and administrators. The report describes how the program works, how local governments can set up their own programs, and how they are financed. The report further describes R-PACE's growth, the legal challenges it has faced thus far, and consumer protection concerns that have been raised by consumer advocates.

The report also addresses frequently asked questions about R-PACE covering key administrative topics such as FICO scores of borrowers and information on contract provisions set by different providers including interest rates, prepayment fees, borrowing limits, amount of assessments issued by administrator, and types of allowable improvements. Finally, the report draws conclusions summarizing the most important findings for state and local government officials and provides detailed appendices covering specific legal, policy, and contract questions.

## KEY FINDINGS

**LOAN VOLUME.** Since the launch of the first R-PACE programs in 2008, R-PACE programs have financed more than 132,000 energy retrofits and lent out more than \$3.3 billion, making R-PACE one of the fastest-growing forms of energy efficiency and renewable energy financing in the United States. Of this amount, \$2.85 billion was originated in the last two years.

**TYPES OF IMPROVEMENTS FINANCED.** As of January 2017, 58 percent of R-PACE projects financed were energy efficiency, 37 percent were renewable energy, and 5 percent were water improvements and related improvements.

**MAXIMUM LOAN AMOUNT.** Maximum loan amounts vary by program and by state. In all California R-PACE programs, the maximum loan amount is capped at 15 percent of the first \$700,000 in property value and 10 percent of any remaining property value over \$700,000. In several Florida PACE programs, the maximum loan amount is capped at 20 percent of the property value.

**GEOGRAPHICAL DISTRIBUTION.** Twenty-five states plus the District of Columbia have R-PACE enabling legislation and projects are currently being financed in 5 states. Senior-lien residential PACE programs have been established in California, Florida, and Missouri. Subordinate-lien programs have been established in Vermont and Maine.

**LIEN ISSUES.** R-PACE has been criticized by the Federal Housing Finance Agency (FHFA), mortgage lenders, and realtors for the risk posed to mortgage holders by the existence of a first-lien R-PACE obligation on a property; in 2010, FHFA, the conservator of Fannie Mae and Freddie Mac, directed them not to purchase or insure mortgages with first-lien R-PACE assessments. In response, California created a loss reserve to address potential first lien losses, while Vermont and Maine established subordinate or second lien programs as an acceptable alternative. In July 2016, the Federal Housing Administration and the Department of Veterans Affairs announced that they would back mortgages on homes with first-lien R-PACE assessments.

After FHFA's opposition, Sonoma County challenged FHFA in court, arguing that FHFA was acting as a regulator in its directive rather than as conservator. The court ruled in favor of FHFA and California subsequently established a \$10 million residential PACE loss reserve fund that FHFA has indicated as insufficient. All California R-PACE programs have since sought judicial validation from California courts and all have affirmed. In Florida, a number of cases challenging the legal validity of residential PACE programs were dismissed and its programs have obtained validation in the courts as well.

**INTEREST RATES.** As of January 2017, interest rates for active senior-lien residential PACE programs range between 6 and 9 percent. As a point of reference, interest rates on home equity loans are around 5 percent as of February 2017. In addition, there have been 15 R-PACE securitizations to date (by Renovate America, Renew Financial, and Ygrene), with coupons ranging between 3 and 5 percent.

**CLOSING COSTS.** R-PACE financing can have many associated program fees. Typical fees include: a recording fee, an annual administrative fee, an origination fee, a title search fee, and a bond reserve deposit. Final closing costs are usually dependent on the size of the financing.

**LOW DELINQUENCY AND DEFAULTS.** Delinquency and default rates on R-PACE assessments are low. Defaults on R-PACE bond deals are currently less than one percent. However, R-PACE assessments are still relatively new and there is insufficient historical performance data to make any concrete claims about defaults and delinquencies as loan performance may not be linear through time.

**CONSUMER PROTECTION CONCERNS.** Existing consumer protection policies common to most active R-PACE programs include: full disclosure of estimated assessment amount, annual installments, and fees; disclosure of the impact a residential PACE lien can have on refinancing and sale; verification that contractors have the necessary licenses and permits; third party verification of workmanship; a three-day right to cancel; and a dispute resolution process.

In September 2016, California passed a law to increase consumer protections beginning in 2017. In addition, several organizations have released consumer protection recommendations, including PACENation, National Consumer Law Center, and the U.S. Department of Energy. Key areas recommended include: adding an ability to pay requirement; combining R-PACE financing with other incentives, grants, and assistance; monitoring contractors for quality assurance and anti-fraud; disclosing all relevant program information; and collecting data on projects funded, energy savings, emissions reduction, default and delinquency, and mortgage default.

**CONCLUSION.** In order to address the concerns of consumer advocacy organizations and strengthen R-PACE programs, EPC recommends a national oversight body or committee to act as a third-party monitor and ensure adequate consumer protections and more coordinated governmental oversight as PACE expands its reach into low and moderate income homeowner communities. EPC also recommends state and local governments consider requiring PACE administrators to provide some of the suggested consumer protections to ensure the programs are best serving their residents.

# I. INTRODUCTION



## 1 What is PACE?

Property Assessed Clean Energy (PACE) is a financing option for energy efficiency, water conservation and renewable energy measures that serves as an alternative to traditional loan structures. PACE allows property owners to finance such measures by means of an assessment added to the property's tax bill secured by the same type of lien against the property as tax bills. In the event that the property is sold, the lien may be transferred to the new owner.

PACE is growing rapidly. A recent Wall Street Journal article<sup>1</sup> reported:

*About \$3.4 billion has been lent so far for residential projects, and industry executives predict the total will double within the next year. That would likely rank PACE loans as the fastest-growing type of financing in the U.S.*

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<sup>1</sup> <http://www.wsj.com/articles/americas-fastest-growing-loan-category-has-eerie-echoes-of-subprime-crisis-1484060984>

The purpose of this report is to provide state and local government officials with a comprehensive resource on residential PACE history, legal and financing structures, terms and administrators. The first part of the report, the Introduction, will describe how PACE works, how local governments can set up their own PACE programs, and how PACE programs are financed. The following section, History of PACE, will describe PACE's growth, the legal challenges it has faced thus far, and consumer protection concerns that have been raised by consumer advocates. The third section provides brief answers to twenty-nine frequently asked questions about PACE. Finally, we draw some conclusions and provide detailed appendices covering specific legal, policy, and contract questions.

## 2 How does PACE Work?

After a state passes the requisite<sup>2</sup> authorizing legislation and local governments pass resolutions to set up PACE districts and PACE programs, property owners interested in installing home efficiency improvements can apply for PACE financing. Approved property owners can then install their projects with a program-approved contractor at no initial cost. The amounts borrowed to finance the improvement(s) are repaid gradually through the property owner's property tax bills; the PACE assessment appears as an additional line item on the bill. If property taxes are escrowed, monthly payments to the escrow account will generally be adjusted to include the amount due for PACE financing.<sup>3</sup>

PACE assessments can last up to 30 years, depending on the program administrator, but cannot exceed the useful life of the equipment installed. Longer loan terms spread repayment schedules over many years, increasing the ratio of monthly utility savings to monthly payments such that some PACE-financed improvements may be cash flow positive.<sup>4</sup>

As a tax assessment, the standard PACE lien is senior to any mortgage lien on the property and is *pari passu*, or on equal footing, with other tax liens. This means that if a homeowner does not pay a PACE installment, the PACE administrator may initiate a foreclosure action to sell the home and use the sale proceeds to cover the unpaid amounts due. This priority lien position may reduce the cost of capital for PACE programs by providing security for investors.<sup>5</sup>

If the property owner sells the building before the end of the financing term, the remainder of the PACE assessment, in a traditional PACE structure, may remain on the property tax bill and transfer to the new owner.<sup>6</sup>

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<sup>2</sup> Most states require a change to state statute to allow local governments to adopt PACE programs. States have to establish law enabling local governments to create special assessment districts that recognize energy efficiency and renewable energy as public "goods". See <http://my.solarroadmap.com/userfiles/PACE-enabling-legislation-Vote-Solar.pdf> and <http://www.nrel.gov/docs/fy10osti/47097.pdf>

<sup>3</sup> Call to HERO Call Center, January 4, 2017.

<sup>4</sup> <http://energycenter.org/policy/property-assessed-clean-energy-pace>

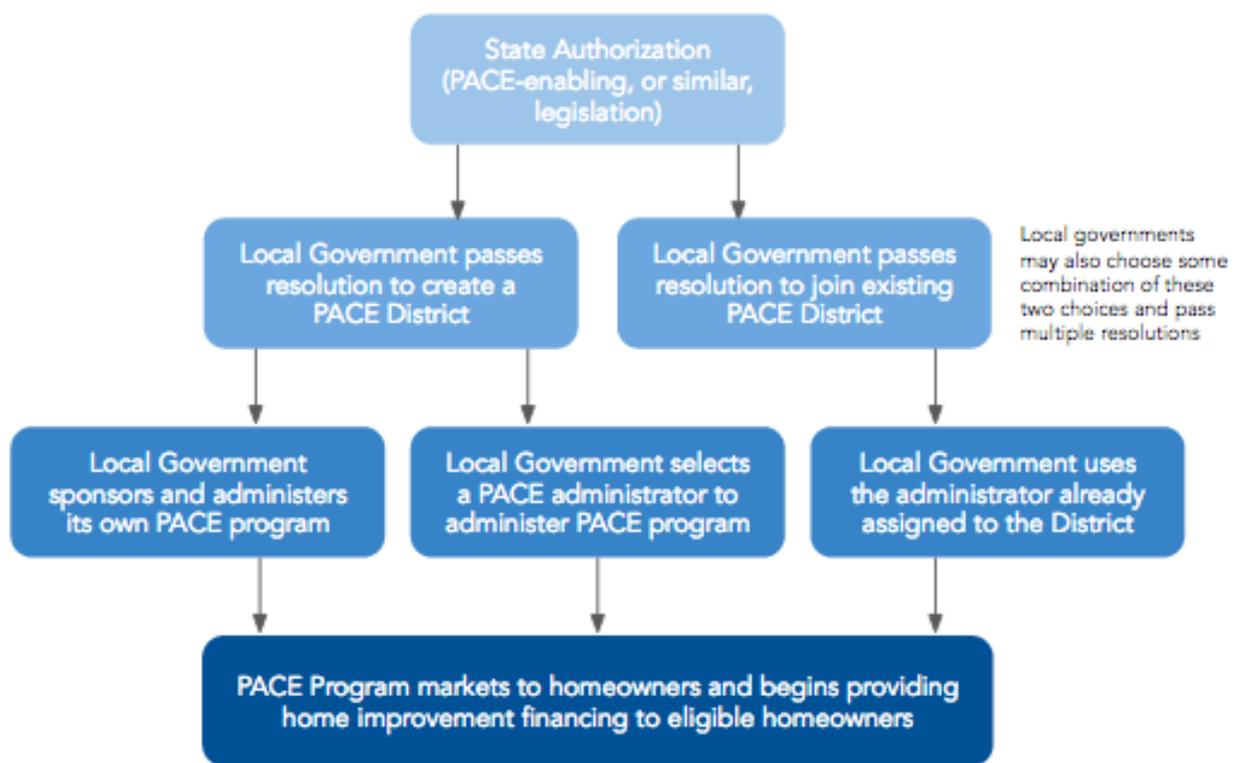
<sup>5</sup> [http://lawreview.colorado.edu/wp-content/uploads/2013/11/9.-Cox-FINAL\\_s.pdf](http://lawreview.colorado.edu/wp-content/uploads/2013/11/9.-Cox-FINAL_s.pdf)

<sup>6</sup> There are transfer risks associated with PACE financing. In the event of a sale, a PACE homeowner may be required to pay off the remaining balance of the PACE financing at the request of the seller. If not, the seller may instead offer a lower price for the home to compensate for the responsibility of paying off future PACE payments.

In the case of default, PACE assessments do not accelerate.<sup>7</sup> That is, in the event of nonpayment or foreclosure, only those payments past due are due for payment and the rest of the assessment and the lien generally remain with the property and become the responsibility of the transferee unless paid off at transfer. Nonpayment of a PACE assessment can result in the PACE financier initiating a foreclosure proceeding against the property owner, but at least one PACE administrator has a forbearance policy.<sup>8</sup> To date, EPC is not aware of any completed foreclosures against PACE assessees solely due to nonpayment of property taxes that include a PACE assessment. We welcome and are grateful for any information you might have to share with us in this regard.

### 3 How can a state or local government set up a PACE program?

Figure 1: Setting Up a PACE Program



Setting up a PACE program involves a number of actors, including: the **state government**, which authorizes PACE (typically via legislation); the **local government**, which passes a resolution to create or join a PACE district; a **PACE district**, which selects one or more PACE administrators; and a **PACE administrator**, who actually operates the PACE program and oversees day-to-day functions.

(See “Keeping PACE?: The Case Against Property Assessed Clean Energy Financing Programs”, Prentiss Cox, University of Colorado Law Review, 2013, [http://lawreview.colorado.edu/wp-content/uploads/2013/11/9.-Cox-FINAL\\_s.pdf](http://lawreview.colorado.edu/wp-content/uploads/2013/11/9.-Cox-FINAL_s.pdf))

<sup>7</sup> <http://pacenation.us/wp-content/uploads/2013/02/PACE-FHFA-Concerns-Responses.pdf>; <http://pace-equity.com/how-pace-works/>

<sup>8</sup> Ygrene Energy Fund has indicated that they have internal forbearance policies.

The first step in the process is state authorization.<sup>9</sup> In California, for example, local governments can authorize PACE pursuant to either of two statutes: the Improvement Act of 1911 as amended by Assembly Bill 811 (Streets and Highways Code Section 5898.10 et seq.) (“AB 811”)<sup>10</sup> or the Mello-Roos Community Facilities Act of 1982 as amended by Senate Bill 555 (Government Code Section 53311 et seq.) (“SB 555”).<sup>11</sup> Berkeley Financing Initiative for Renewable and Solar Technology (FIRST)<sup>12</sup> was created under the Mello-Roos Act.<sup>13</sup> The Palm Desert program<sup>14</sup> was created under AB 811.

To facilitate PACE financing, local governments generally utilize an existing legal structure known as the “land-secured financing district” which has traditionally been used to finance public goods such as sidewalks, streetlights, sewer systems, and underground utility lines. This district is the legal entity that enters into PACE assessment agreements with homeowners and, in many cases, also issues municipal bonds to finance the PACE program. Land-secured financing districts are also often referred to as “assessment districts” or “local improvement districts”; in the context of PACE financing, such districts are known as “PACE districts”.

A local government may establish a PACE district within its jurisdiction and sponsor and administer the PACE program itself.<sup>15</sup> Its program may then also be offered to other local governments through joint powers and shared services agreements. More commonly, local governments join one or more existing statewide or multi-jurisdictional PACE district(s),<sup>16</sup> and third-party, private sector PACE companies may administer PACE financing in the local government’s jurisdiction without as extensive local government involvement.<sup>17</sup>

When a local government chooses to join a multi-jurisdictional PACE program, it must typically pass a resolution of participation in a program and become a member of the PACE district (see Appendix A for an example of a resolution from PACE district, California Statewide Communities Development Authority/CSCDA). The local government is not a party to the financing and is not responsible for the conduct of any assessment proceedings, the levy of assessments, any required remedial action in the case of delinquencies in such assessment payments or the issuance, sale, guarantee or administration

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<sup>9</sup> See <http://pacenation.us/pace-legislation/> for a full list of PACE-enabling legislation by state. See <http://city.lighthousepoint.com/wp-content/uploads/2016/06/Memo-Regarding-Liability-of-Local-Governments.pdf>.

<sup>10</sup> [http://www.leginfo.ca.gov/pub/07-08/bill/asm/ab\\_0801-0850/ab\\_811\\_bill\\_20080721\\_chaptered.html](http://www.leginfo.ca.gov/pub/07-08/bill/asm/ab_0801-0850/ab_811_bill_20080721_chaptered.html)

<sup>11</sup> [http://www.abag.ca.gov/bayren/pace/pdfs/sb\\_555\\_bill\\_20111006\\_chaptered.pdf](http://www.abag.ca.gov/bayren/pace/pdfs/sb_555_bill_20111006_chaptered.pdf)

<sup>12</sup> BerkeleyFIRST and Palm Desert were the first two programs created. BerkeleyFIRST has since become a part of CaliforniaFIRST.

<sup>13</sup> As a charter city, Berkeley was able to utilize the Mello-Roos Act prior to the passage of SB 555. A charter city is a city whose governing system and management of municipal affairs is defined by the city’s own charter document rather than by state, regional, or federal laws. Draft Comments from Jenine Windeshausen (mPOWER), January 27, 2017.

<sup>14</sup> Palm Desert’s PACE program has since become a part of Ygrene Works.

<sup>15</sup> Examples of this approach include Sonoma County Energy Independence Program (SCEIP), CA and the mPOWER program administered by Placer County’s Treasurer-Tax Collector, which is offered in Placer, Nevada, and Sacramento Counties, and in the City of Folsom in Sacramento County, CA.

<sup>16</sup> The PACE district may be an existing organization of local governments, an existing statewide housing finance-related organization, or an organization established solely for the purpose of administering a PACE program. Three states, California, Florida, and Missouri, currently offer statewide PACE districts.

<sup>17</sup> See FAQ 3 and 4.

of any bonds issued in connection with the PACE program.<sup>18</sup> The local government is also not directly involved in the marketing of the PACE program but most generate awareness of the program and promote it as part of broader efforts to encourage energy efficiency and water conservation.

However, the local tax collector is responsible for current collections and for defaulted collections if the PACE lienholder fails to remove the PACE lien from the property tax rolls to enforce collection through foreclosure sale. California tax collectors have also found that the placement of PACE liens on the property tax rolls does increase calls to the various tax collector offices, especially in cases where consumers did not fully understand that PACE funding is a lien and that it would appear on property taxes. In addition, the tax collector becomes involved when defaults occur as directed by each state's tax law.<sup>19</sup> Also, in California, the county auditors who add PACE assessments to the property tax roll are impacted when PACE liens must be corrected or removed from the property tax rolls.<sup>20</sup>

#### 4 Where does a local government (or PACE administrator) get the funds used to provide homeowners financing through a PACE program?

Many PACE programs are financed by the issuance of PACE bonds. These bonds are typically limited obligation improvement bonds issued by the PACE district and purchased by the PACE administrator.<sup>21</sup> The PACE assessments serve as the security for the bonds.

Some states, including California and Florida, required judicial validation<sup>22</sup> of the program to confirm that the PACE district has legal approval to provide its services and issue debt to finance PACE assessments. This validation process<sup>23</sup> may preempt some future legal challenges, helps protect the local government from liability associated with PACE assessments, and reassures investors about the security of the assessments.

PACE administrators also participate in the securitization of PACE bonds, selling them to investors in the secondary market. This frees up capital that can then be used to purchase more PACE bonds from the PACE districts. These securitizations may be placed publicly (as by Renovate America) or privately (as by Renew Financial and Ygrene Energy Fund). See Appendix H for more discussion of the securitization of PACE bonds.

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<sup>18</sup> <http://www.dbrs.com/research/282751/rating-u-s-property-assessed-clean-energy-pace-securitizations.pdf>

<sup>19</sup> Draft Comments from Alexia Retallack (mPOWER), January 25, 2017.

<sup>20</sup> Draft Comments from Jenine Windeshausen (mPOWER), January 27, 2017.

<sup>21</sup> SCEIP and mPOWER are exceptions. SCEIP's bonds are purchased by the County Treasury and County Water Agency. mPOWER's bonds are purchased by the County Treasury.

<sup>22</sup> For example, all of the PACE programs operating in California have sought judicial validation. The PACE Bond Issuers obtained judicial validation of their PACE programs in the Superior Courts of Placer, Sacramento, Riverside, San Bernardino, and LA counties. Judgments made in July 2011, August 2013, April 2016, and April 2015 confirmed the legality of PACE assessments under California law in the WRCOG, SANBAG, California HERO, and LA County PACE programs, respectively. Judgements made in 2013, 2014, and 2015 confirmed the legality of PACE special taxes under California law in the Sacramento, Yolo, CVAG, and Golden State Finance Authority (statewide) programs, respectively.

<sup>23</sup> Some states, like California and Florida, require judicial validation. Others, like Missouri and Colorado, do not. Draft Comments from Michael Yaki (Renovate America), January 18, 2017.

## 5 Where has Residential PACE financing been used?

As of January 2017, 25 states have enabling legislation authorizing residential PACE.<sup>24</sup> To date, residential PACE projects have been financed in at least 7 states (California, Florida, Missouri, New York, Colorado, Vermont, and Maine). The five states with active residential PACE programs are: California, Florida, Missouri, Vermont, and Maine. Of these, California, Florida, and Missouri are senior lien programs while Vermont and Maine maintain subordinate lien programs.

The town of Babylon in New York had a PACE program that financed more than 650 loans as of March 2012<sup>25</sup> but the program has since changed to a direct loan model. As of January 2017, New York does not have an active residential program though it does have an active commercial program.

A senior-lien residential PACE program once existed in Colorado as well. The ClimateSmart Loan Program was launched in 2009 in Boulder County. However, it was suspended in 2010 after FHFA expressed its opposition to first-lien PACE financing.<sup>26</sup>

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<sup>24</sup> <http://pacenation.us/pace-programs/residential/>

<sup>25</sup> <https://www.cga.ct.gov/2012/rpt/2012-R-0133.htm>

<sup>26</sup> See Section II.4.C for more information about PACE in Colorado.

## II. HISTORY OF PACE



### 1 Growth in PACE

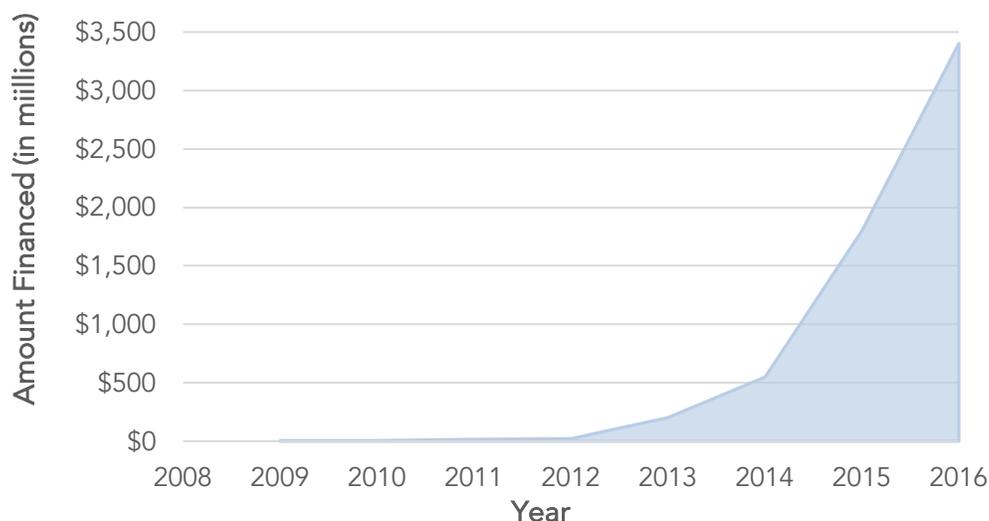
Since its conception in 2007, PACE has grown rapidly into a multibillion-dollar industry (see Figure 2). The first PACE programs used the financing structure that would later become known as PACE to finance solar photovoltaic (PV) installations.<sup>27</sup> The idea caught on and within 3 years as many as 24 states had passed PACE-enabling legislation and property owners in communities such as San Francisco and Sonoma County, California and Babylon, New York were participating in PACE programs. In December 2009, *Scientific American* hailed PACE as one of the “top 20 ways to change the world.” In January 2010, *Harvard Business Review* featured PACE as one of the top 10 new business ideas of the year. Since then, 32 states and the District of Columbia have adopted PACE-enabling legislation<sup>28</sup> and over 132,000 buildings have been upgraded using PACE financing.<sup>29</sup>

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<sup>27</sup> Email from Ted Flanigan (EcoMotion), January 12, 2017.

<sup>28</sup> <http://pacenation.us/pace-programs/>

Figure 2: Growth in R-PACE Financing, 2008-2016



Source: PACENation

## 2 Legal Challenges and Responses

PACE has faced opposition from the Federal Housing Finance Agency (FHFA) and legal challenges in both California and Florida. This section describes these various legal actions as well as PACE advocates' responses, which include the creation of loan loss reserves in the case of California and the introduction of subordinate lien PACE.

For your reference, we have compiled here a timeline of important PACE-related guidance documents, regulations, and court cases:

Figure 3: PACE Document Timeline

May 2010	Initial DOE Guidelines for Pilot PACE Financing Programs
July 2010	FHFA Directive
April 2011	FHFA Letter Approving Vermont's Subordinated PACE Legislation
March 2013	<i>Sonoma County v. FHFA</i>
March 2014	CAEAFTA Launches PACE Loss Reserve Program
December 2014	FHFA Issues Statement Affirming Its Opposition to PACE
August 2015	President Obama Announces New Actions to Advance Energy Efficiency and Renewable Energy, Including Unlocking PACE
August 2015	FHA Releases Announcement to Develop Single-Family PACE Guidance
October 2015	Ruling on <i>Reynolds v. Leon County Energy Improvement District</i> Allows Florida Municipalities to Issue Bonds Funding Clean Energy
June 2016	FHFA Testimony Reaffirming Opposition to PACE

<sup>29</sup> <http://pacenation.us/pace-market-data/>

July 2016	FHA Issues Promised Guidance; FHA and VA Announcement to Start Backing Mortgages with PACE Liens
July 2016	MBA Releases Statement on PACE Program
September 2016	Passage of AB 2693 in California
November 2016	DOE Best Practice Guidelines
November 2016	Class Action Lawsuits Filed Against LA County, WRCOG, SANBAG & HERO

Those interested in reviewing only the current federal administrative documents can look to:

July 2016	FHA Final PACE Guidance	<a href="https://portal.hud.gov/hudportal/documents/huddoc?id=16-11ml.pdf">https://portal.hud.gov/hudportal/documents/huddoc?id=16-11ml.pdf</a>
November 2016	DOE Best Practice Guidelines	<a href="https://energy.gov/sites/prod/files/2016/11/f34/best-practice-guidelines-RPACE.pdf">https://energy.gov/sites/prod/files/2016/11/f34/best-practice-guidelines-RPACE.pdf</a>

### A. FHFA Opposition

The early enthusiasm for PACE was dampened in July 2010 when the Federal Housing Finance Agency (FHFA) directed the GSEs (U.S. government-sponsored entities including Fannie Mae and Freddie Mac) not to purchase or insure mortgages affected by first-lien PACE obligations because the PACE lien takes priority over the mortgage.<sup>30</sup> FHFA feared that PACE would increase homeowners' debt burdens and lead to higher rates of default on GSE-backed mortgages. Such increases in defaults could reduce bank willingness to offer mortgages and increase interest rates for homeowners in PACE jurisdictions, contrary to Fannie and Freddie's mandates to protect liquidity, affordability, and stability in the U.S. mortgage market.<sup>31</sup>

Effectively, this guidance prevented some homeowners with PACE assessments from refinancing their mortgages with Fannie- and Freddie-backed mortgages, generally the most affordable option available, unless they first paid off the PACE assessment. It also prevented some homeowners from selling their homes to buyers wishing to use Fannie- and Freddie-backed mortgages without paying off the existing PACE assessment.<sup>32</sup> This can delay closing.<sup>33</sup>

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<sup>30</sup> <http://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Statement-on-Certain-Energy-Retrofit-Loan-Programs.aspx>

<sup>31</sup> Fannie Mae and Freddie Mac's congressional charters spell out a "liquidity, affordability, and stability" mandate to which the two must adhere. Fannie Mae's 1954 charter (Federal National Mortgage Association Charter Act) is located at: [http://www.fhfa.gov/SupervisionRegulation/FannieMaeandFreddieMac/Documents/Fannie\\_Mae\\_charter\\_Act\\_N508.pdf](http://www.fhfa.gov/SupervisionRegulation/FannieMaeandFreddieMac/Documents/Fannie_Mae_charter_Act_N508.pdf). Freddie Mac's 1970 charter (Federal Home Loan Mortgage Corporation Act) is located at: [http://www.fhfa.gov/SupervisionRegulation/FannieMaeandFreddieMac/Documents/Freddie\\_Mac\\_charter\\_Act\\_N508.pdf](http://www.fhfa.gov/SupervisionRegulation/FannieMaeandFreddieMac/Documents/Freddie_Mac_charter_Act_N508.pdf).

<sup>32</sup> One large PACE provider reports that a vast majority of PACE-improved properties with Fannie/Freddie mortgages which have been sold or refinanced did not require payoff of the PACE lien at time of sale or refinance, and notes that, as a practical matter, Fannie/Freddie have not implemented their guidance and routinely offer mortgages and refinancing to PACE-improved properties. However, other report that, since August 2015, Fannie Mae and Freddie Mac have started actively enforcing PACE lien prohibitions; Draft Comments from Alexia Retallack and Jenine Windeshausen (mPOWER), January 27, 2017.

FHFA's action caused some state and local officials to re-evaluate PACE. After additional investigation, many determined that FHFA's action did not undermine the value of the PACE mechanism for enabling improvements to commercial properties and commercial PACE has continued to grow and spread across the country. However, since 2010, only Florida has moved forward in launching residential PACE, joining California, Missouri,<sup>34</sup> Vermont, and Maine<sup>35</sup> in having active residential PACE programs.<sup>36</sup> Several others – Georgia, Colorado, and Illinois – are currently constructing residential PACE programs.<sup>37</sup> In December 2014, FHFA issued an additional statement<sup>38</sup> affirming its position: Fannie Mae and Freddie Mac's policies prohibit the purchase of a mortgage where the property has a first-lien PACE assessment attached to it.

A 2013 University of North Carolina study<sup>39</sup> found that mortgage defaults are significantly lower on energy efficient properties than on non-energy efficient properties, but did not appear to impact FHFA's position.

In August 2015, President Obama announced new actions to bring energy efficiency and renewable energy to U.S. households, including an effort aimed at "Unlocking residential Property-Assessed Clean Energy (PACE) financing for single-family housing to make [it] easier for Americans to invest in clean energy technologies."<sup>40</sup> The Federal Housing Administration (FHA)<sup>41</sup> subsequently announced that it was developing Single Family PACE guidance to "overcome impediments in the purchase and

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<sup>33</sup> In a letter expressing opposition against PACE's first-priority lien, the California Association of Realtors (CAR) has claimed that some lenders are counting seller satisfaction of PACE assessments as seller contributions or seller concessions, making some loans unqualified (see

[http://www.car.org/governmentaffairs/federal/commentletters/941839/E.Golding\\_FHA\\_PACE\\_Lien\\_08\\_11\\_15.pdf](http://www.car.org/governmentaffairs/federal/commentletters/941839/E.Golding_FHA_PACE_Lien_08_11_15.pdf)), since conventional loans from Fannie Mae and Freddie Mac place limitations on seller concessions, and paying off an outstanding PACE assessment may exceed these limits in some cases. (For conventional mortgages on principal residences or second homes, maximum limits for seller concessions range between 3 and 9 percent depending on the LTV/CLTV ratios. For investment properties, the maximum limit is 2 percent for all CLTV ratios. See

<https://www.fanniemae.com/content/guide/selling/b3/4.1/02.html>). However, Fannie Mae has stated that: "Payoff of a PACE loan by a seller is not subject to Fannie Mae IPC [Interested Party Contributions] limits because it is not a financing concession." (See <https://www.fanniemae.com/content/guide/selling/b3/4.1/03.html>).

<sup>34</sup> Missouri temporarily suspended its residential PACE program, Set the PACE St. Louis, due to FHFA concerns but has since launched two new residential PACE programs: Missouri HERO with Renovate America and YgreneWorks with Ygrene.

<sup>35</sup> Vermont and Maine have subordinate lien PACE programs.

<sup>36</sup> New York no longer has an active residential PACE program as the PACE program in Babylon, NY has since switched to direct loans.

<sup>37</sup> Draft Comments from Stacey Lawson (Ygrene Energy Fund), January 20, 2017.

<sup>38</sup> To view FHFA's December 2014 "Statement of the Federal Housing Finance Agency on Certain Super-Priority Liens", see <https://www.fhfa.gov/Media/PublicAffairs/Pages/Statement-of-the-Federal-Housing-Finance-Agency-on-Certain-Super-Priority-Liens.aspx>

<sup>39</sup> "Home Energy Efficiency and Mortgage Risks," UNC Center for Community Capital, Institute for Market Transformation (IMT), March 2013. The authors of the study analyzed ENERGY STAR homes and found that they had a 32% lower default risk than non-ENERGY STAR homes. IMT does not report any funding from PACE companies on its Form 990.

<sup>40</sup> <https://www.whitehouse.gov/the-press-office/2015/08/24/fact-sheet-president-obama-announces-new-actions-bring-renewable-energy>

<sup>41</sup> Earlier in 2015, HUD, which oversees FHA, had provided some indication that it was on board with the concept of PACE financing by announcing a pilot program in California for PACE financing for multifamily properties within HUD's portfolio; see <https://www.hudexchange.info/resources/documents/Background-on-New-Guidance-on-Multifamily-PACE-in-California.pdf>

sale of properties to which PACE loans are attached.”<sup>42</sup> This initial 2015 notice stated that the guidance was being informed by ongoing discussions with FHFA and that at a minimum it would include that (1) FHA will allow only PACE liens that preserve payment priority for first-lien mortgages through subordination, and (2) PACE financing must be a fixed-rate, fully amortizing loan.

On July 19, 2016, FHA issued the final promised guidance that it would now approve, purchase, and refinance mortgage applications in states that treat PACE obligations as special assessments similar to property taxes.<sup>43</sup> The guidance updates the U.S. Department of Housing and Urban Development (HUD) Single Family Policy Handbook and provides that properties with a PACE obligation may be eligible for FHA-insured mortgage finance provided that the following requirements have been met<sup>44</sup>:

1. Under the laws of the state where the property is located, the PACE obligation is collected and secured by the creditor in the same manner as a special assessment against the property;
2. The property may only become subject to an enforceable claim (i.e., a lien) that is superior to the FHA-insured mortgage for delinquent regularly scheduled PACE special assessment payments. The property shall not become subject to an enforceable claim (i.e., lien) superior to the FHA-insured mortgage for the full outstanding PACE obligation at any time (i.e., through acceleration of the full obligation). However, a notice of lien for the full PACE obligation may be recorded in the land record;
3. There are no terms or conditions that limit the transfer of the property to a new homeowner. Legal restrictions on the conveyance arising from a PACE obligation that could require the consent of a third party before the owner can convey the real property are prohibited, unless such provisions may be terminated at the option of, and with no cost to, the homeowner;
4. The existence of a PACE obligation on a property is readily apparent to mortgagees, appraisers, borrowers, and other parties to an FHA-insured mortgage transaction in the public records and must show the obligation amount, the expiration date and cause of the expiration of the assessment, and in no case may default accelerate the expiration date; and
5. In the event of the sale, including a foreclosure sale, of the property with outstanding PACE financing, the obligation will continue with the property causing the new homeowner to be responsible for the payments on the outstanding PACE amount.

On the same day, the White House announced that the Department of Veterans Affairs (VA) would also back mortgages on homes with first-lien PACE assessments. Of the homes given a PACE upgrade in HERO’s 2015 and 2016 securitizations, 26 to 28 percent are financed by the FHA and VA. This move by the FHA and VA may consequently lower the risk of legal challenges to senior PACE liens. Furthermore, this may have a positive effect on credit for PACE asset-backed securities, with uncertain impact on residential mortgage-backed securities.<sup>45</sup>

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<sup>42</sup> <http://portal.hud.gov/hudportal/documents/huddoc?id=FTDO.pdf>

<sup>43</sup> [http://portal.hud.gov/hudportal/HUD?src=/press/press\\_releases\\_media\\_advisories/2016/HUDNo\\_16-110](http://portal.hud.gov/hudportal/HUD?src=/press/press_releases_media_advisories/2016/HUDNo_16-110)

<sup>44</sup> <http://portal.hud.gov/hudportal/documents/huddoc?id=16-11ml.pdf>

<sup>45</sup> “FHA’s Acceptance of PACE is Credit Positive for PACE ABS and Will Have Mixed Effects on RMBS,” Moody’s ABS Spotlight, September 12, 2016, [https://www.moody.com/researchdocumentcontentpage.aspx?docid=PBS\\_SF438684](https://www.moody.com/researchdocumentcontentpage.aspx?docid=PBS_SF438684)

Despite FHA's and VA's new position, FHFA has continued to oppose PACE. On June 9, 2016, FHFA reaffirmed its prior position on PACE in testimony given by Alfred M. Pollard, FHFA's General Counsel, before the California Legislature Assembly Banking and Finance Committee and Assembly Local Government Committee.<sup>46</sup> In this testimony, Mr. Pollard restated FHFA's position that a PACE assessment's status as a super-priority lien senior to a first mortgage transfers undue risk of loss to the first-lien mortgage holder<sup>47</sup> and that, as a result, FHFA cannot sanction first-lien status PACE programs for Fannie Mae/Freddie Mac participation. He stated that: "only true second-lien status avoids this problem." Furthermore, Mr. Pollard expressed additional concerns with PACE programs such as a lack of regulatory oversight, poor consumer protections, and unreasonably high program fees, all of which increase the risk of default and therefore increase the risk of loss to the first-lien mortgage holder. Following the FHA announcement, FHFA reaffirmed its position once more.

## B. Mortgage Opposition

The mortgage lending community has also continued to express serious concerns with PACE. In a statement dated July 19, 2016,<sup>48</sup> the Mortgage Bankers Association (MBA) stated that while they believe energy efficiency home improvements provide homeowners with a variety of benefits, they are concerned that PACE programs leave low and moderate income FHA borrowers more vulnerable to being misled into financial obligations they may not understand due to lack of disclosure. These concerns were addressed with respect to California PACE in August 2016 when the California legislature passed Assembly Bill 2693, the PACE Preservation and Consumer Protection Act, which codified a formal disclosure requirement and form into CA law, and also required a 3-day right of rescission. The concerns remain relevant in other states, however, and some consumer advocates do not believe that AB 2693 fully addresses concerns regarding low and moderate income homeowners.<sup>49</sup>

Furthermore, MBA expressed concerns that the FHA's position on PACE puts taxpayers at risk by effectively making them the guarantor of home improvement loans made by private contractors, thus increasing loss severity for the FHA program if borrowers default. MBA states that there are alternative home energy efficiency financing options that do not pose the same risks and they urge FHA to solicit and encourage feedback from the mortgage industry and refine their program to better serve and protect consumers and the taxpayer.

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<sup>46</sup> To view FHFA's June 2016 "Statement of Alfred M. Pollard, General Counsel, FHFA, before the California Legislature, Keeping Up with PACE", see <https://www.fhfa.gov/Media/PublicAffairs/Pages/Pollard-Statement-before-California-Legislature-Keeping-Up-with-PACE.aspx>

<sup>47</sup> In "Keeping PACE?: The Case Against Property Assessed Clean Energy Financing Programs", author Prentiss Cox argues that PACE's senior lien position puts the burden of default on mortgage lenders. In the event that a homeowner defaults on property taxes, a mortgage lender will either pay the taxes for the homeowner or the home will be subject to a tax lien foreclosure sale, at which point the lender will purchase the home. If a homeowner defaults on mortgage payments and a home is foreclosed upon, the burden will again shift to the mortgage lender because the new buyer, having to make future PACE payments, may offer a lower bidding price. (See [http://lawreview.colorado.edu/wp-content/uploads/2013/11/9.-Cox-FINAL\\_s.pdf](http://lawreview.colorado.edu/wp-content/uploads/2013/11/9.-Cox-FINAL_s.pdf))

<sup>48</sup> <https://www.mba.org/2016-press-releases/july/mba-statement-on-pace-program>

<sup>49</sup> See section II.3.C. below.

Some suggest that mortgage bankers are not generally in the business of protecting either taxpayers or low and moderate income homeowners but instead are in the business of home equity lines of credit (HELOCs) and second mortgages that may compete with PACE financing for some homeowners' home efficiency improvement borrowing business. MBA notes: "in contrast with PACE, conventional financing options such as home equity lines of credit (HELOCs) or second mortgages, are frequently more suitable for providing energy efficient home improvements".<sup>50</sup> NCLC indicates that interest rates and fees are often lower for such alternatives. On the other hand, many homeowners may be unable to qualify for such financing under the stricter criteria employed by many banks post-crisis, and bank financing can be more difficult and time-consuming to obtain than PACE financing.

### C. California PACE Litigation & CAEATFA Loss Reserve

#### FHFA LITIGATION AND CAEATFA LOSS RESERVE

After FHFA's initial statement of opposition in 2010, the number of applications in Sonoma County's PACE program fell by 50 percent, from an average 52 per month to 26 per month.<sup>51</sup> FHFA's opposition was challenged in the U.S. District Court for the Northern District of California. The U.S. Court of Appeals for the Ninth Circuit ultimately found in FHFA's favor in *Sonoma County v. FHFA*,<sup>52</sup> ruling that the directive preventing Fannie Mae and Freddie Mac from purchasing mortgages on properties encumbered with "PACE loans" was a lawful exercise of its power as conservator of Fannie Mae and Freddie Mac and that the courts do not have jurisdiction to review actions that the FHFA takes as a conservator.<sup>53</sup> The case did not establish any precedent as to the lawfulness of PACE assessments themselves.<sup>54</sup>

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<sup>50</sup> <http://mba.informz.net/MBA/data/images/MBA%20Summary%20of%20FHA%20PACE%20Bulletin%20Final.pdf>

<sup>51</sup> <https://insidclimateneews.org/news/20120424/pace-energy-efficiency-home-loan-program-fhfa-fannie-mae-freddie-mac-mortgage-crisis-sonoma-county-california>

<sup>52</sup> The case, *Sonoma County v. FHFA* (see [http://cdn.ca9.uscourts.gov/datastore/opinions/2013/03/19/12-16986%20web\\_revised.pdf](http://cdn.ca9.uscourts.gov/datastore/opinions/2013/03/19/12-16986%20web_revised.pdf)), contested the use of a directive to instruct the GSEs not to purchase PACE assessments; plaintiffs contended that FHFA acted as regulator in issuing this directive and not as a conservator and that, in acting as a regulator, FHFA must issue regulations and not a directive. The district court initially found in the Plaintiff's favor and enjoined FHFA to complete notice-and-hearing rulemaking within 210 days of the judgment. FHFA began such rulemaking but appealed the decision and the rulemaking was ultimately abandoned following their victory on appeal. See [http://cdn.ca9.uscourts.gov/datastore/opinions/2013/03/19/12-16986%20web\\_revised.pdf](http://cdn.ca9.uscourts.gov/datastore/opinions/2013/03/19/12-16986%20web_revised.pdf)

<sup>53</sup> Other challenges to FHFA's directive in the Second and Eleventh circuits resulted in the same decision; see *Town of Babylon v. FHFA* ([http://www.ca2.uscourts.gov/decisions/isysquery/57145a5b-4be3-4569-945c-f47abee47c09/1/doc/11-3408\\_opn.pdf#xml=http://www.ca2.uscourts.gov/decisions/isysquery/57145a5b-4be3-4569-945c-f47abee47c09/1/hilite/](http://www.ca2.uscourts.gov/decisions/isysquery/57145a5b-4be3-4569-945c-f47abee47c09/1/doc/11-3408_opn.pdf#xml=http://www.ca2.uscourts.gov/decisions/isysquery/57145a5b-4be3-4569-945c-f47abee47c09/1/hilite/)) and *Leon County, Florida v. FHFA* (<http://law.justia.com/cases/federal/appellate-courts/ca11/11-15614/11-15614-2012-11-09.html>).

<sup>54</sup> The PACE programs operating in California have all sought judicial validation from the California courts and all courts have affirmed. The PACE Bond Issuers obtained judicial validation of their PACE programs in the Superior Courts of Placer, Sacramento, Riverside, San Bernardino, and LA counties. Judgments made in July 2011, August 2013, April 2016, and April 2015 confirmed the legality of PACE assessments under California law in the WRCOG, SANBAG, California HERO, and LA County PACE programs, respectively. Judgements made in 2013, 2014, and 2015 confirmed the legality of PACE special taxes under California law in the Sacramento, Yolo, CVAG, and Golden State Finance Authority (statewide) programs, respectively. Notwithstanding California's judicial validation process, one rating agency discussed the possibility of challenges to California's PACE program under the U.S. Constitution's Supremacy Clause, which requires that states and municipalities recognize the supremacy of federal law whenever it conflicts with state or local law. If successfully challenged

In light of the decision in *Sonoma County v. FHFA* and in order to allow residential PACE to continue in California, in 2014 the State of California established a \$10 million residential PACE loss reserve fund.<sup>55</sup> The fund is administered by the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) and was set up to assist in addressing FHFA's concerns about the risks posed to first mortgage holders and their underwriters by PACE liens during foreclosure or forced sale. The program is designed to mitigate potential risk to first mortgage lenders by making them whole for losses incurred due to the existence of a first-priority PACE assessment on a property during a foreclosure or forced sale. The program covers two types of losses: (1) PACE payments paid while a first mortgage lender is in possession of a foreclosed home, and (2) any losses to the first mortgage lender up to the amount of outstanding PACE assessments in a forced sale for unpaid taxes or special assessments. In either case, the loss must be unrecoverable through proceeds of foreclosure or sale.<sup>56</sup>

Enrolled PACE administrators submit claims directly to CAEATFA on behalf of the mortgage lender and provide satisfactory evidence of an eligible loss, including but not limited to: the loss amount, the name of the first mortgage lender, and the date of loss or losses. Payment from the Reserve may be used as a reimbursement to the PACE administrator or as a pass-through to the first mortgage lender.

Any PACE program operating in California is eligible to apply to join CAEATFA's PACE Loss Reserve Program. According to the loss reserve's regulations,<sup>57</sup> PACE programs participating in the loss reserve program have to submit documentation evidencing that they are following certain underwriting criteria, including capping financing at 15 percent of the value of the property, up to the first \$700,000 of the value of the property, and 10 percent of the remaining value of the property above \$700,000. CAEATFA also requires detailed documentation of a PACE program's transactional activities, consumer protection policies, and credit enhancement structures. Participation further requires PACE administrators to report portfolio size and status to CAEATFA on a twice-yearly basis. The hope is that this data can prove useful to PACE policymakers and inform future best practices and standards for residential PACE financing.

As of January 2017, CAEATFA had not received any claims on the loss reserve.<sup>58</sup> FHFA has indicated to CAEATFA that the loss reserve does not address all of its concerns. After LA County launched its

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by FHFA, the rating agency reports that there is a small but material risk that PACE assessments may be impaired. (See "HERO Funding 2016-3 Class A Notes: \$320,243,000 Property Assessed Clean Energy (PACE) Bond Backed Notes," Kroll Bond Rating Agency, September 22, 2016, page 16.) In response to this, HERO reports that the three issuers of the CA HERO programs filed judicial validation proceedings in which the Superior Court of the State of California ordered, judged and decreed that the contractual assessment agreements, and all proceedings relating to or leading up to the issuance of such limited obligation improvement bonds, and the execution and delivery of such limited obligation improvement bonds, were and are legal and binding obligations in accordance with their terms and were and are in conformity with all applicable provisions of all laws and enactments at any time in force or controlling upon such proceedings, whether imposed by law, constitution, statute or ordinance, and whether federal, state or local. The appeals period for the judgments have expired. (Draft Comments from Chani Vines (Renovate America), February 1, 2017.) Another PACE administrator reports that its rating agency (Ygrene/Moody's) has completed regulatory and legal due diligence and is satisfied that this is not a concern.

<sup>55</sup> <http://treasurer.ca.gov/caeatfa/pace/index.asp>

<sup>56</sup> Draft Comments from Jenine Windeshausen (mPOWER), January 27, 2017.

<sup>57</sup> <http://www.treasurer.ca.gov/caeatfa/pace/regulations/regulations.pdf>

<sup>58</sup> <http://treasurer.ca.gov/caeatfa/pace/activity.asp>

own PACE program in June 2015, it also subsequently created its own LA County Residential PACE Reserve Fund to protect investors. This reserve is funded by 0.10 percent of each dollar of microbonds<sup>59</sup> issued by LA County.

Other states that have explored the possibility of creating a loan loss reserve for PACE are Vermont, Rhode Island, and (for C-PACE) Michigan.

Vermont responded to FHFA's opposition by amending<sup>60</sup> its existing PACE legislation to create two loan loss reserve funds. In the first loss reserve, PACE participants contribute 2 percent of their assessment to the fund. In the second, the reserve consists of revenue from Vermont's participation in the Regional Greenhouse Gas Initiative and funds from ISO (Independent System Operator) New England's Forward Capacity Market, up to a maximum of \$1 million.<sup>61</sup>

Rhode Island passed residential PACE-enabling legislation in 2013 and announced that the program would be managed by the state Office of Energy Resources, which would contract with an approved institution to create, at the minimum, a \$1 million loan loss reserve fund;<sup>62</sup> an active residential PACE program in Rhode Island has not yet been established.<sup>63</sup>

In Michigan, the Ann Arbor PACE program, currently only available to commercial property owners, has established a loan loss reserve fund to secure municipal PACE bond issuances and make losses whole.<sup>64</sup>

## OTHER LITIGATION

Three purported class action complaints have recently been filed naming three California PACE Bond Issuers and the program administrator as defendants.

- *Richard Ramos et al. v. San Bernardino Associated Governments and Renovate America, Inc.* (filed November 1, 2016 in the Superior Court of the State of California for the County of San Bernardino, Case No. CIVDS 1618459);

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<sup>59</sup> Microbonds were first used in Berkeley, California. These are small bonds issued at pre-determined fixed interest rates (adjusted daily or weekly) to finance improvements for one specific project or for a limited number of properties/projects. These bonds are purchased by a third party and sold to the public bond market after a sufficiently large number of microbonds have been issued. See

<http://apps.ci.pittsburg.ca.us/sirepub/cache/2/uesoeb553dwmub55szroe1fr/238553412222016014635217.PDF> and <http://www.nrel.gov/docs/fy10osti/47097.pdf>

<sup>60</sup> <http://legislature.vermont.gov/statutes/section/24/087/03270>

<sup>61</sup> <http://aceee.org/files/proceedings/2012/data/papers/0193-000188.pdf>

<sup>62</sup> <http://www.energy.ri.gov/documents/PACE/PACE%20Program%20-%20Frequently%20Asked%20Questions%2011.19.2013.pdf>; <http://www.providencejournal.com/breaking-news/content/20130707-new-program-designed-to-help-r.i.-homeowners-invest-in-solar-panels-and-other-clean-energy-products.ece>

<sup>63</sup> <http://pacenation.us/pace-in-rhode-island/>

<sup>64</sup> <http://www.a2gov.org/a2energy/commercial/Pages/faqs.aspx>; <http://www.a2gov.org/departments/systems-planning/planning-areas/energy/Documents/Final%20Question%20and%20Answer%20Document.pdf>; <http://www.ncsl.org/research/energy/pace-financing.aspx>

- *George Loya et al. v. Western Riverside Council of Governments and Renovate America, Inc.* (filed November 1, 2016 in the Superior Court of the State of California for the County of Riverside, Case No. RIC 1614434); and
- *Michael Richardson et al. v. County of Los Angeles and Renovate America, Inc.* (filed November 1, 2016 in the Superior Court of the State of California for the County of Los Angeles, Case No. BC639230).

Each of these complaints asserts statutory violations of consumer lending laws (Truth-in-Lending Act and the Homeowners Protection Act) related to disclosures, documentation, and fee and rate practices. None of the complaints assert that any of these purported violations render any assessment contracts or PACE Bonds void or voidable, reduce amounts payable under any assessment contracts, or invalidate the lien or lien priority of any assessments relating to any assessment contracts or PACE Bonds.

#### D. Florida PACE Litigation

Florida has also seen legal challenges to PACE programs. A number of cases brought by Florida residents challenged the legal validity of PACE programs and the issuance of municipal PACE bonds. Circuit court decisions had validated the issuances but many of these decisions were subsequently appealed,<sup>65</sup> often by litigants that had not appeared in the original proceeding (as was allowed under prior Florida case law).<sup>66</sup> On October 1, 2015, however, the Florida Supreme Court overturned this prior case law<sup>67</sup> in *Reynolds v. Leon County Energy Improvement District* and ruled that litigants must appear in the initial circuit court validation case to preserve their appeal,<sup>68</sup> rendering many of these appeals moot. This change should provide more stability regarding the legal validity of PACE in Florida.

In the same month, in another landmark case, *Florida Bankers Association v. Florida Development Finance Corporation (FDFC)*, the Supreme Court of Florida court held that the Florida Bankers Association had no standing as a citizen, taxpayer, or property owner in any of the PACE municipalities

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<sup>65</sup> In 2014, five decisions were appealed to the Supreme Court of Florida. They are: *Reynolds v. Leon County Energy Improvement District*, No. SC14-710 (Fla. Apr. 11, 2014); *Vicki Thomas et al. v. State of Florida* No. SC14-1282 (Fla. Jul. 2, 2014); *Fla. Bankers Ass'n (FBA) v. State of Fla.*, No. SC14-1603 (Fla. Aug. 15, 2014); *Gowen v. State of Fla.*, No. SC14-2269 (Fla. Nov. 19, 2014); *Robert Reynolds v. State of Florida*, No. SC14-1618 (Fla. Aug. 18, 2014). See <https://www.floridabar.org/DIVCOM/JN/JNJournal01.nsf/8c9f13012b96736985256aa900624829/e7bb0e397debc20b85257fbd006e339f!OpenDocument>

<sup>66</sup> The case in question was *Meyers v. City of St. Cloud*, 78 So. 2d 402 (Fla. 1955), which ruled that citizens, taxpayers and property owners who had not appeared in trial court were nonetheless able to challenge a bond validation on appeal.

<sup>67</sup> *Reynolds v. Leon County Energy Improvement District*, SC12-710 (Fla. Oct 1, 2015) [<http://law.justia.com/cases/florida/supreme-court/2015/sc14-710.html>]

<sup>68</sup> Several other cases were subsequently dismissed for the same reason. However, in *Reynolds* (and other similar cases), while the bond validation was upheld, the court did remand part of the case, ordering the removal of language from PACE financing agreements that includes use of judicial foreclosure if the assessments cannot be collected. For discussion of all the related cases, see:

<https://www.floridabar.org/divcom/jn/jnjournal01.nsf/8c9f13012b96736985256aa900624829/e7bb0e397debc20b85257fbd006e339f!OpenDocument>

where FDFC bonds were being issued to challenge the validity of PACE bonds<sup>69</sup> and dismissed the case.<sup>70</sup>

While these cases were pending, some municipalities in Florida continued to adopt PACE programs. For instance, two such PACE programs, Ygrene Florida and Florida PACE Funding Agency, continued to welcome new cities and municipalities throughout 2015, such as Charlotte County, which joined in January 2015, and the City of Margate, which joined in September 2015.<sup>71</sup> Other jurisdictions, such as Broward County, remained unwilling to adopt programs while the cases were pending – though some Broward cities, such as Hollywood, linked up with other PACE districts to provide financing to their constituents.<sup>72</sup> Since the October 2015 decisions, applications for PACE financing have been rising rapidly as more local governments adopt the program: in July 2016, Ygrene reported that applications had increased from 200-300 a month to 1,200 a month, a four to six-fold increase.

## E. Subordinate Lien PACE

### SUBORDINATE LIEN LEGISLATION

After FHFA's action described in section II.2.A. above, some states adopted a modified PACE approach we will refer to as "subordinate lien" PACE to distinguish it from the traditional "senior lien" PACE first authorized in California. In senior lien PACE, the PACE assessment is *pari passu* with the other property tax assessments, which are the first to be repaid in the event of a foreclosure sale.<sup>73</sup> After property tax assessments are paid, senior lenders such as first mortgage lenders are paid. By contrast, in subordinate lien PACE,<sup>74</sup> the lien is subordinate to all mortgages and other liens in place at the time the PACE assessment is recorded, subordinate to any subsequent mortgages and senior only to any other non-mortgage liens filed subsequently. Therefore, in the event of nonpayment, amounts past due on a PACE assessment are subordinate to amounts past due on a first mortgage or any other senior liens and are paid in such order. The remainder of the PACE assessment is still intended to transfer when the property is sold if not paid off at that time.

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<sup>69</sup> <https://renewfinancial.com/news/legal-barriers-removed-energy-financing-program-can-grow-supporters-say>

<sup>70</sup> The Florida Bankers Association (FBA) challenged a bond validation claiming the validation unconstitutionally provided priority lien rights to special assessments over mortgages and that it was an impairment of contract. The court in this case did not even apply the new precedent that overturned *Meyers v. City of St Cloud*. Instead, they held that the Florida Bankers Association did not even have standing to challenge the bond validation as they were not a "citizen, taxpayer or property owner in any jurisdiction where the bonds will support PACE improvements". See <http://www.floridasupremecourt.org/decisions/2015/sc14-1603.pdf>

<sup>71</sup> Florida PACE Funding Agency welcomed Charlotte County in January 2015 and the City of Margate in September 2015. See <https://www.floridapace.gov/news-events>

<sup>72</sup> <http://www.sun-sentinel.com/business/personal-finance/fl-pace-financing-florida-bankers-20151015-story.html>

<sup>73</sup> <http://cbei.psu.edu/property-assessed-clean-energy-financing/>; <http://www.greentechmedia.com/articles/read/Why-Residential-PACE-Is-Growing>

<sup>74</sup> States with subordinate lien PACE legislation are Vermont, Rhode Island, New Hampshire (commercial), Oklahoma, Colorado, and Nebraska. Maine has a PACE-like program in which the assessments are also subordinate to any mortgage or other lien existing at the time of recording but it is not a true PACE program as it is considered a second mortgage rather than an assessment (despite the fact it can be collected by a municipality with property taxes in the same manner as a PACE assessment). Nebraska passed subordinate lien legislation in 2016.

States that currently have some form of subordinate lien PACE legislation are Vermont, Maine,<sup>75</sup> Rhode Island,<sup>76</sup> Oklahoma,<sup>77</sup> New Hampshire,<sup>78</sup> Colorado,<sup>79</sup> and Nebraska. Some of these states (Vermont, Maine) have residential PACE programs that are currently active while others are still in the process of developing their programs. Rhode Island, for instance, passed subordinate lien residential PACE legislation in 2013, but does not yet have an active residential program; a commercial PACE program is operating.<sup>80</sup> No residential PACE programs are currently known to be planned in New Hampshire or Oklahoma.

For example, the Vermont statute states:<sup>81</sup> "...a lien for an assessment under subchapter 2 of this chapter shall be subordinate to all liens on the property in existence at the time the lien for the assessment is filed on the land records, shall be subordinate to a first mortgage on the property recorded after such filing, and shall be superior to any other lien on the property recorded after such filing."

Vermont modeled this lien methodology after FHA's PowerSaver loan program, an energy efficiency financing program rolled out shortly after the FHFA letter and described as a viable alternative to PACE.<sup>82</sup>

The Vermont Department of Financial Regulation (then named Department of Banking, Insurance, Securities and Health Care Administration) sent House Bill 155 to FHFA for review. FHFA returned a letter (see Appendix B) to the Department on April 6, 2011 signed by the General Counsel of FHFA approving of Vermont's subordinated program structure along with a few additional recommendations.

The other states with subordinate lien PACE legislation take an approach similar to Vermont's. For each state's legislation, see Appendix C: Subordinate Lien PACE Legislation. For example, Oklahoma initially passed senior lien PACE legislation in SB 668 in April 2009. Like Vermont, Oklahoma subsequently passed revised subordinate lien PACE legislation, SB 102, in 2011 in response to FHFA's

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<sup>75</sup> <http://www.efficiencymaine.com/docs/PACE-Final-Evaluation-Report-FINAL.pdf>

<sup>76</sup> <http://webserver.rilin.state.ri.us/BillText/BillText15/HouseText15/H5900Aaa.pdf>

<sup>77</sup> <http://programs.dsireusa.org/system/program/detail/3534>

<sup>78</sup> <http://pacenation.us/pace-in-new-hampshire/>

<sup>79</sup> Colorado first passed enabling legislation in 2008 with HB 08-1350. This bill enabled municipalities to create their own residential PACE programs (such as Boulder County's ClimateSmart Loan Program). This was amended in 2010 to create a statewide district, and municipalities were no longer allowed to create their own districts. The bill was amended again in 2013 to enable commercial PACE and to include new best practices, such as mortgage holder consent. (Email from Paul Scharfenberger (Colorado Energy Office), March 2, 2017.) The Colorado statute provides that a PACE lien only receives prioritization if executed consent agreements are received with each lienholder. The implication is that if you have a PACE lien that originates without consent agreements, it must be subordinate to pre-existing liens. That is how the Colorado residential PACE program has been envisioned by the New Energy Improvement District created by the Colorado PACE statute. (Email Notes from Michael Yaki (Renovate America), February 8, 2017.)

<sup>80</sup> <http://www.energy.ri.gov/renewable/index.php>; <http://pacenation.us/pace-in-rhode-island/>

<sup>81</sup> Initial PACE-enabling legislation was introduced in 2009, but was amended in 2011 by House Bill 155 to address FHFA concerns over senior lien PACE. House Bill 155 clarified that a Vermont PACE program would be subordinated to give primary mortgage liens priority.

<sup>82</sup> Draft Comments from Peter Adamczyk (Vermont Energy Investment Corporation), January 11, 2017.

opposition to first-lien PACE.<sup>83</sup> Maine has subordinate lien PACE as well. In order to avoid complexity in working with multiple local taxing authorities, Maine chooses to service its program through a private third party servicer, but it is legally able to utilize property tax billing if it preferred to do so.<sup>84</sup> While subordinate lien legislation may be an effective way of avoiding FHFA's ban on the purchase of mortgages with PACE liens in place, some PACE advocates do not recognize this as "true" PACE because subordinate PACE assessments are subordinated from day one. Subordination laws need to be evaluated individually for consistency with utilization of the tax assessment power to secure financing. For example, Vermont law makes clear that its subordinate PACE assessments are assessments under state law as much as any other assessment, including those for taxes.<sup>85</sup>

PACE advocates that oppose the use of subordinate lien legislation for PACE programs argue that subordination will substantially increase the cost of PACE financing to property owners due to undermining of the lien priority and security required by investors.<sup>86</sup> However, it is notable that Vermont and Maine's subordinate lien programs offer significantly lower interest rates (4 and 5 percent respectively compared to 6 to 10 percent) than traditional senior lien PACE programs. Furthermore, it can be argued that a subordinate model would be ideal for small states like Vermont and Maine that may never reach sufficient volume for securitization (where initial senior lien status may be required by investors). There are statutory provisions as well within each state's unique PACE-enabling legislation that can serve as market barriers, including: lack of scale,<sup>87</sup> difficulties of forming a PACE district, and programmatic requirements incompatible with existing PACE financing models.<sup>88</sup>

## SUBORDINATE AGREEMENTS

Some senior-lien PACE administrators have started allowing "subordinate agreements". The PACE lien holder agrees that it will not initiate a foreclosure action for a defaulted PACE lien unless the first mortgage holder authorizes the foreclosure. The PACE lien holder further agrees that if it is authorized to exercise a foreclosure action, it will apply the foreclosure proceeds to the first mortgage holder's interests before paying itself. Amounts past due on a PACE assessment are subordinate by agreement to amounts past due on a first mortgage or any other senior liens and are paid in such order, but, as in all PACE programs, the remainder of the assessment is intended to transfer when the property is sold if not paid off at that time.

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<sup>83</sup> <http://programs.dsireusa.org/system/program/detail/3534>; <http://www.ncsl.org/research/energy/pace-financing.aspx>

<sup>84</sup> Email from Dana Fischer (Efficiency Maine), January 17, 2017.

<sup>85</sup> See 24 V.S.A. § 3255: "Special assessments ... shall constitute a lien on the property against which the assessment is made in the same manner and to the same extent as taxes assessed on the grand list of a municipality, and all procedures and remedies for the collection of taxes shall apply to special assessments."

<sup>86</sup> Draft Comments from Stacey Lawson (Ygrene Energy Fund), January 20, 2017.

<sup>87</sup> Lack of scale occurs when the locus of PACE is at the local government level and there are no means by which local governments can work together to create a single PACE program, like in California where JPAs allow a single PACE provider to service many jurisdictions utilizing the same program, or in Florida where Interlocal Agreements accomplish the same, or in Missouri where Joinder Agreements allow that to happen. Without that, the costs of replicating individual programs for individual local governments is prohibitive. Email Notes from Jewel James (Renovate America), February 7, 2017.

<sup>88</sup> Draft Comments from Jewel James (Renovate America), January 31, 2017.

An example is Renovate America’s HERO subordination process. In April of 2015, Renovate America began contractually yielding the following rights that it is afforded by nature of the senior lien to the first deed of trust holder: (a) its right to judicially foreclose on the PACE-assessed property, and (b) its right to receive proceeds from a foreclosure sale to the extent necessary to enable a first deed of trust holder to recover full payment of all amounts expressly owed and due under the obligation secured by the deed of trust. Renovate America offers this contractual solution if required by the first deed of trust holder to facilitate both sale and refinance transactions. See Appendix D. Ten HERO PACE assessments were contractually subordinated in this manner between April and August 2015, and more than 400 were contractually subordinated between April 2015 and May 2016; no request to contractually subordinate had been rejected as of May 2016.<sup>89</sup>

However, lien subordination is not authorized under California law, so such “subordinate agreements” are side agreements to the PACE lien which retains its senior lien status.<sup>90</sup> In the event of nonpayment, a third party cannot enjoin the tax collector’s legal requirement to sell a tax defaulted property, including the PACE lien. If the defaulted PACE lien is not removed by the PACE lien holder and remains on the property tax roll, it is subject to sale at auction by the county tax collector and the PACE lien priority remains intact. Furthermore, in California, defaulted taxes accrue at an additional 1.5 percent per month (18 percent per year) until collected.<sup>91</sup>

### 3 Consumer Protection Concerns

As PACE has grown, consumer protection has become an area of intense focus. As described above in section II.2.C, three purported class action complaints have recently been filed against Renovate America, Los Angeles County, Western Riverside Council of Governments (WRCOG), and San Bernardino Association of Governments (SANBAG), claiming violation of the Truth-in-Lending Act (TILA) and the Homeowners Protection Act.

Additional concerns have been raised specifically relating to quality control checks and the ability of low and moderate income families to repay their PACE assessments. There is also concern over whether families are being explicitly informed first about available grant resources and the cost-effectiveness of various measures and their relative energy savings versus the cost of the improvements prior to applying for a PACE loan.

This section provides a summary of Assembly Bill 2693, U.S. Department of Energy (DOE)’s recently issued guidance document, comments submitted by NCLC, and PACENation’s recommendations for additional protections.

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<sup>89</sup> Bill notes from CA 2693 AB (May 4, 2016) say HERO has contractually subordinated over 400 PACE assessments. See <http://alcl.assembly.ca.gov/sites/alcl.assembly.ca.gov/files/AB%202693%20analysis.pdf>

<sup>90</sup> Draft Comments from Jenine Windeshausen and Alexia Retallack (mPOWER), January 27, 2017.

<sup>91</sup> Draft Comments from Jenine Windeshausen (mPOWER), January 27, 2017.

## A. California Increases Consumer Protections Beginning January 1, 2017

On September 25, 2016, the state of California passed Assembly Bill (AB) 2693, the PACE Preservation and Consumer Protection Act,<sup>92</sup> which went into effect on January 1, 2017. The law requires PACE programs to provide a standard financing estimate and disclosure to the homeowner before the contract is signed,<sup>93</sup> as well as to give the homeowner the right to cancel the transaction for three business days after they have signed the contract, received the financing estimate and disclosure, or received the notice of right to cancel, whichever is latest. The right to cancel provision states that the provider then has 20 days to cancel the lien and remove it from public records, and to return any money to the homeowner minus an application processing fee.

The law also forbids PACE programs or contractors from making claims to homeowners about potential increases in property values as a result of PACE installations unless the estimate is derived based on: a) an automated valuation model, b) a price opinion by a licensed real estate broker, or c) an appraisal conducted by a state licensed real estate appraiser.

Existing California law prohibits PACE assessments and other tax assessments of more than 5 percent of the property's market value.<sup>94</sup> This requirement applies only to PACE programs formed under AB 811 and not to programs formed pursuant to SB 555, which includes Ygrene Works and mPOWER.

## B. Guidelines for PACE from DOE

The U.S. DOE released "Best Practice Guidelines for Residential PACE Financing Programs" in November 2016,<sup>95</sup> which includes guidelines for consumer protections. These guidelines include recommendations in ten categories for potential and existing PACE sponsors to consider when designing or modifying their programs.

**1 - PACE Program Scope and Eligible Improvements.** DOE recommends that PACE programs avoid duplicating or undermining other existing programs and should assist homeowners in choosing cost-effective improvements, including energy efficiency and weatherization measures, for their home.

1. Identify and prioritize energy and water improvements, or portfolios of improvements, that are cost-effective over the term of the assessment, excluding health and safety costs; and
2. Include and recommend weatherization measures as eligible measures for PACE assessments.

Additionally, programs should offer energy assessments performed by a qualified energy assessor as an eligible cost to be included in PACE financing.

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<sup>92</sup> [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160AB2693](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB2693)

<sup>93</sup> To view California's Assembly Bill 2693's sample text for the Financing Estimate and Disclosure form, see [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160AB2693](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB2693)

<sup>94</sup> See Assembly Bill 44: [http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab\\_0001-0050/ab\\_44\\_bill\\_20100930\\_chaptered.html](http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab_0001-0050/ab_44_bill_20100930_chaptered.html)

<sup>95</sup> <http://energy.gov/sites/prod/files/2016/11/f34/best-practice-guidelines-RPACE.pdf>

**2 - Establish Eligibility Criteria.** DOE recommends that PACE programs confirm applicant income and debt.

**3 - Establish Consumer and Lender Protections.** DOE recommends requiring protections for both the consumer and the mortgage-holder, including:

1. Education documents and disclosures that clearly explain how PACE financing works, the opportunities and risks to homeowners, and best practices for working with contractors. Disclosures should include all costs and fees associated with the PACE assessment, repayment terms, information on the relationship between the PACE assessment and the homeowner's mortgage, information on how PACE assessments affect and are affected by the sale of the home, penalties for late payments, estimated energy savings and factors that could potentially affect whether or not those savings are realized, and options for and implication of including tax credits in a PACE assessment;
2. A right to cancel within a certain time period;
3. A minimum equity threshold of 10 percent and a maximum amount for the PACE assessment (current maximums range between 10 and 20 percent of the estimated property value). The combined debt on the property and the PACE assessment should not exceed the estimated value of the property at the time financing is approved;
4. Detailed information on the completed improvements and an energy assessment post-improvement that provides a numerical rating of the home's energy efficiency;
5. Information about the relationship between the PACE assessment and the homeowner's mortgage including whether or not failure to pay the PACE assessment could trigger foreclosure even if the homeowner is not behind on their mortgage, procedures for transferring the PACE assessment upon sale or refinance and how a PACE assessment could affect those transactions;
6. Non-acceleration of PACE assessments, including in the case of foreclosure whereby the new owner is responsible for the assessment<sup>96</sup>;
7. Notifying the mortgage servicer and public record holders when a PACE assessment is added to a home; and
8. Policies to accommodate homeowners facing economic hardship or serving in the military.

In response to comments from consumer protection groups,<sup>97</sup> DOE added to its final guidance special considerations for potential low-income customers including additional disclosures that clearly explain the risks of PACE assessments, screening for eligibility for free or low-cost weatherization or energy

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<sup>96</sup> Non-acceleration is a requirement in the case of mortgages insured by the Federal Housing Administration or the Department of Veterans Affairs. In both cases, the PACE assessment may not be an enforceable claim superior to the FHA or VA mortgage. See [http://www.benefits.va.gov/HOMELOANS/documents/circulars/26\\_16\\_18.pdf](http://www.benefits.va.gov/HOMELOANS/documents/circulars/26_16_18.pdf), <http://portal.hud.gov/hudportal/documents/huddoc?id=16-11ml.pdf>

<sup>97</sup> Sixteen consumer advocacy groups submitted joint comments on the DOE "Best Practice Guidelines for Residential PACE Financing Programs," on August 18, 2016 including the National Consumer Law Center, Action, Inc.; Citizens Action Coalition of Indiana; Consumer Action; Consumers Union; Community Action Partnership of Oregon; Economic Opportunity Studies, Inc.; Iowa Community Action; Low-Income Energy Affordability Network (MA); National Community Action Foundation; North Carolina Justice Center; the Pennsylvania Utility Law Project, on behalf of its low-income clients; People's Action; Public Citizen; Public Justice Center (MD); and the Public Utility Law Project of New York.

efficiency programs, pre- and post-improvement energy consumption and expenditure data, recommendations of low-cost or cost-effective improvements, and coordinating with low-income service providers to ensure contractors are authorized by PACE program.

The DOE also recommended a mechanism to adjust PACE assessments for incentives, rebates, tax credits, or grants without triggering prepayment penalties, and increased contractor monitoring and enforcement in low-income areas. It recommended additional program design strategies to assist low-income customers such as using underwriting methods that consider energy savings, limiting financing for low-income customers to measures that pay for themselves over the life of the measure, limiting the PACE assessment to 10 percent of the estimated property value, and including additional incentives and assistance for low-income customers.

**4 - Public Recording and Disclosure of PACE assessments.** There should be a standard process for recording the Notice of Assessment and Payment of Contractual Assessment Required to public record keepers within the state and locality.

**5 - Incentives and Direct Assistance.** PACE programs should accommodate and coordinate with other incentives including tax incentives, rebates, renewable energy production credits, utility benefits, and grants and other assistance to ensure the homeowner receives the best financing package available. Programs should develop policies to exempt such incentives from prepayment penalties.

**6 - Property Appraisals and Real Estate Transactions.** PACE measures should be well documented in order to ensure they are considered during any property appraisals or property value assessments at time of sale and provide information to realtors, appraisers, and lenders about the benefits of energy efficiency, water efficiency, and renewable energy measures on a property.

**7 - Program Execution and Compliance with Applicable Laws.** DOE recommends that state and local governments designate agencies with oversight over PACE programs including financial compliance, contractor licensing, and business procedures, and that homeowners receive information about whom to contact with concerns about their PACE project.

**8 - Quality Assurance and Anti-Fraud Measures.** DOE recommends PACE programs establish a range of quality assurance and anti-fraud measures, including:

1. A registry of approved contractors and minimum contractor requirements including certifications, training, and adherence to PACE program terms;
2. Ensuring that work standards for projects include minimum requirements to ensure work performed is effective, durable and safe, using the DOE Standards of Work Specifications as a guide, and that work permits are obtained and available upon request;
3. Contractor management systems and procedures that monitor contractor performance and address consumer complaints; and
4. Quality insurance including on-site inspections, homeowner sign-off on project completion before payment, and a dispute resolution process.

**9 - Debt Service Reserve and Loan Loss Reserve Funds.** DOE recommends establishing a debt service reserve fund to protect bondholders from late payments or defaults and reduce foreclosure risk for the insurer, as well as establishing a loan loss reserve to protect mortgage lenders the need to make PACE assessments due from sale proceeds in the case of default or foreclosure.

**10 - Data Collection and Evaluation.** DOE recommends that PACE programs collect and report data on: installed measures, assessment amount, default and delinquency, mortgage default and disclosure, expected energy and cost savings, homeowner data, actual energy and water consumption for at least twelve months before and after installation, number of projects funded, annual and cumulative energy and water savings, and number of jobs created.

### C. NCLC Concerns and Recommendations

A group of sixteen consumer advocacy groups submitted joint comments<sup>98</sup> to draft DOE guidelines released in July, expressing concerns that the guidelines did not go far enough to adequately protect homeowners from predatory lending practices or other potential pitfalls including tax foreclosure or mortgage default, contractor abuses, false claims of energy savings paying for the full cost of the loan, or a PACE assessment on a property precluding a homeowner from selling or refinancing the property.<sup>99</sup> In addition, the groups expressed concern that consumers may be misled about whether or not the state or federal government has endorsed a PACE program or PACE contractor, and that customers who are unaware of free or subsidized weatherization programs may take out a PACE assessment despite more affordable options.

In September 2016, the National Consumer Law Center (NCLC) published an issue brief<sup>100</sup> that described in more detail its concerns with PACE and recommendations for improving consumer protections. The brief argues that PACE needs the following additional protections in order to sufficiently safeguard homeowners.

The following is a list of 8 consumer protections recommended by NCLC. Three NCLC-recommended consumer protections for low income that EPC considers particularly crucial and inadequately addressed thus far are starred below:



**Require assessment of ability to repay.** Take into account whether or not the homeowner can afford additional debt service payments<sup>101</sup> if energy savings from PACE improvements do not cover the cost of the lien.

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<sup>98</sup> [http://www.nclc.org/images/pdf/energy\\_utility\\_telecom/on\\_bill\\_financing/comments-doe-pacef-aug2016.pdf](http://www.nclc.org/images/pdf/energy_utility_telecom/on_bill_financing/comments-doe-pacef-aug2016.pdf)

<sup>99</sup> Fannie Mae and Freddie Mac have indicated they will not purchase loans on properties with PACE liens issued after July 5, 2010 if the PACE lien has priority over first mortgages. See <https://www.fanniemae.com/content/guide/selling/b5/3.4/01.html> and <http://www.freddiemac.com/singlefamily/guide/bulletins/pdf/iltr082014.pdf>

<sup>100</sup> "PACE Energy Efficiency Loans; Good Intentions, Big Risks for Consumers." National Consumer Law Center, September, 2016. <http://www.nclc.org/issues/pace-energy-efficiency-loans.html>

<sup>101</sup> Note that PACE underwriting does look at tax and mortgage payment history, bankruptcies, defaults, and involuntary liens.



**Screen & Refer.** Low income households should not be encouraged to take out a lien for energy efficiency upgrades if they are eligible to receive subsidized or free services from other sources.

Mandate compliance with the Truth in Lending Act's (TILA) ability-to-repay rule, right to rescind, and other TILA or Real Estate Settlement Procedures Act (RESPA) mortgage protections. Since the PACE assessment may have priority over the existing mortgage, it is important that it includes the same consumer protections as mortgages to prevent predatory lending practices and eliminate the possibility of a lender skirting mortgage protections by foreclosing on a home due to a delinquent PACE assessment.

Apply the Federal Trade Commission's holder rule, giving consumers remedies against the holder of the assessment.

Verify independently that the consumer signed the loan documents and understands the cost of the program and risks. Require more robust counseling for vulnerable homeowners. Require an independent energy audit to assess likely savings and ensure cost effectiveness of the product being sold.



**Limit incentives for aggressive door-to-door sales of PACE assessments and incentives to up-sell.** PACE homeowners should not be encouraged to implement measures that do not significantly increase the energy efficiency of the home or decrease energy cost for the homeowner.

*EPC Comment: A family that initially reports satisfaction with the quality of work might not have the skills to effectively assess if the work was completed in a manner that will achieve the promised energy savings. For a low income family, this could weaken their overall financial situation, thereby increasing the possibility of default.*

Establish a homeowner protection fund for those injured by judgment-proof contractors. Homeowners may not have the resources to independently recover damages from contractors that have performed unsatisfactory work or caused other damage to the home as a result of PACE improvements.

Ban deceptive tactics (i.e., claims that "it'll pay for itself" unless that's guaranteed). Unfair practices by an auditor or contractor should be per se Unfair, Deceptive or Abusive Acts and Practices (UDAP) violations.

PACE administrators disputed some of the NCLC claims, and pointed to progress on others.

The final DOE guidance released in November addressed some of the issues raised by the NCLC and other groups, particularly by adding a section on extra protections for low income households, but did not fully alleviate their concerns about PACE financing. In a press release on November 18, 2016,<sup>102</sup>

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<sup>102</sup> <http://www.nclc.org/media-center/pace-energy-efficiency-still-risky.html>

the NCLC, Americans for Financial Reform, Consumer Federation of America, Bet Tzedek Legal Services, Public Counsel, Public Law Center, and Elder Law and Advocacy expressed their continued concerns. First, they noted that the DOE guidance is voluntary and not enforceable, providing no guaranteed protection for homeowners or penalties for PACE programs, contractors, or lenders that do not conform to the recommendations. The release also reiterated the argument that PACE assessments should be subject to mortgage protections such as TILA's ability-to-repay rule, right to rescind, and other TILA/RESPA provisions, and that potential borrowers should be screened for ability to pay and for eligibility for other low- or no-cost energy efficiency programs.

#### D. PACENation Consumer Protection Recommendations

PACENation, a membership organization of PACE providers and others in the field, has also issued model consumer protection language. The PACENation guidance<sup>103</sup> includes standards across 14 categories: (1) eligibility and risk, (2) disclosures and documentation, (3) financing terms, (4) operations, (5) post-funding support, (6) data security, (7) privacy, (8) marketing and communications, (9) protected classes, (10) registered contractors, (11) eligible products, (12) pricing, (13) reporting, and (14) closing & funding. For each category, PACENation recommends minimum requirements for PACE assessments. See Appendix F.

## 4 Recent State Developments

### A. New Jersey

New Jersey has commercial and residential PACE-enabling legislation.<sup>104</sup> There is currently an active commercial PACE program operating in New Jersey,<sup>105</sup> but residential PACE has experienced setbacks. In November 2015, Governor Christie sent back a bill, A2579, that would have expanded existing PACE legislation to include resiliency measures.<sup>106</sup> In doing so, Christie included a conditional veto demanding multiple changes to the bill as a condition of signing it, including (1) limiting PACE to commercial properties, and (2) limiting commercial PACE to only 10 pilot locations statewide. Since then, New Jersey PACE, a non-profit set up to implement the features of New Jersey's PACE legislation, and other PACE advocates have been working with the state legislature to rework the law to reflect the Governor's conditions. As of August 3, 2016, the new PACE law has not yet been signed, but New Jersey PACE is anticipating that the program will become available for commercial properties in fall of 2016.<sup>107</sup>

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<sup>103</sup> "PACE Consumer Protection Policies." PACENation, May 10, 2016. <http://pacenation.us/wp-content/uploads/2016/08/PACENation-CPP-V1-2016.05.10-1.pdf>

<sup>104</sup> <http://pacenation.us/pace-programs/residential/>

<sup>105</sup> The active commercial PACE program is operated by program administrator AllianceNRG. See <http://pacenation.us/pace-in-new-jersey/>

<sup>106</sup> Exact text of NJ PACE statute as it now stands: [http://www.njleg.state.nj.us/2014/Bills/A3000/2579\\_R3.PDF](http://www.njleg.state.nj.us/2014/Bills/A3000/2579_R3.PDF)

<sup>107</sup> <http://www.newjerseypace.org/update-on-pace-legislation-in-new-jersey/>; For more information on PACE in New Jersey, see: <http://www.newjerseypace.org>

## B. Missouri

In July 2016, Missouri announced that one of the state's PACE agencies, Missouri Clean Energy District (MCED), was expanding to residential PACE in conjunction with Renovate America. The program was formally launched in September 2016 in the Kansas City/Jackson County area<sup>108</sup> and will be expanded statewide to communities that are members of MCED by the end of 2017.<sup>109</sup> Missouri was one of the first states to adopt residential PACE but the program, Set the PACE St. Louis, put a hold on residential PACE due to concerns with FHFA's position. However, in 2016, it selected the incumbent C-PACE Administrator, Energy Equity Funding, along with partners Ygrene Energy Fund and Rockwood Management Company, to develop a residential PACE program for the City of St. Louis. The same program team has been selected by the County of St. Louis to develop both residential and commercial PACE. Both jurisdictions are expected to launch their R-PACE programs in early 2017.

## C. Colorado

One of the earliest PACE programs, called the ClimateSmart™ Loan Program, was launched in 2009 in Boulder County, Colorado. The inspiration for ClimateSmart came from the BerkeleyFIRST program launched in 2007. In 2008, Colorado passed enabling legislation, HB 08-1350, that allowed for ClimateSmart to set up a PACE financing structure for energy efficiency and renewable energy measures and to issue tax-exempt bonds to fund the program. That same year, voters approved a ballot measure allowing Boulder County to issued up to \$40 million in bonds to fund ClimateSmart. In its initial stage, ClimateSmart primarily funded residential projects. Within its first six months, it financed 612 energy efficiency and renewable energy projects worth \$10 million.<sup>110</sup>

ClimateSmart combined financing with education and counseling.<sup>111</sup> Prior to applying for and receiving any financing, participants in the program were required to first attend a Home Energy 101 workshop that was intended to educate homeowners about home efficiency upgrades and the ClimateSmart financing process. ClimateSmart also worked with Boulder County's energy concierge service, the Residential Energy Action Program (REAP), to provide homeowners one-on-one counseling. This counseling provided homeowners with a greater understanding of their energy usage, personalized recommendations for energy retrofits, and information on payback, utility savings, and rebates and incentives.

ClimateSmart started to expand into commercial PACE. In 2010, Boulder County issued a Qualified Energy Conservation Bond (QECCB) financing \$1.515 million in commercial PACE projects. However, after only one round of funding for commercial PACE, ClimateSmart was suspended in 2010 after

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<sup>108</sup> <http://www.prnewswire.com/news-releases/hero-program-launching-in-kansas-city-missouri-and-jackson-county-to-finance-home-energy-improvements-300327245.html>

<sup>109</sup> <https://www.renovateamerica.com/News/Property-Assessed-Clean-Energy-Financing-for-Home-Improvements-in-Kansas-City-Area-2016-07-05>

<sup>110</sup> "Boulder County's ClimateSmart Loan Program: Funding Energy Efficiency and Renewable Energy on a Countywide Scale", Ann Livingston and Susie Strife, 2010, available at <http://aceee.org/files/proceedings/2010/data/papers/2176.pdf>.

<sup>111</sup> <http://aceee.org/files/proceedings/2010/data/papers/2176.pdf>

FHFA expressed its opposition to PACE financing and issued its directive prohibiting Fannie and Freddie from backing mortgages impacted by first-lien PACE obligations.<sup>112</sup>

In December 2015, the New Energy Improvement District (NEID) established and launched a statewide commercial PACE program under Colorado C-PACE.<sup>113</sup> In the summer of 2016, Colorado issued a Request for Applications for residential PACE providers,<sup>114</sup> and in late 2016 chose Renovate America and Renew Financial as potential administrators. Negotiations are ongoing to define the residential PACE program that will be launched in Colorado.<sup>115</sup> Within these negotiations, concerns over consumer protections and the absence of an ability-to-repay assessment have been raised.<sup>116</sup> While 14 counties have already joined Colorado C-PACE's commercial programs, counties will have the opportunity to opt-in separately to residential PACE offerings.

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<sup>112</sup> Call with Susie Strife (Boulder County), February 28, 2017.

<sup>113</sup> [https://www.colorado.gov/pacific/sites/default/files/atoms/files/Co%20CPACE%20Launch\\_0.pdf](https://www.colorado.gov/pacific/sites/default/files/atoms/files/Co%20CPACE%20Launch_0.pdf)

<sup>114</sup> See page 71 of <http://www.utilityexchange.org/resources/rmuee/2016/CEO%20Workshop2016%20RMUEE%20-%20Final.pdf>

<sup>115</sup> Draft Comments from Michael Yaki (Renovate America), January 18, 2017.

<sup>116</sup> Call with Paul Scharfenberger (Colorado Energy Office), March 2, 2017.

# III. FREQUENTLY ASKED QUESTIONS



This section will answer twenty-nine frequently asked questions about single-family residential PACE. It provides information on known residential PACE programs and their terms and policies. For a full list of the questions answered here, please see the Table of Contents at the beginning of the document.

## 1. What Single-Family Residential PACE programs are currently available?

Table 1: Operational Single-Family Residential PACE Programs as of January 2017

PACE Program Name	State	PACE Administrator	PACE District	Participating Jurisdictions
HERO (California)*	CA	Renovate America	Western Riverside Council of Governments (WRCOG), San Bernardino Associated Governments (SANBAG), Los Angeles County	48 counties
HERO (Missouri)	MO	Renovate America	Missouri Clean Energy District (MCED)	9 counties
Ygrene Works (California)	CA	Ygrene Energy Fund	Golden State Finance Authority (GSFA), County of Yolo, Coachella Valley Association of Governments (CVAG), City of Chula Vista**	42 counties
Ygrene Works (Florida)	FL	Ygrene Energy Fund	Green Corridor PACE District	8 counties
CaliforniaFIRST ***	CA	Renew Financial	California Statewide Communities Development Authority (CSCDA) Open PACE, Los Angeles County	38 counties
RenewPACE	FL	Renew Financial	Florida Green Finance Authority	9 counties
PACEfunding	CA	PACE Funding Group	California Statewide Communities Development Authority (CSCDA) Open PACE	34 counties
AllianceNRG (California)	CA	AllianceNRG	California Statewide Communities Development Authority (CSCDA) Open PACE	35 counties
AllianceNRG (Florida)	FL	AllianceNRG	Florida PACE Funding Agency	20 counties
E3	CA	Energy Efficient Equity	California Municipal Finance Authority (CMFA)	65 jurisdictions
Sonoma County Energy Independence Program (SCEIP)	CA	Sonoma County Auditor-Controller Treasurer-Tax Collector	Sonoma County Joint Powers Authority	1 county (Sonoma County)
mPOWER	CA	Placer County Treasurer-Tax Collector	Placer County, Nevada County, Sacramento County	3 counties; 10 cities
Vermont PACE	VT	Efficiency Vermont and Burlington Electric Department (BED)	Albany, Barre City, Bristol, Corinth, Fayston, Ferrisburgh, Glover, Halifax, Hinesburg, Huntington, Londonderry, Marshfield, Ripton, Tunbridge, Westminster	43 towns
Maine PACE	ME	Efficiency Maine		190 municipalities
Ygrene Works (Missouri)	MO	Ygrene Energy Fund	Set the PACE St. Louis	Anticipated Launch 2017
Ygrene Works (Georgia)	GA	Ygrene Energy Fund	Atlanta Downtown Development Authority	Anticipated Launch 2017
Spruce	CA	Spruce	California Statewide Communities Development Authority (CSCDA) Open PACE	Anticipated Launch 2017

HERO (Florida)	FL	Renovate America	Florida Development Finance Corporation	Anticipated Launch 2017
Dividend PACE	CA	Dividend Solar		Anticipated Launch 2017

\*In California, there are four separate HERO programs all operated by the same PACE administrator, Renovate America: California HERO, LA County HERO, SANBAG HERO, and WRCOG HERO. These programs are differentiated in that LA County, SANBAG, and WRCOG have more involved roles in administering their respective district’s PACE programs.

\*\*Coachella Valley Association of Governments, County of Yolo and the City of Chula Vista issue their own PACE bonds and therefore serve as the PACE district in that capacity.

\*\*\*There is a CSCDA CaliforniaFIRST program and an LA County CaliforniaFIRST program, both operated by Renew Financial.

## 2. What is the role of the PACE District?

The PACE district is the underlying legal entity that facilitates PACE programs. It is a land-secured financing district that local governments may join (or create, if they choose) in order to participate in the PACE program. It is responsible for selling PACE bonds secured by PACE assessments in order to finance the program and it also has the right to initiate foreclosure proceedings in connection with delinquent PACE assessments (which right is assignable to holders of PACE bonds in some states.) Many districts engage a third-party private sector company to act as the PACE administrator to run the PACE program, while other districts administer their own programs. Historically, such land-secured districts were used to finance public infrastructure and were entirely administered by local governments.

## 3. What is the role of Local Government?

After a state has passed PACE-enabling legislation, local governments may voluntarily initiate and launch programs that will provide PACE financing to homeowners within their jurisdictions. The local government’s role in the PACE program is typically limited, but includes:

**RESOLUTION ADOPTION.** The local government must adopt a resolution to either create or join a PACE district. If it chooses to join an existing PACE district, it will participate in the corresponding PACE program but it is not a party to the financing or to any PACE bonds issued for assessments within its jurisdiction.<sup>117</sup>

**BILLING & COLLECTION.** The local government’s tax authority (the agency of the local government office that bills and collects assessments for properties located within its jurisdiction) is generally responsible for the billing and collection of the PACE assessments for all participating properties within its jurisdiction. A jurisdiction may engage a third-party tax administrator who provides the tax authority and/or the PACE district with the assessment enrollment, billing and reporting services (as in Maine). The tax authority pursues delinquent payments and has the right to initiate foreclosure

<sup>117</sup> Los Angeles County is the main exception to this. The county administers its own program in conjunction with two major PACE administrators and issues PACE bonds, has its own consumer protection requirements, and maintains its own loan loss reserve fund. See <http://pace.lacounty.gov/residential/index.html>. Additionally, 3 jurisdictions participating in the Ygrene program in California act as their own PACE bond issuers: Coachella Valley Association of Governments, the County of Yolo, and the City of Chula Vista.

proceedings or to directly offer property for sale at auction in relation to defaulted taxes and assessments that it collects. California tax collectors have also found that the placement of PACE liens on the property tax rolls does increase calls to the various tax collector offices, especially in cases where consumers did not fully understand that PACE funding is a lien and that it would appear on property taxes.<sup>118</sup>

**MARKETING.** The local government is not typically responsible for any marketing of the PACE program but most do generate awareness of the program and promote it as part of broader efforts to encourage energy efficiency and water conservation.

#### 4. What is the role of the PACE Administrator?

The PACE administrator is the entity that local governments contract with to run the district's PACE program. The PACE administrator can be the local government itself, a third-party private company, or some combination of both. PACE administrators are responsible for:

**MARKETING.** The PACE administrator markets the PACE program to property owners and contractors by means of websites, pamphlets, and conference booths. Many PACE administrators will also offer co-marketing to contractors. Generally, contractors using a program's branding (logos and copy blocks) are required to comply with the administrator's guidelines, which have been created to meet local, state, and federal regulations related to advertising.<sup>119</sup>

**APPLICATION PROCESSING.** The PACE administrator manages the application, documentation, and financing processes.

**ORIGINATION.** The PACE administrator makes the final decision about whether to lend to a particular homeowner based on the application materials received, finalizes assessment contracts<sup>120</sup> and recording documents, and disburses funds to the homeowner's contractor.

**MAINTAINING THE CONTRACTOR NETWORK.** PACE administrators provide contractors with certification to verify that they possess insurance, all the requisite permits, and proper licenses. In this process, administrators may conduct background checks on contractors. Administrators will also train and register new contractors as well as provide marketing materials and software. Some administrators will inspect or hire a third-party quality assurance firm to inspect contractors' projects. Contractors with subpar workmanship or insufficient business may be placed on probation.<sup>121</sup>

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<sup>118</sup> Draft Comments from Alexia Retallack (mPOWER), January 25, 2017.

<sup>119</sup> [https://cdn.heroprogram.com/contractor/HERO\\_Contractor\\_Marketing\\_Guidelines.pdf](https://cdn.heroprogram.com/contractor/HERO_Contractor_Marketing_Guidelines.pdf);

<http://alcl.assembly.ca.gov/sites/alcl.assembly.ca.gov/files/ygrene-report.pdf>;

<https://www.allianceng.com/retail/sites/default/files/CESR%20Brand%20and%20Marketing%20Policy%20092116.pdf>

<sup>120</sup> See the following link for an example of an Assessment Contract from SANBAG HERO: [https://9662473e561b2ca15fec-e991096dabe6d2069d3f005000c6b73d.ssl.cf2.rackcdn.com/SANBAG\\_SampleHEROFinancingDocs.pdf](https://9662473e561b2ca15fec-e991096dabe6d2069d3f005000c6b73d.ssl.cf2.rackcdn.com/SANBAG_SampleHEROFinancingDocs.pdf)

<sup>121</sup> [http://www.pacensation.us/wp-content/uploads/2015/02/CalFirst\\_ConsumerProtect\\_FINAL.pdf](http://www.pacensation.us/wp-content/uploads/2015/02/CalFirst_ConsumerProtect_FINAL.pdf)

**CONSUMER PROTECTIONS.** The PACE administrator ensures that consumer protections are in place. These may include disclosure requirements, quality control, dispute resolution, senior citizen protections, right to cancel, among others.

**ASSESSMENT AND BOND ADMINISTRATIVE FUNCTIONS.** The PACE administrator coordinates with the tax authority (see below) to establish assessments; adds the assessments on tax bills; and, in the event of securitization, acts as a coordinator for the trustee that receives the assessment payment from the tax collector and disburses the payment to bondholders.

In the case of PACE programs administered by the local governments, the local government would perform all of these tasks.

## 5. What are the eligibility requirements for a homeowner interested in taking out a PACE assessment? What underwriting criteria do PACE administrators use in originating PACE financing?

Eligibility requirements and underwriting vary amongst programs; Table 2 summarizes some of the differences between program underwriting criteria. All of the listed programs require that the home be located in a participating jurisdiction and have no involuntary liens, that the applicant must be the property owner of record and be current on property taxes and on all property debt. Most look to combined loan-to-value (CLTV) ratios<sup>122</sup> and place limitations on borrowing based on past bankruptcies and prior mortgage/property tax delinquencies. Eligible improvements must typically be permanent fixtures to an existing property and the cost of the improvements must not exceed a set percentage of the property's value. If a proposed assessment exceeds CLTV ratios or the set percentage of the property's value, the maximum assessment may be reduced.

For example, in the California HERO program, no credit check is required. The underwriting criteria include that the property owner must (1) be the property owner of record (the person or entity listed as the title holder of a property in the public records); (2) be current on their property taxes with no more than one late payment over the last 3 years; and (3) not have declared bankruptcy in the past seven years. The property must not have any other material liens other than lender debt or liens recorded by community facilities district or similar financing districts. The PACE assessment cannot exceed 15 percent of the first \$700,000 in property value and 10 percent of the remaining value above \$700,000. Mortgage-related debt cannot exceed 90 percent of the property's value; together, the CLTV ratio must not exceed 100 percent. The total annual property tax, special assessments, and other charges including the contractual assessment on the subject property will not exceed 5 percent of the property's market value.

Some programs, such as SCEIP, have more lenient requirements allowing a PACE assessment to be made to a homeowner current on property taxes and mortgage payments who has not been subject

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<sup>122</sup> CLTV ratios represent the ratio of loans secured by a property to value of the property. For PACE purposes, CLTV ratios are calculated by summing all existing loans on a property (such as a mortgage debt) plus the proposed assessment and dividing the total by the property's value.

to a bankruptcy in the last 3 years so long as the bankruptcy is discharged, all liens have been current for the six (6) months prior to the application date, and the homeowner does not owe more in mortgages and liens than the market value of the home. Property owners who have declared bankruptcy more than once are not eligible for SCEIP.<sup>123</sup>

While credit scores are not used for PACE underwriting purposes, many programs do review a credit report to check for bankruptcies and mortgage payment history. Other programs, such as mPOWER, do not generate a credit report as part of the application process but instead and SCEIP utilize title reports and bankruptcy checks to determine bankruptcies and mortgage payment history. In addition, both mPOWER and SCEIP require that property owners provide a current mortgage statement. mPOWER also requires no notice of default for the past five years; have no record of bankruptcy for at least five years since date of discharge; and be current on property taxes with no defaults for the past three years. PACE assessments do not appear on the homeowner’s credit report as it is attached to the property, not the homeowner. However, nonpayment of a PACE assessment will face the same consequences as nonpayment of property taxes,<sup>124</sup> which has the potential to affect the homeowner’s credit score.<sup>125</sup>

**Table 2: Underwriting Criteria**

Underwriting Criteria	HERO	California FIRST	Renew PACE	Ygrene Works (CA)	Alliance NRG (CA)	PACE funding	E3	SCEIP	mPOWER
No bankruptcy	In last 7 years	In last 2 years	In last 2 years	√	In last 7 years	In last 2 years	In last 3 years	Generally In last 3 years	In last 5 years
% equity required		10%	10%			10%	10%		
Mortgage-related debt maximum	90%	90%	90%	90%	90%	90%			
Financing amount maximum (LTV)	15% of the first \$700,000; 10% of remaining value	15% of the first \$700,000; 10% of remaining value	20% or \$250,000	15% of the first \$700,000; 10% of remaining value	15% of the first \$700,000; 10% of remaining value	15% of the first \$700,000; 10% of remaining value	15% of the first \$700,000; 10% of remaining value	10%	10%
Mortgage-related debt + amount Financed	100%	100%	100%		100%	100%	96.4%		

<sup>123</sup>[http://sonomacountyenergy.org/uploads/sonomacountyenergy.org/Policy%20Documents/SCEIP\\_Financing\\_Eligibility\\_Requirements.pdf](http://sonomacountyenergy.org/uploads/sonomacountyenergy.org/Policy%20Documents/SCEIP_Financing_Eligibility_Requirements.pdf)

<sup>124</sup> <http://www.broward.org/GoGreen/EnergySense/Documents/PACEBrowardFAQSheet10272016.pdf>; <http://sonomacountyenergy.org/resources/pace-financing/frequently-asked-questions/>

<sup>125</sup> [http://www.huffingtonpost.com/creditcom/can-paying-your-taxes-lat\\_b\\_5111450.html](http://www.huffingtonpost.com/creditcom/can-paying-your-taxes-lat_b_5111450.html)

(CLTV)								
Total annual property tax + assessment cannot exceed 5% of the property's value	√	√	√	√	√	√	√	√
Income Requirements							DTI: 5% CDTI: 45%	

## 6. Do Residential PACE programs serve low and moderate income homeowners?

Income is usually not a part of the PACE underwriting process,<sup>126</sup> so it is generally not possible to know exactly how many PACE homeowners have low or moderate incomes. However, the same lack of income-underwriting means PACE may reach low and moderate income homeowners who might be disqualified from traditional financing with income cut-offs or restrictive debt-to-income ratio requirements. Fees associated with the program can typically be financed, making it more accessible to families without savings or cash available to pay upfront.

However, low and moderate income families may not always be able to finance the full extent of improvements they wish to make because the amount financed is limited to a percentage of the property value, which may prove to be a low cap for less expensive homes in lower-priced markets. On the other hand, this may provide some protection for low to moderate income borrowers against borrowing for improvements whose value cannot be recouped upon sale.

Home value may give some indication as to the income of PACE participants. The most recent Dominion Bond Rating Service (DBRS) rating data available for the HERO program (from the HERO Funding Trust 2016-4 securitization) has an average home value of \$510,786 with the lowest property value being \$71,980 and the highest property value being \$17,271,005<sup>127</sup> across a pool of 12,394 PACE assessments.

## 7. What sort of FICO scores do PACE borrowers typically have?

Data is limited, but two programs reported average FICOs of 684 (HERO 2016-4) and 708 (Ygrene 2016-1), respectively.<sup>128</sup> Generally, a FICO score between 670 and 739 is considered a good,

<sup>126</sup> An exception is Energy Efficient Equity (E3) which looks at debt-to-income in underwriting. The program's debt-to-income threshold is 5 percent and its maximum combined debt-to-income is 45 percent. See <http://www.treasurer.ca.gov/caeatfa/meeting/staff/2017/20170117/4d.pdf>

<sup>127</sup> "Rating Report: HERO Funding Trust 2016-4," DBRS, September 22, 2016, <http://www.dbrs.com/research/303643/hero-funding-2016-4-rating-report.pdf>

<sup>128</sup> Despite FICO scores not being used to underwrite the loan, FICO scores are collected as part of the file. Rating Report: HERO Funding Trust 2016-4, DBRS, September 22, 2016, <http://www.dbrs.com/research/303643/hero-funding-2016-4-rating-report.pdf>. Draft Comments from Stacey Lawson (Ygrene Energy Fund), January 20, 2017.

acceptable score with medium risk: about 8 percent of consumers with this type of FICO score are likely to become delinquent in the future.<sup>129</sup>

## 8. How much can a homeowner borrow using a PACE assessment?

Table 3: Borrowing Constraints

Program	Minimum	Maximum
HERO (CA)	\$5,000	Must be less than 15% of the first \$700,000 in property value and 10% of any remaining property value over \$700,000 <sup>130</sup>
HERO (MO)	\$2,500	20% of property value
Ygrene Works (CA)	\$2,500	Must be less than 15% of the first \$700,000 in property value and 10% of any remaining property value over \$700,000
Ygrene Works (FL)	\$2,500	20% of the property value
Ygrene Works (MO)	\$2,500	20% of the property value
CaliforniaFIRST	\$5,000	Must be less than 15% of the first \$700,000 in property value and 10% of any remaining property value over \$700,000, may not exceed \$200,000 (\$250,000 for LA County residents)
RenewPACE	\$5,000	20% of property value. Cannot exceed \$250,000
PACEfunding	\$5,000	14.99% of the first \$700,000 of the market value of the collateral property, and up to 10% of any remaining market value of the property above \$700,000, or \$200,000, whichever is less
AllianceNRG (CA & FL)	\$2,500	15% of the property value up to \$700,000 and 10% thereafter
E3	\$5,000	Must be less than 15% of the first \$700,000 in property value and 10% of any remaining property value over \$700,000. Cannot exceed \$200,000
SCEIP	\$2,500	10% of property value
mPOWER (Placer)	\$2,500	10% of property value and cannot exceed the property owner's equity in the home, subject to qualification.
Vermont PACE	\$3,500	15% of the assessed value of the property; capped at \$30,000. CLTV ratio cannot exceed 90% of the assessed value of the property.
Maine PACE	\$6,500	\$15,000. Loans over \$7,500 cannot exceed homeowner's equity in the home

## 9. How much do homeowners typically borrow using a PACE assessment?

Around \$20,000. The median PACE assessment principal amount for all programs that are members of the CAEATFA PACE Loss Reserve Program for the period July 1, 2014 to June 30, 2016 was \$19,567.<sup>131</sup> For the HERO program, loan data is available for the 84,613 assessments that have been securitized to date. The average loan balance across the pools for all prior securitizations is \$22,084. In

<sup>129</sup> <http://www.experian.com/blogs/ask-experian/infographic-what-are-the-different-scoring-ranges/>

<sup>130</sup> All programs participating in CAEATFA's PACE Loss Reserve Program have been subject to this max financing amount since 2015, and all CA residential PACE programs must not exceed this maximum per AB 2693, effective January 1, 2017.

<sup>131</sup> Based on data submitted to CAEATFA; see <http://treasurer.ca.gov/caeatfa/pace/activity.asp>

the most recent securitization (HERO Funding Trust 2016-4 dated November 2016) the average loan balance was \$22,723.

## 10. Over what period of time are PACE assessments repaid?

The underlying PACE assessments of the 15 PACE securitizations completed to date (see Appendix H) have average loan terms ranging between 14 and 20 years.

**Table 4: Loan Tenor**

Program	Minimum	Maximum	Options
HERO (CA)	5 years	25 years	5, 10, 15, 20, or 25 years. Cannot exceed expected useful life of improvements
HERO (MO)	5 years	20 years	5, 10, 15 or 20 years. Cannot exceed expected useful life of improvements
Ygrene Works (CA)	5 years	30 years	5, 10, 15, or 20 years; 25 or 30 years for solar projects in some areas. Cannot exceed expected useful life of improvements
Ygrene Works (FL)	5 years	20 years	5, 10, 15, or 20 years. Cannot exceed expected useful life of improvements
Ygrene Works (MO)	5 years		5, 10, 15, or 20 years. Cannot exceed expected useful life of improvements
CaliforniaFIRST	5 years	30 years	5, 10, 15, 20 or 25 years. Cannot exceed expected useful life of improvements. For solar only, up to 30 years offered.
RenewPACE	5 years	25 years	Limited by the expected useful life of the costliest product of the project's financed improvements
PACEfunding	5 years	25 years	The financing Term may not exceed the useful life of the installed Eligible Product
AllianceNRG (CA & FL)	5 years	30 years	5, 10, 15, 20, 25 or 30 years
E3	5 years	30 years	
SCEIP	10 years	20 years	10 years for amounts from \$2,500 to \$4,999 and 10 or 20 years for projects over \$5,000 (property owner's option)
mPOWER (Placer)	5 years	20 years	5, 10, 15 or 20 years based on useful life of improvements. Multiple improvements may have varied payback periods – blended/step down payback periods
Vermont PACE	N/A	20 years	Cannot exceed expected useful life of improvements
Maine PACE	5 years	15 years	5, 10, or 15 years

## 11. Are there prepayment fees or penalties?

Most PACE programs (including HERO, CaliforniaFIRST, and mPOWER) allow for prepayment at any time without fees or penalties so long as the prepayment is in an amount of at least \$2,500.

AllianceNRG does not have a prepayment penalty but has a prepayment processing fee of up to \$100. Ygrene indicates that there is a 3 to 5 percent prepayment penalty unless the property owner chooses

to add 0.25 percent to the interest rate to waive the penalty. The Ygrene Florida program has a 5 percent prepayment fee (called an “early termination fee”) of 5 percent of the remaining amount, unless the homeowner chooses to add a 1.5 percent up-front fee to waive the penalty.

## 12. What sort of interest rates are homeowners typically seeing on PACE financing?

Table 5: Interest Rates as of January 2017

Program	5 year	10 year	15 year	20 year	25 year	30 year
HERO (CA)	6.75%	7.69%	8.15%	8.35%	8.35%	N/A
HERO (MO)	6.99%	7.99%	8.79%	8.99%	N/A	N/A
Ygrene Works (CA)	6.75%	7.49%	8%	8.25%		8.49%
Ygrene Works (FL)	7.29%	7.67%	7.89%	8.02%	N/A	N/A
CaliforniaFIRST	6.75%	7.59%	7.99%	8.29%	8.39%	8.49%
RenewPACE	6.75%	7.59%	7.99%	8.29%	8.39%	N/A
PACEfunding	6.55%	7.35%	7.49%	7.79%	7.99%	N/A
AllianceNRG (CA & FL)	5.95%	6.75%	7.88%	8.13%	8.25%	8.50%
E3	2.99 – 6.99% (fixed)					
SCEIP	N/A	7%	N/A	7%	N/A	N/A
mPOWER (Placer)	6%	6%	6%	6%	N/A	N/A
Vermont PACE	4%	4%	4%	4%	N/A	N/A
Maine PACE	4.99%	4.99%	4.99%	N/A	N/A	N/A

As a point of reference, interest rates on home equity loans are around 5 percent as of February 2017.<sup>132</sup>

## 13. What other fees may be involved in PACE financing?

Table 6: Fees

Program	Fees
HERO (CA)	\$55 recording fee; \$25 annual collection fee; origination fee amount to 4.99% of project cost
HERO (MO)	One-time administration fee (4.99%)
Ygrene Works (CA)	\$40 annual administrative fee (varies slightly by jurisdiction); \$441 program fee plus 3% origination fee and 1% jurisdiction fee. Fees are rolled into financed amount, no upfront fees.
Ygrene Works (FL)	\$505 program fee, plus 3% origination fee. Fees are rolled into financed amount, no upfront fees.
CaliforniaFIRST	Representative of CSCDA program only: one time closing cost not to exceed 6.65%; program admin and origination fee of 4% of project cost; bond counsel of

<sup>132</sup> <http://www.bankrate.com/finance/home-equity/current-interest-rates.aspx>

	1%; program sponsor fee of 0.875%; \$5 foreclosure fee; lien recording fee (depends on County); bond reserve of 0.25%
RenewPACE	Program-related fee; reserve fee; recording fee; administrative fee; annual administrative fee
PACEfunding	\$100 lien recording fee; \$95 loan loss reserve account; \$10 foreclosure expense reserve account; \$45 annual administration fee; origination fee 5.95%
AllianceNRG (CA & FL)	Estimated \$100 lien recording fee (varies by County and number of pages); \$10 administrative reserve account deposit; \$75 trustee issuance fee; program administration fee of 6.40% of assessment amount; reserve fund deposit of 0.25%; prepaid (or capitalized) interest – varies based on when closing occurs; \$15 annual municipality fee; \$10 annual administrative fee; \$35 annual trustee fee
E3	Origination fee of 0%-4.99%, risk adjusted; other fees (i.e., recording expenses)
SCEIP	Title costs (typically \$50 for projects under \$5,000 and \$125 for projects \$5,000 to \$500,000. Projects greater than \$500,000 will require title insurance; recording fee (currently \$66); annual assessment collection and processing costs (\$40 for fiscal year 2009/10); \$12 cost to determine the market value of a residential property; \$150 inspection fee per disbursement for multiple disbursement projects
mPOWER (Placer)	\$500 residential processing fee; \$66 recording fee; \$140 title costs; \$25 annual assessment fee; \$12 desktop appraisal fee if needed for valuation
Vermont PACE	Loan loss reserve contribution equal to 2% of the borrowed funds; \$375 application/underwriting fee
Maine PACE	No loan origination, servicing, closing, or pre-payment fees of any kind

For comparison, closing costs on home equity loans can include: an application fee, title search, attorneys' fees, document preparation, and an appraisal. These fees typically amount to 2 to 5 percent of the loan.<sup>133</sup>

#### 14. What types of improvements can homeowners finance with PACE?

See Appendix E for a completed list of eligible improvements by program. Most programs require that eligible improvements be permanently affixed, new products that meet minimum energy and water efficiency thresholds. Some programs also provide lists of eligible improvements along with minimum eligibility specifications such as ENERGY STAR certification.<sup>134</sup>

#### 15. What types of improvements do homeowners finance with PACE?

The most recent data available from PACE Nation<sup>135</sup> (as of January 2017) indicates that 58 percent of residential PACE projects financed were related to energy efficiency, 37 percent were renewable energy projects, and 4 percent were water improvements.

<sup>133</sup> <https://www.lendingtree.com/home-equity/closing-costs-for-a-home-equity-loan-article>

<sup>134</sup> For California HERO's eligibility specifications, see <https://e46c35b14ba172b610db-5bdc7e6ccbce2b667854e87f83bdb832.ssl.cf1.rackcdn.com/CA-HEROEligibleProductsList.pdf>. For CaliforniaFIRST's eligibility specifications, see its Property Owner Handbook.

<sup>135</sup> <http://www.pacenation.us/pace-data/>

## 16. What sort of contractor qualification or management does the program utilize?

PACE programs typically maintain a network of contractors certified to work on the projects they finance. All existing residential PACE programs require licensing, insurance, certification, and registration with the program. The exact requirements vary by program and by state. Some programs allow homeowners to finance self-installed improvements.<sup>136</sup> Renovate America has about 8,000 participating contractors; Ygrene has 3,200.<sup>137</sup>

**Table 7: Contractor Requirements**

Program	Requirements for certification/Registration
HERO (CA)	Must adhere to HERO Program’s consumer protections standards
HERO (MO)	Must adhere to HERO Program’s consumer protections standards
Ygrene Works (CA)	Contractors must register for program and attend Ygrene Contractor Training; all participating contractors must have ability to access Ygrene’s “Ygrene Works” software. Contractors must remain in good standing and comply fully with Ygrene’s Contractor Code of Conduct and Consumer Protection Policy.
Ygrene Works (FL)	Contractors must register for program and attend Ygrene Contractor Training; all participating contractors must have ability to access Ygrene’s “Ygrene Works” software. Contractors must remain in good standing and comply fully with Ygrene’s Contractor Code of Conduct and Consumer Protection Policy.
CaliforniaFIRST	Must complete a product specific training within 30 days of enrollment
RenewPACE	Contractors must meet program requirements to register with Renew Financial. Registration involves an online application.
PACEfunding	To register, contractors must be properly licensed and bonded with the Contractors State License Board. Contractors fill out a short online application form to get started on registration.
AllianceNRG (CA & FL)	Online registration system; customers can select their own contractor (as opposed to a contractor from the approved contractor list) so long as the contractor completes the registration process
E3	Contractors have to submit to a background check, be in business for at least 2 years, maintain an auditable database of customer transactions, meet certain financial requirements, provide proof of insurance, have a valid license, and abide by E3’s code of ethics.
SCEIP	Agree to contractor standards and guidelines for the SCEIP program, including the requirement of carrying at least \$1 million dollars in commercial general liability insurance. For every application, the contractor’s license is verified as active and in the correct trade, as well as verifying insurance.
mPOWER (Placer)	Contractor must attend program seminar. Contractor must abide by Contractor Code of Conduct. In addition, mPOWER uses an ongoing dynamic approval process. For every

<sup>136</sup> In the case of the HERO program, if a homeowner registers as a HERO program contractor they may then be able to finance the labor costs of any work crew but not their personal labor. See <https://www.heroprogram.com/faq##6e649c6a-cf7e-4e93-ae12-9b66aea06472>

<sup>137</sup> <http://www.wsj.com/articles/americas-fastest-growing-loan-category-has-eerie-echoes-of-subprime-crisis-1484060984>

	application, the contractor’s license is verified as active and in the correct trade, as well as verifying insurance.
Vermont PACE	Property owner is responsible for hiring and paying the contractor. The contractor has to be in the normal business of installing the energy system(s) involved in the project. BED requires that the property own submit a copy of the contractor(s)’ formal proposal that separately lists costs of major materials by model number and the labor and the permit costs.

## 17. Does the program utilize audits or other methods of estimating or verifying savings?

An energy audit is not required but is encouraged by many residential PACE programs.<sup>138</sup> The chart below summarizes the requirements by program:

Table 8: Audits

Program	Audit required?	Standards
HERO (CA)	No	No. Audits encouraged, and eligible for financing but not required.
HERO (MO)	No	No. Audits encouraged, and eligible for financing but not required.
Ygrene Works (CA)	No	Not required, but recommended in certain cases. Audit costs can be financed with YgreneWorks.
Ygrene Works (FL)	No	Not required, but recommended in certain cases. Audit costs can be financed with YgreneWorks.
CaliforniaFIRST	No	Recommended in certain cases. Audit costs can also be financed with CaliforniaFIRST.
RenewPACE	No	Recommended in certain cases
PACEfunding	No	It is recommended, especially for homeowners looking to do whole home improvements.
AllianceNRG (CA & FL)	No	
E3		
SCEIP	No	SCEIP encourages homeowners to use an energy audit.
mPOWER (Placer)	No	mPOWER encourages homeowners to use an energy audit.
Vermont PACE	No	Homeowners are encouraged to have an energy audit.
Maine PACE	Yes	

<sup>138</sup> "PACE financing: A primer for real estate investment management professionals." Robert Johnson Jr., *The Letter – Americas* (July/August 2015): 48. <http://pace-equity.com/wp-content/uploads/2015/07/Pace-financing-primer.pdf>  
<http://www.pace-equity.com/news/pace-financing-a-primer-for-real-estate-investment-management-professionals>

## 18. Are PACE payments deductible (in whole or in part) for U.S. federal income tax purposes?

In July 2016, the IRS released guidance stating that the interest portion of a PACE payment can be treated as a deduction to personal income taxes.<sup>139</sup> California’s Franchise Tax Board adopted the same position.<sup>140</sup> California’s recently enacted PACE disclosure law, Assembly Bill 2693, requires PACE programs to specifically inform the homeowner that they should consult a tax professional.<sup>141</sup>

## 19. What consumer protections exist?

Each program has a different set of existing quality assurance and consumer protection policies. These policies are generally based on state and local government requirements for companies to participate in the PACE program. We have information about consumer protections for 7 programs: HERO, CaliforniaFIRST, AllianceNRG, Ygrene Works, PACEfunding, SCEIP, and mPOWER. An absence of a check mark in any of the cells in the table below does not necessarily mean that a program lacks the corresponding consumer protection; this table was filled out to the best of our abilities with the information available to us. For more information on consumer protections-related legislation and best practice guidelines, see section II.3. above.

**Table 9: Consumer Protection Policies**

Consumer Protections	HERO <sup>142</sup>	California FIRST <sup>143</sup>	Alliance NRG	Ygrene Works <sup>144</sup>	PACE funding <sup>145</sup>	SCEIP <sup>146</sup>	mPOWER
Full Disclosure of Estimated Assessment Amount, Annual Installments & Fees	√	√	√	√	√	√	√
Disclosure of Impact of PACE Lien on Refinancing & Sale	√	√	√		√	√	√
Written/Print Copies of	√	√	√		√	√	√

<sup>139</sup> See <https://www.irs.gov/taxtopics/tc503.html>. There had previously been much debate as to whether the payment was tax deductible and, if so, whether all of it or just the interest portion was deductible. The IRS stated that PACE assessments are not fully deductible real estate taxes (despite appearing as such on a property tax bill) as they are assessments associated with specific improvements benefiting only one home. However, the interest portion of the payment may be deductible as home mortgage interest if the homeowner qualifies for such a deduction.

<sup>140</sup> Draft Comments from Alexia Retallack (mPOWER), January 25, 2017.

<sup>141</sup> Draft Comments from Michael Yaki (Renovate America), January 18, 2017.

<sup>142</sup> <http://www.prnewswire.com/news-releases/hero-programs-hero-protect-includes-special-protections-for-seniors-300120733.html>

<sup>143</sup> [http://www.pacensation.us/wp-content/uploads/2015/02/CalFirst\\_ConsumerProtect\\_FINAL.pdf](http://www.pacensation.us/wp-content/uploads/2015/02/CalFirst_ConsumerProtect_FINAL.pdf)

<sup>144</sup> See [https://ygreneworks.com/wp-content/uploads/40011-CA-10-16\\_ConsumerProtectionsBooklet\\_PRINT.pdf](https://ygreneworks.com/wp-content/uploads/40011-CA-10-16_ConsumerProtectionsBooklet_PRINT.pdf) and <http://city.lighthousepoint.com/wp-content/uploads/2016/06/Eligible-Improvements.pdf>

<sup>145</sup> <http://www.pacefunding.com/images/Handbook.pdf>

<sup>146</sup> [http://abnk.assembly.ca.gov/sites/abnk.assembly.ca.gov/files/Sonoma%20Points%20for%20CA%20Assembly%20Joint%20Hearing%206-9-16\\_final.pdf](http://abnk.assembly.ca.gov/sites/abnk.assembly.ca.gov/files/Sonoma%20Points%20for%20CA%20Assembly%20Joint%20Hearing%206-9-16_final.pdf)

Disclosures Available Upon Request								
Contractor Quality Verified	√	√	√	√	√	√	√	√
Only High Performing Projects are Eligible	√	√	√	√	√	√	√	√
Only Participating Contractors Install Eligible Measures	√	√	√	√	√	√	√	√
Project Completion Sign-off	√	√	√	√	√	√	√	√
Third Party Verification of Workmanship	√	√	√	√				√
Dispute Resolution Process	√	√	√	√	√			√
Records Calls to Call Centers	√	√	√					N/A (in person)
Contractors Paid Only If and When Homeowner Is Fully Satisfied with Work	√	√	√	√	√	√	√	√
Special Protections for Seniors, 65+	√	√		√				√
3- Day Right to Cancel after Signing Assessment Contract	√	√	√	√	√	√	√	√

## 20. Can the repayment obligation for PACE assessments be assumed by new homeowners upon sale of the property?

It depends. PACE programs generally do not require lender consent for a buyer to assume a PACE assessment, but some homeowners using FHFA-overseen financing cannot currently purchase homes with PACE assessments in place. FHFA oversees Fannie Mae and Freddie Mac, which together insure 44 percent of U.S. mortgage originations currently,<sup>147</sup> so this presents a limitation in some cases.<sup>148</sup> For example, in the San Bernardino Associated Governments (SANBAG) area, FHFA products are involved in up to 80% of mortgages. As such, disclosure language informs potential PACE assesseees that the

<sup>147</sup> See page 8 of [http://www.urban.org/research/publication/housing-finance-glance-monthly-chartbook-january-2017/view/full\\_report](http://www.urban.org/research/publication/housing-finance-glance-monthly-chartbook-january-2017/view/full_report)

<sup>148</sup> Renovate America reports that over 80 percent of 5,000 HERO PACE assesseees that have sold or refinanced their homes with a PACE assessment in place transferred the assessment successfully. (See <http://www.sanbag.ca.gov/about/agendas/2015/08-15TAC.pdf>. Note that this source is from August 2015). Stacey Lawson from Ygrene has also reported that PACE liens are transferring for FHFA/Fannie/Freddie mortgage holders routinely.

assessment may be required to be paid off at sale or refinance.<sup>149</sup> Renovate America reports that over 80 percent of 5,000 HERO PACE assessees that have sold or refinanced their homes with a PACE assessment in place transferred the assessment successfully.<sup>150</sup> In September 2015, Stacey Lawson of Ygrene told a conference that the overall prepayment of Ygrene-originated PACE assessments was approximately 1.2 percent, and roughly half of those of those prepayments occur due to sale or refinancing.<sup>151</sup>

## 21. How are PACE assessments repaid?

Payments for the assessment are made on the homeowner's property tax bill where the PACE assessment appears as a separate line item. Depending on the jurisdiction, payments are made on either an annual or semi-annual basis. In the California HERO program, per California law, the full amount borrowed, once financed, is placed as a bulk assessment lien on the title. In the California Ygrene Works program, just the maximum annual tax lien amount is filed.<sup>152</sup>

## 22. What happens if a homeowner is late on a PACE payment or stops repaying the assessment?

It depends on the state. In California, failure to pay property tax installments and assessments in full will result in additional interest and penalties and may result in judicial foreclosure. Delinquent property taxes are subject to a 10 percent penalty. Should the property taxes and penalties not be paid by June 30, the entire amount is subject to a penalty of 1.5 percent interest charge for each month in default (18 percent per year) which is applied until the property taxes are paid.<sup>153</sup>

Nonpayment of a PACE assessment will face the same consequences as nonpayment of property taxes.<sup>154</sup> If a property owner is delinquent in paying property taxes, the IRS can file a tax lien with the credit bureaus, which has the potential to affect the homeowner's credit score.<sup>155</sup>

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<sup>149</sup> If the property owner wishes to sell the property, under California law, property taxes typically stay with the property when it is sold and the same is true with assessments. Under the HERO Program, when a property owner sells or refinances their property, the Agent and the County in which the owner's property is located will permit their assessment to stay with the property; however, the seller's lender or the buyer's lender may require that the seller pay off the remaining outstanding balance of their assessment when the property owner refinances their home or sells their property. Accordingly, depending upon the requirements of the lenders, the assessment lien may be able to remain (or in the case of a refinancing allow it to remain with the property), or the seller may need to pay the unpaid balance at the time of transfer or refinance. Property owners should consult with their lenders at the time of refinance or sale of the property to determine whether their Program assessment will need to be paid in full. In addition, by law, property owners must provide notice of the assessment to the buyer prior to sale of the property.

<sup>150</sup> <http://www.sanbag.ca.gov/about/agendas/2015/08-15TAC.pdf>

<sup>151</sup> <http://www.asreport.com/news/abs/abs-east-why-pace-lien-subordination-is-no-big-deal-258122-1.html>

<sup>152</sup> In all programs formed pursuant to AB 811, the full amount borrowed is placed as a bulk assessment lien on the title. This does not apply to Ygrene, which was formed under SB 555.

<sup>153</sup> Draft Comments from Jenine Windeshausen (mPOWER), January 27, 2017.

<sup>154</sup> <http://www.broward.org/GoGreen/EnergySense/Documents/PACEBrowardFAQSheet10272016.pdf>;  
<http://sonomacountyenergy.org/resources/pace-financing/frequently-asked-questions/>

<sup>155</sup> [http://www.huffingtonpost.com/creditcom/can-paying-your-taxes-lat\\_b\\_5111450.html](http://www.huffingtonpost.com/creditcom/can-paying-your-taxes-lat_b_5111450.html)

One law review article suggests that in the event that a homeowner defaults on property taxes (including a PACE assessment), a mortgage lender will either pay the taxes for the homeowner or the home will be subject to a tax lien foreclosure sale, at which point the lender will purchase the home. If a homeowner defaults on mortgage payments and a home is foreclosed upon, the burden will again shift to the mortgage lender because the new buyer, having to make future PACE payments, may offer a lower bidding price.<sup>156</sup>

### 23. How often are homeowners delinquent in paying or defaulting on PACE assessment repayments?

PACE assessments are still relatively new and there is insufficient historical performance data to make any concrete claims about default and delinquency rates. While delinquencies and defaults remain low to date (see Table 10), loan performance is not necessarily linear through time.

The weighted average FICO for the financing pool of HERO’s 2016-4 securitization was 684. the weighted average FICO for the financing pool of Ygrene’s 2016-1 securitization was 708.<sup>157</sup> Generally, a FICO score between 670 and 739 is considered a good, acceptable score with medium risk: about 8 percent of consumers with this type of FICO score are likely to become delinquent in the future.<sup>158</sup>

According to Kroll Bond Rating Agency, Inc., defaults on PACE bond deals are below 1 percent: fewer than 70 of the underlying PACE assessments have defaulted.<sup>159</sup> Furthermore, there have not been any foreclosures brought about by PACE administrators and the foreclosure rate brought about by banks on homes with HERO financing is below the California state average.<sup>160</sup>

The following table describes the magnitude of delinquency and default seen in residential PACE programs thus far. The table also lists the programs that have their own bond reserve funds.

**Table 10: Delinquencies, Defaults, and Bond Reserves**

Program	Delinquencies	Defaults	Bond Reserve?
HERO (CA)	0.43%	N/A	Yes. Reserve deposit at funding is varied through history of program, determined at time of origination.
Ygrene (CA)	0.15%	0	No
CaliforniaFIRST	0.045%	0.03%	Yes. 0.25% of assessment amount for CSCDA program; 0.10% for LA County program. Zero withdrawals from the reserve have been made to date.
PACEfunding	0	0	Yes. Each property owner is charged \$10 for the Bond Reserve Fund. Zero withdrawals from the reserve have

<sup>156</sup> [http://lawreview.colorado.edu/wp-content/uploads/2013/11/9.-Cox-FINAL\\_s.pdf](http://lawreview.colorado.edu/wp-content/uploads/2013/11/9.-Cox-FINAL_s.pdf)

<sup>157</sup> Draft Comments from Stacey Lawson (Ygrene Energy Fund), January 20, 2017.

<sup>158</sup> <http://www.experian.com/blogs/ask-experian/infographic-what-are-the-different-scoring-ranges/>

<sup>159</sup> <http://www.wsj.com/articles/americas-fastest-growing-loan-category-has-eerie-echoes-of-subprime-crisis-1484060984>

<sup>160</sup> <https://www.renovateamerica.com/News/Property-Assessed-Clean-Energy-Begins-2017-With-New-Standards-in-Place-2017-01-10>

			been made to date.
AllianceNRG (CA & FL)	0	0	Reserve fund of 0.25% of the assessment amount
E3	0	0	Yes, there is a reserve fund. A deposit of 0.27% of the assessment amount is made with financing.
SCEIP	0.23%	0	No
mPOWER (Placer)	N/A	0.001%	No.
Vermont PACE	0	0	One project (out of 14) has been paid in full.
Maine PACE	<12	N/A	Efficiency Maine has financed almost 600 PACE projects. Out of the more than 1,800 loans financed in the history of Efficiency Maine, 12 are more than 90 days' delinquent.

The HERO program reports that of the 60,000 assessments completed since September 2011, as of December 2016, there was a 98.7 percent on-time repayment rate<sup>161</sup> and that there have been no tax defaults and only 45 mortgage defaults across the whole portfolio, with no foreclosures being initiated by PACE Issuers. However, Renovate America made \$175,000 in payments on behalf of 83 homeowners who otherwise may have defaulted between 2014 and 2016.<sup>162</sup> This information was not disclosed to its bond investors.

In Vermont's two existing programs, Efficiency Vermont's PACE (12 participants) and Burlington Electric Department's PACE (2 participants), none have defaulted as of December 31, 2016 and one assessment has already been paid in full.<sup>163</sup>

CAEATFA, which has a loss reserve in place to cover losses on loans from defaults, has not received any claims on the reserve fund as of January 2017.<sup>164</sup>

Finally, although the ClimateSmart Loan Program from Boulder County, Colorado was suspended in 2010, its participants continue to pay off their PACE assessments. The program reports that they have had zero defaults to date.<sup>165</sup>

## 24. Is there a connection between PACE assessments and mortgage defaults?

FHFA has expressed concern that PACE assessments will increase mortgage defaults. See section II.2.A. On the other hand, a 2013 University of North Carolina study suggests that energy efficient homes are 32 percent less likely to default than non-energy efficient homes.<sup>166</sup>

<sup>161</sup> <https://www.renovateamerica.com/News/Property-Assessed-Clean-Energy-Begins-2017-With-New-Standards-in-Place-2017-01-10>

<sup>162</sup> <https://www.wsj.com/articles/renovate-america-one-of-americas-fastest-growing-lenders-didnt-disclose-it-made-payments-to-some-borrowers-1488969001>

<sup>163</sup> Email from Mark Kelley (Efficiency Vermont), August 31, 2016; Draft Comments from Peter Adamczyk (Vermont Energy Investment Corporation) and Chris Burns (Burlington Electric Department), January 11, 2017.

<sup>164</sup> <http://treasurer.ca.gov/caeatfa/pace/activity.asp>

<sup>165</sup> Call with Susie Strife (Boulder County), February 28, 2017.

<sup>166</sup> "Home Energy Efficiency and Mortgage Risks," UNC Center for Community Capital, Institute for Market Transformation (IMT), March 2013.

## 25. How does a PACE assessment affect the market value of a home?

In 2016, the first economic study of residential properties with PACE improvements, funded by Renovate America, was published. In the study, the authors, Urban Institute housing economist Laurie Goodman and Jun Zhu, compare resale values of PACE homes to similar non-PACE homes to determine whether or not PACE upgrades are reflected in a property's market value. The study uses three separate methodologies: (1) comparing PACE sales price with projected sales price; (2) comparing PACE homes with a random sample of similarly situated non-PACE homes; and (3) performing a multivariate regression of PACE homes and non-PACE homes, controlling for other property characteristics. The study finds that all three methodologies yield the same result: PACE improvements do increase the resale values of homes. This is true even after accounting for the cost of the PACE upgrade. The 773 PACE homes included in the study had net resale values that were \$199-\$8,882 higher than comparable non-PACE homes.<sup>167</sup>

## 26. How does the impact of PACE financing compare with that of rebates?

A recent study published in August 2016 by The Cadmus Group found that HERO financing had a greater impact on a customer's decision to make high energy efficiency improvements than rebates do. The study is supposed to inform financing pilot programs being planned by a number of investor-owned utilities (IOUs) in California. The study design consists of three methodologies: self-reporting, expanded self-reporting, and discrete choice modeling. Surveys were sent out via email and incentives of \$10-20 were used to encourage higher response rates. All three methodologies yielded the same conclusion, which was further supported by anecdotal evidence from contractors. However, Cadmus includes a disclaimer stating that these findings are specific to HERO financing, and that they should not be applied to other financing programs.<sup>168</sup>

## 27. How many PACE Administrators are there and how long have they been in business?

We were able to identify a total of 41 PACE Administrators as of January 2017. Of these, 15 facilitate both residential and commercial PACE, 2 are residential-only and 26 are commercial-only.

Table 11: PACE Administrators that Operate Both Residential and Commercial PACE

PACE Administrator	Areas of Operation	Founded
AllianceNRG	CA, FL, LA, NJ, CT	2015
AmeriNat	Nationwide	1975 (PACE in 2017)
County of Los Angeles, Office of Sustainability	CA	2009
Efficiency Vermont	VT	2011

<sup>167</sup> "PACE Loans: Does Sale Value Reflect Improvements?" Laurie S. Goodman and Jun Zhu, *The Journal of Structured Finance* 21, no. 4 (2016).

<sup>168</sup>[http://www.energydataweb.com/cpucfiles/pdadocs/1625/HERO%20Allocation%20Method%20Study\\_DRAFT%20Final%20Report.pdf?t=535](http://www.energydataweb.com/cpucfiles/pdadocs/1625/HERO%20Allocation%20Method%20Study_DRAFT%20Final%20Report.pdf?t=535)

Energy Efficient Equity	CA	2014
Energy Equity Funding, LLC	AR, MO	
LoudounPACE	VA	2010
Petros PACE Finance*	TX	2010
mPOWER (Placer)	CA	2010
Renew Financial	CA, FL	2008
Renovate America	CA, FL, MO	2008
Sonoma County Energy Independence Program	CA	2009
Spruce	CA	2015
Willdan Financial Services	CA, FL	1999 (PACE in 2017)
Ygrene Energy Fund	CA, FL, GA, MO	2010

\*Petros PACE Finance mainly focuses on commercial property. In terms of residential PACE, it only provides financing for multi-family buildings.

**Table 12: PACE Administrators that Operate Residential PACE Only**

PACE Administrator	Areas of Operation	Founded
Efficiency Maine	ME	
PACEfunding	CA, FL	2010

## 28. How much volume is there in PACE assessments in total and by program administrator?

As of Q3 2016, residential senior-lien PACE programs have collectively installed more than 132,000 home improvements worth more than \$3.3 billion, creating 29,000 jobs.<sup>169</sup>

**Table 13: Volume**

PACE Administrator	Volume
Renovate America	To date, Renovate America's HERO Program has issued a total of \$2.12 billion in PACE green bonds secured by 87,526 residential PACE assessments.
Ygrene Energy Fund	In California, Ygrene has financed 13,531 projects worth \$305 million. Ygrene Energy Fund has issued \$480 million in PACE green bonds to date for both residential and commercial assessments. Its first two securitizations, in 2015 and 2016, were privately placed. Its third securitization was secured by 7,761 residential and commercial PACE assessments in California and Florida.
Renew Financial	In CSCDA and LA county, Renew Financial has financed 12,786 projects for a total of \$347 million. Renew Financial has issued \$339 million in PACE green bonds. Its first securitization deal was privately placed. In its second securitization, 347 PACE bonds were secured by 4,804 residential PACE assessments. Its third securitization was backed by 18 PACE bonds secured by

<sup>169</sup> <http://pacenation.us/pace-market-data/>

	4,226 residential PACE assessments in California. Its fourth securitization is secured by residual interest from the previous three securitizations.
PACEfunding	PACEfunding has financed a total of 72 projects with a value of \$2.5 million.
AllianceNRG	In California, AllianceNRG has funded 3 residential projects worth \$121,000 total. Florida figures are higher but unavailable to us.
E3	E3 has financed 43 recorded projects for a total amount of \$2.3 million.
mPOWER (Placer)	As of December 2016, mPOWER has funded 1,858 projects with 1,833 residential and 25 commercial for \$62 million combined.
Sonoma County Energy Independence Program	The Sonoma program has funded more than 2,300 residential projects (the overall total including more than 65 commercial assessments) has a total loan value of \$75.4 million and claims to have directly or indirectly induced over 1,400 local jobs, with 89% of financed projects going to local contractors.
Vermont PACE	Efficiency Vermont has financed 12 projects. BED has financed 2 projects.
Maine PACE	Maine PACE has issued \$7.4 million to nearly 600 projects.

## 29. How many PACE securitizations have occurred?

EPC is aware of 15 PACE securitizations to date. See Appendix H for specifics on each deal.

There have been nine securitizations of HERO PACE assessments: HERO Funding Trust 2014-1, HERO Funding Trust 2014-2, HERO Funding Trust 2015-1, HERO Funding Trust 2015-2, HERO Funding Trust 2015-3, HERO Funding Trust 2016-1, HERO Funding Trust 2016-2, HERO Funding Trust 2016-3, and HERO Funding Trust 2016-4. Each transaction is secured by PACE bonds issued by one of the three PACE issuers (WRCOG, SANBAG and LA County). The PACE bonds are in turn secured by the PACE assessments. The notes are considered Green Bonds for the classification of securities published by the International Capital Market Association (ICMA). Sustainalytics has also issued positive green bond opinions for all nine securitization deals.<sup>170</sup> Moody's, which finalized and published its Green Bonds Assessment (GBA) methodology in March 2016,<sup>171</sup> assigned a GBA of GB1 (Excellent) to HERO Funding Trust 2016-3.<sup>172</sup> For more details on the securitization structure, see Appendix G.

To date there have been three securitizations of Ygrene PACE assessments. In July 2015, Ygrene securitized \$150 million of PACE bonds for both residential and commercial assessments. The transaction was significant as it was the first to combine residential and commercial assets and the first to combine projects in multiple states including California and Florida, and the first to include both special taxes and assessments in a single securitization. In October 2016, Ygrene completed its

<sup>170</sup> Sustainalytics opinions are available at:

[http://www.sustainalytics.com/sites/default/files/ra\\_framework\\_opinion\\_hero\\_funding\\_trust\\_notes\\_series\\_2014\\_2015\\_final.pdf](http://www.sustainalytics.com/sites/default/files/ra_framework_opinion_hero_funding_trust_notes_series_2014_2015_final.pdf);  
[http://www.sustainalytics.com/sites/default/files/ra\\_framework\\_opinion\\_final.pdf](http://www.sustainalytics.com/sites/default/files/ra_framework_opinion_final.pdf);

[http://www.sustainalytics.com/sites/default/files/ra\\_framework\\_opinion\\_hero\\_funding\\_trust\\_2016-1.pdf](http://www.sustainalytics.com/sites/default/files/ra_framework_opinion_hero_funding_trust_2016-1.pdf);

[http://www.sustainalytics.com/sites/default/files/ra\\_framework\\_opinion\\_hero\\_funding\\_trust\\_notes\\_series\\_2016-2.pdf](http://www.sustainalytics.com/sites/default/files/ra_framework_opinion_hero_funding_trust_notes_series_2016-2.pdf); and

[http://www.sustainalytics.com/sites/default/files/ra\\_framework\\_second\\_opinion\\_hero\\_funding\\_notes\\_series\\_2016-3.pdf](http://www.sustainalytics.com/sites/default/files/ra_framework_second_opinion_hero_funding_notes_series_2016-3.pdf);

[http://www.sustainalytics.com/sites/default/files/ra\\_framework\\_second\\_opinion\\_hero\\_funding\\_notes\\_series\\_2016-4.pdf](http://www.sustainalytics.com/sites/default/files/ra_framework_second_opinion_hero_funding_notes_series_2016-4.pdf)

<sup>171</sup> [https://www.moody.com/research/Moodys-publishes-methodology-on-Green-Bonds-Assessment--PR\\_346585](https://www.moody.com/research/Moodys-publishes-methodology-on-Green-Bonds-Assessment--PR_346585)

<sup>172</sup> [https://www.moody.com/research/Moodys-assigns-Green-Bond-Assessment-GBA-of-GB1-to-HERO--PR\\_354112](https://www.moody.com/research/Moodys-assigns-Green-Bond-Assessment-GBA-of-GB1-to-HERO--PR_354112)

second securitization totaling \$145 million. The privately rated Class A notes were placed with strategic insurance partner, Global Atlantic Financial Group.<sup>173</sup> Ygrene completed its third securitization, GoodGreen 2016-1 Trust, in November 2016 in a \$185 million deal, again backed by both residential and commercial PACE assessments in California and Florida. The deal's Class A notes were rated AA by Kroll and AAA by Morningstar, while its Class B notes were rated BBB by Kroll and A by Morningstar. This was the first PACE transaction to achieve a AAA rating. Moody's assigned a GBA of GB1 (Excellent) to the deal.<sup>174</sup>

Renew has completed three PACE securitizations for the CaliforniaFIRST program, issuing \$50 million in privately placed term Notes in September 2015, \$123 million in June 2016 (Golden Bear 2016-1), and \$115 million in October 2016 (Golden Bear 2016-2). The three securitizations were structured and placed by Natixis Securities Americas LLC.

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<sup>173</sup> <http://www.prnewswire.com/news-releases/ygrene-energy-fund-completes-145-million-securitization-of-pace-bonds-with-strategic-insurer-global-atlantic-financial-group-300362613.html>

<sup>174</sup> [https://www.moody.com/research/Moodys-Investors-Assigns-GB1-Green-Bond-Assessment-to-GoodGreen-2016--PR\\_356614](https://www.moody.com/research/Moodys-Investors-Assigns-GB1-Green-Bond-Assessment-to-GoodGreen-2016--PR_356614)

## IV. CONCLUSION



PACE has the potential to serve as an important complement to existing grant programs and financing options for clean energy, water, and resiliency improvements. Despite continued opposition from FHFA, some mortgage lenders, and realtors, PACE has facilitated more than 132,000 residential clean energy installations, amounting to \$3.3 billion and accounting for significant greenhouse gas emissions reduction in the American residential sector. Furthermore, there have been more PACE securitizations in 2016 (8) than there had been previously (7) in all years combined.

At the same time, as with any consumer finance program, care is warranted. EPC recommends a national oversight body or committee to act as a third-party monitor and ensure adequate consumer protections and more coordinated governmental oversight as PACE expands its reach into low and moderate income homeowner communities. EPC recommends state and local governments consider requiring PACE administrators to provide consumer protections including: (1) informing eligible families of their potential qualification for grant assistance to supplement or replace the need for PACE financing; (2) assessing ability-to-repay to ensure that families with limited financial ability do not suffer an unaffordable burden by taking on energy improvements with costs exceeding associated

savings; and (3) developing extra protections to guarantee that improvements are installed correctly as low to moderate income homeowners may lack the skills to effectively determine whether or not the work was completed in a manner that will actually achieve any promised energy savings.

State and local governments interested in supporting efficiency and renewables may be taking renewed interest in PACE but coming to an area that is more complex than ever, with the dizzying array of program development options and third party administrators available. EPC hopes to be a resource in this process, and we look forward to hearing from you.

# V. APPENDICES

## Appendix A: California Statewide Communities Development Authority (CSCDA) Open PACE Opt-in Resolution of Participation

RESOLUTION NO. \_\_\_\_\_

RESOLUTION OF THE [BOARD OF SUPERVISORS/CITY COUNCIL] OF THE [COUNTY/CITY] OF [\_\_\_\_\_] CONSENTING TO THE INCLUSION OF PROPERTIES WITHIN THE TERRITORY OF THE [COUNTY/CITY] IN THE CSCDA OPEN PACE PROGRAMS; AUTHORIZING THE CALIFORNIA STATEWIDE COMMUNITIES DEVELOPMENT AUTHORITY TO ACCEPT APPLICATIONS FROM PROPERTY OWNERS, CONDUCT CONTRACTUAL ASSESSMENT PROCEEDINGS AND LEVY CONTRACTUAL ASSESSMENTS WITHIN THE TERRITORY OF THE [COUNTY/CITY]; AND AUTHORIZING RELATED ACTIONS

**WHEREAS**, the California Statewide Communities Development Authority (the "Authority") is a joint exercise of powers authority, the members of which include numerous cities and counties in the State of California, including the [County/City] of [\_\_\_\_\_] (the ["County"/"City"]); and

**WHEREAS**, the Authority is implementing Property Assessed Clean Energy (PACE) programs, which it has designated CSCDA Open PACE, consisting of CSCDA Open PACE programs each administered by a separate program administrator (collectively with any successors, assigns, replacements or additions, the "Programs"), to allow the financing or refinancing of renewable energy, energy efficiency, water efficiency and seismic strengthening improvements, electric vehicle charging infrastructure and such other improvements, infrastructure or other work as may be authorized by law from time to time (collectively, the "Improvements") through the levy of contractual assessments pursuant to Chapter 29 of Division 7 of the Streets & Highways Code ("Chapter 29") within counties and cities throughout the State of California that consent to the inclusion of properties within their respective territories in the Programs and the issuance of bonds from time to time; and

**WHEREAS**, the program administrators currently active in administering Programs are the AllianceNRG Program (CounterPointe Energy Solutions (CA) LLC), PACE Funding LLC, CaliforniaFirst (Renew Financial Group LLC), CleanFund Commercial PACE Capital and Spruce Finance and the Authority will notify the [County/City] in advance of any additions or changes; and

**WHEREAS**, Chapter 29 provides that assessments may be levied under its provisions only with the free and willing consent of the owner or owners of each lot or parcel on which an assessment is levied at the time the assessment is levied; and

**WHEREAS**, the [County/City] desires to allow the owners of property ("Participating Property Owners") within its territory to participate in the Programs and to allow the Authority to conduct assessment proceedings under Chapter 29 within its territory and to issue bonds to finance or refinance Improvements; and

WHEREAS, the territory within which assessments may be levied for the Programs shall include all of the territory within the [County's/City's] official boundaries; and

WHEREAS, the Authority will conduct all assessment proceedings under Chapter 29 for the Programs and issue any bonds issued in connection with the Programs; and

WHEREAS, the [County/City] will not be responsible for the conduct of any assessment proceedings; the levy of assessments; any required remedial action in the case of delinquencies in such assessment payments; or the issuance, sale or administration of any bonds issued in connection with the Programs;

NOW, THEREFORE, BE IT RESOLVED by the [Board of Supervisors/City Council] of the [County/City] of [\_\_\_\_\_] as follows:

Section 1. This [Board of Supervisors/City Council] hereby finds and declares that properties in the territory of the [County/City] will benefit from the availability of the Programs within the territory of the [County/City] and, pursuant thereto, the conduct of special assessment proceedings by the Authority pursuant to Chapter 29 and the issuance of bonds to finance or refinance Improvements.

Section 2. In connection with the Programs, the [County/City] hereby consents to the conduct of special assessment proceedings by the Authority pursuant to Chapter 29 on any property within the territory of the [County/City] and the issuance of bonds to finance or refinance Improvements; provided, that

(1) The Participating Property Owners, who shall be the legal owners of such property, execute a contract pursuant to Chapter 29 and comply with other applicable provisions of California law in order to accomplish the valid levy of assessments; and

(2) The [County/City] will not be responsible for the conduct of any assessment proceedings; the levy of assessments; any required remedial action in the case of delinquencies in such assessment payments; or the issuance, sale or administration of any bonds issued in connection with the Programs.

Section 3. The appropriate officials and staff of the [County/City] are hereby authorized and directed to make applications for the Programs available to all property owners who wish to finance or refinance Improvements; provided, that the Authority shall be responsible for providing such applications and related materials at its own expense. The following staff persons, together with any other staff persons chosen by the [\_\_\_\_\_] of the [County/City] from time to time, are hereby designated as the contact persons for the Authority in connection with the Programs: \_\_\_\_\_ [specify name of position].

Section 4. The appropriate officials and staff of the [County/City] are hereby authorized and directed to execute and deliver such certificates, requisitions, agreements and related documents as are reasonably required by the Authority to implement the Programs.

Section 5. The [Board of Supervisors/City Council] hereby finds that adoption of this Resolution is not a "project" under the California Environmental Quality Act, because the Resolution does not involve any commitment to a specific project which may result in a potentially significant physical impact on the environment, as contemplated by Title 14, California Code of Regulations, Section 15378(b)(4).

Section 6. This Resolution shall take effect immediately upon its adoption. The [Clerk of the Board of Supervisors/City Clerk] is hereby authorized and directed to transmit a certified copy of this resolution to the Secretary of the Authority at: Secretary of the Board, California Statewide Communities Development Authority, 1400 K Street, Sacramento, CA 95814.

**PASSED AND ADOPTED** this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by the following vote, to wit:

**AYES:** [Board/Council] Members \_\_\_\_\_

**NOES:** [Board/Council] Members \_\_\_\_\_

**ABSENT:** [Board/Council] Members \_\_\_\_\_

**ABSTAIN:** [Board/Council] Members \_\_\_\_\_



State of Vermont  
Department of Banking, Insurance,  
Securities and Health Care Administration  
89 Main Street  
Montpelier, VT 05620-3101  
www.bishca.state.vt.us

Consumer Assistance Only:  
Insurance: 1-800-964-1784  
Health Care Admin.: 1-800-631-7788  
Securities: 1-877-550-3907

## Memorandum

**To:** Efficiency Vermont  
**From:** Thomas J. Candon, Deputy Commissioner of Banking and Securities  
**Date:** April 7, 2011  
**Re:** H.155 Property Assessed Clean Energy Districts

In 2009 The Vermont Legislature adopted legislation which permitted municipalities to set up clean energy assessment districts (H.155 refers to it as property-assessed clean energy district or "PACE"). If a town votes to set up a pace district homeowners can request money from the municipality to undertake approved energy efficient improvements to their homes. The money is to be paid back to the municipality through the special tax assessment mechanism.

Over the last three years The PACE program has been adopted by a number of states. The program ran into opposition from Fannie Mae and Freddie Mac, the Federal Housing Finance Agency, federal bank regulators, and the Federal Home Loan Bank because the pace lien had priority over a primary mortgage loan. The PACE program came to a quick halt nationwide.



Banking  
802-828-3307

Insurance  
802-828-3301

Captive Insurance  
802-828-3304

Securities  
802-828-3420

Health Care Admin.  
802-828-2900

House Bill 155 was introduced into the Vermont Legislature this year to clarify that the PACE program in Vermont would give the primary mortgage lien a priority over PACE assessments.

BISHCA shared H.155, as passed by the House, with the Federal Housing Finance Agency and asked if the program as presented would be looked upon favorably by the Federal Housing Finance Agency and thus Fannie Mae and Freddie Mac. During the discussion of this legislation BISHCA has expressed concern that the pace program be designed in a way that does not inhibit Vermont lenders ability to sell residential mortgage loans to the secondary market. Vermont has relied on the national secondary market and primarily Fannie Mae and Freddie Mac purchasing Vermont mortgage loans since the mid 1970's. Vermont is a capital poor state and needs to import capital so eligible Vermont borrowers have access to residential mortgage loans.

The attached letter, signed by the General Counsel of the Federal Housing Finance Agency and received by BISHCA on April 6, 2011, indicates that Vermont's PACE program as proposed in the House passed version of H.155 is acceptable to the Federal Housing Finance Agency. The letter also contains recommendations of items to include in the underwriting and management guidelines to be issued by BISHCA for use in connection with the PACE program.



## Federal Housing Finance Agency

1700 G Street, N.W., Washington, D.C. 20552-0003

Telephone: (202) 414-3800

Facsimile: (202) 414-3823

[www.fhfa.gov](http://www.fhfa.gov)

April 6, 2011

Mr. Thomas Candon  
Deputy Commissioner of Banking and Securities  
State of Vermont Department of Banking and Securities  
89 Main Street  
Montpelier, Vermont 05620-3101

RE: H. 155

Dear Deputy Commissioner Candon:

In response to your inquiry, I am providing the views of the Federal Housing Finance Agency (FHFA) regarding H. 155, a bill amending statutes that enable Vermont municipalities to form property assessed clean energy (PACE) districts. As drafted, the amendments contained in the bill appear to improve the opportunities for and prudential administration of energy retrofit lending.

FHFA and the entities it regulates support efforts for improved residential energy efficiency. The development and adoption of responsible lending practices that permit energy efficient and renewable energy home improvements should benefit all stakeholders. I would note that the Freddie Mac and Fannie Mae have incorporated energy efficient and green practices into their day-to-day business operations.

H. 155 provides for responsible lending practices and a subordinate lien status for energy improvement loans. This approach promotes sustainable homeownership and will aid in the success of the Vermont PACE program. Fannie Mae and Freddie Mac continue to support housing in the state and this effort will complement their efforts at keeping homeowners in their homes and providing liquidity to mortgage markets, including for those homes requiring retrofits.

FHFA has concerns with PACE programs that alter traditional lending priorities, that result in collateral-based lending rather than lending based upon ability-to-pay or that are not subject to consumer protections. In contrast, H. 155 provides that PACE liens are subordinate to all liens on the property that exist at the time the PACE lien is filed on the land records and are subordinate to a first mortgage on the property recorded after such filing. In addition, FHFA recognizes H. 155's call for strong and uniform underwriting criteria that will assure responsible underwriting and credit standards; these are critical to protect homeowners, lenders and those investing in mortgage backed securities. The state banking department deployment of such criteria will provide beneficial expertise to the process so that property owners are able to meet their payment obligations. Accordingly, FHFA supports the overall approach of H. 155.

Specific observations concerning H. 155 and its implementation that I would hope would be of benefit are provided here.

First, state banking regulators should take into account in their implementation of the bill federal consumer protection laws, such as the Truth in Lending Act and the Equal Credit Opportunity Act as important and well-established guides to prudent and appropriate lending.

Second, H. 155 is unclear regarding whether PACE loans would be fully amortizing. Although the bill specifies that the terms of the PACE loans may not exceed twenty years, it would be beneficial to make clear, not leaving it to implication, that loans would be fully and evenly repaid within those timeframes. This would avoid any possibility of negative amortization schedules, adjustable interest rates and balloon payments which I assume is not the intent of H. 155.

Third, the bill does not specify the types of improvements permitted and that the loan term should not exceed the expected life span of such improvements. Additional limitations on fees and interest rates could also be considered. These details could be addressed either in the bill or through direction from regulators.

Fourth, to avoid conflicts of interest, regulators should consider underwriting rules that segregate duties between contractors, installers and energy providers as well as between parties issuing loans and those installing improvements. Such controls assist in the prevention of fraudulent activities. Employee and vendor training and other items set forth in H. 155 and here regarding prudent underwriting standards and procedures contribute to fraud prevention.

Finally, borrowers with second liens which were recorded after the PACE lien may have difficulty refinancing the second lien because their lenders will need to consider the PACE lien payments when underwriting the refinancing. Again, this should be considered in the legislation or through regulatory action.

I hope that these observations are useful as Vermont continues consideration of H. 155. Please do not hesitate to contact me if you have any questions regarding these comments.

With all best wishes, I am

Sincerely,



Alfred M. Pollard  
General Counsel

## Appendix C: Subordinate Lien PACE Legislation

Table 14: Subordinate Lien PACE Legislation

State	Volume	Legislation
Vermont	Low – 14 as of Dec 2016	<p>24 V.S.A. § 3251 et seq. (<a href="http://legislature.vermont.gov/statutes/chapter/24/087">http://legislature.vermont.gov/statutes/chapter/24/087</a>)</p> <p>Chapter 87: Special Assessments            Subchapter 1: General Provisions            3255. Collection of assessments; liens            (a) Special assessments under this chapter shall constitute a lien on the property against which the assessment is made in the same manner and to the same extent as taxes assessed on the grand list of a municipality, and all procedures and remedies for the collection of taxes shall apply to special assessments.            (b) Notwithstanding subsection (a) of this section, a lien for an assessment under subchapter 2 of this chapter shall be subordinate to all liens on the property in existence at the time the lien for the assessment is filed on the land records, shall be subordinate to a first mortgage on the property recorded after such filing, and shall be superior to any other lien on the property recorded after such filing. In no way shall this subsection affect the status or priority of any municipal lien other than a lien for an assessment under subchapter 2 of this chapter.</p> <p>Subchapter 2: Property-assessed Clean Energy – contains the PACE specifics to which the general provisions of subchapter 1 apply</p>
Maine	Nearly 600 assessments	<p>Maine Statutes Title 35-A: PUBLIC UTILITIES HEADING: PL 1987, C. 141, PT. A, §6 (NEW)Part 8: ENERGY EFFICIENCY HEADING: PL 2003, C. 644, §9 (NEW)            Chapter 99: PROPERTY ASSESSED CLEAN ENERGY            §10156. PACE mortgages; collection of PACE assessments; priority</p> <p>3. Priority. Except as provided in paragraph A, the priority of a PACE mortgage created under subsection 2 is determined based on the date of filing of notice required under subsection 2 and applicable law. A PACE mortgage is not entitled to any special or senior priority.</p> <p>A. If a property owner's PACE assessment payments are current, upon the refinancing, sale or transfer of the qualifying property, other than a judicial sale or foreclosure, the PACE mortgage is junior and subordinate in priority to the first mortgage used to refinance an existing mortgage or a first mortgage of a subsequent purchaser or transferee, regardless of the date of the recording of the refinanced first mortgage or the first mortgage of the subsequent purchaser or transferee.</p> <p>B. If a property owner's PACE assessment payments are delinquent, the past due assessments must be satisfied prior to or contemporaneously with the refinancing, sale or transfer of the qualifying property, other than a judicial sale or foreclosure.</p>
Oklahoma	None – program in development (original PACE legislation passed in 2009, subordinate lien legislation in 2011)	<p>SB 102 (<a href="http://webserver1.lsb.state.ok.us/cf_pdf/2011-12%20ENR/SB/SB102%20ENR.PDF">http://webserver1.lsb.state.ok.us/cf_pdf/2011-12%20ENR/SB/SB102%20ENR.PDF</a>)</p> <p>SECTION 1. AMENDATORY Section 5, Chapter 122, O.S.L. 2009 (19 O.S. Supp. 2010, Section 460.5), is amended to read as follows:</p> <p>“Section 460.5 C. Any loan made pursuant to the Oklahoma Energy Independence Act shall constitute a lien on the property which is the subject of the loan only upon the recording of a mortgage covering the property in the office of the county clerk. Any mortgage securing a loan shall be junior and inferior to all previously recorded liens or mortgages of any kind. The exclusive</p>

method of enforcing a lien for failure to repay any loan made pursuant to the Oklahoma Energy Independence Act shall be by judicial or nonjudicial foreclosure as provided by law.”

New Hampshire

Doesn't have residential PACE yet (PACE laws apply to all real property whether zoned or used for residential, commercial or other uses)

NH HB 205 (<http://www.gencourt.state.nh.us/legislation/2015/HB0205.html>)

**53-F:5 Eligibility of Property Owners.**

II. Prior to entering into an agreement with an owner of eligible property, the municipality shall determine that all property taxes and any other assessments levied with property taxes are current and have been current for 3 years or the owner's period of ownership, whichever is less; that there are no involuntary liens such as mechanic's liens on the property; and that no notices of default or other evidence of property-based debt delinquency have been recorded during the past 3 years or the property owner's period of ownership, whichever is less. The municipality shall adopt additional criteria, appropriate to property-assessed clean energy finance programs. The municipality shall determine whether any mortgages or liens of record exist in the registry of deeds on the property, whether they are current in the obligations, and whether the total debt to equity ratio specified by the private lender will be met. If any such mortgage or lien exists, the municipality shall notify each such mortgagee or lienholder in writing that a private lender is considering making a loan secured by a municipal lien pursuant to the provisions of this chapter and request the consent of each such mortgagee or lienholder to the making of such loan. Each mortgagee or lienholder shall have the right to determine in its sole discretion whether or not it will consent to such loan. If all of the mortgagees or lienholders of record elect to consent, the consents shall be in writing and recorded with the municipal lien in the registry of deeds. The legal effect of having all consents shall be that the municipal lien shall not be extinguished in the event of a foreclosure or sheriff's sale by the mortgagee or lienholder as provided in RSA 53-F:8. If all of the mortgagees or lienholders of record do not consent, but the private lender determines that it will proceed in making such loan, then in the event of a foreclosure or sheriff's sale by a mortgagee or lienholder, the municipal lien shall be extinguished.

**53-F:8 Priority; Collection and Enforcement.** Collection of *special* assessments under this chapter shall be made by the tax collector or other official responsible for property tax or municipal service charge collection. A municipality shall commit bills for amounts due on the *special* assessments, including interest and any charges, to the tax collector with a warrant signed by the appropriate municipal officials requiring the tax collector to collect them. Each year bills for amounts due on the *special* assessments shall coincide with bills for property taxes or municipal service charges. Each *special* assessment on the property of a participating property owner shall create a lien on the property pursuant to RSA 80:19, except that the lien shall be junior to existing liens of record at the time the bill for the assessment is mailed to the participating property owner. Enforcement powers for nonpayment shall be those provided under RSA 80 relative to property tax collection, including RSA 80:19; provided, however, a tax sale of the property shall not extinguish prior liens of record. At the time of enforcement, only the past due balances of the *special* assessment under this chapter, including all interest, charges, and penalties, shall be due for payment. Notwithstanding any other provision of law, in the event of a transfer of property ownership through foreclosure or a sheriff's sale by a senior mortgagee or lienholder which has consented to the making of a loan by a *private lender* under the provisions of this chapter, the lien of the municipality shall not be extinguished, and the net proceeds of the sale, if any, after payment of all prior obligations to mortgagees and lienholders, costs and expenses of foreclosure or sheriff's sale, shall be first applied to the payment of any past due balances of the loan and then any excess shall be applied against the remaining balance of the loan. If a senior mortgagee or lienholder has not given its consent to the

		loan, a foreclosure or sheriff's sale by the mortgagee or lienholder shall extinguish all junior mortgages and liens.
Rhode Island	No volume, program still under development	<p><b>Rhode Island General Laws at Chapter 39-26.5</b> (<a href="http://webserver.rilin.state.ri.us/PublicLaws/law15/law15141-14.htm">http://webserver.rilin.state.ri.us/PublicLaws/law15/law15141-14.htm</a>)</p> <p>39-26.5-6. Priority of PACE assessment lien Priority of PACE lien. -- (a) A lien for a PACE assessment lien on a residential property shall be: subordinate to all liens on the residential property in existence at the time the lien for the assessment in filed residential PACE lien is filed; subordinate to a first mortgage on the residential property recorded after such filing PACE lien is filed; and superior to any other lien on the residential property recorded after such filing PACE lien is filed. This subsection shall not affect the status or priority of any other municipal or statutory lien.</p>
Colorado	None – residential program in development. Has an active commercial program	<p><b>SB 13-212</b> (<a href="http://www.leg.state.co.us/clics/clics2013a/csl.nsf/fsbillcont3/DC81393AA33AA4E387257AEE00570B0E?Open&amp;file=212_rer.pdf">http://www.leg.state.co.us/clics/clics2013a/csl.nsf/fsbillcont3/DC81393AA33AA4E387257AEE00570B0E?Open&amp;file=212_rer.pdf</a>)</p> <p>32-20-107. Special assessment constitutes lien – filing – sale of property for nonpayment. (1) (a) A special assessment, together with all interest thereon and penalties for default in payment thereof, and associated collection costs constitutes, from the date of the recording of the assessing resolution and assessment roll pursuant to subsection (2) of this section, a perpetual lien in the amount assessed against the assessed eligible real property and has priority over all other liens; except that:</p> <ul style="list-style-type: none"> <li>(I) General tax liens have priority over district special assessment liens;</li> <li>(II) A district special assessment lien has priority over preexisting liens only if each lienholder consents as specified in Section 32-20-105 (3)(i) and each consent and the assessment lien are recorded in the real estate records of the county where the property is located.</li> </ul>
Nebraska	Does not yet have an active residential program.	<p><b>LB1012</b> (<a href="http://nebraskalegisature.gov/bills/view_bill.php?DocumentID=28353">http://nebraskalegisature.gov/bills/view_bill.php?DocumentID=28353</a>)</p> <p>Sec. 6. (3) The PACE lien created under this section shall:</p> <p>(a) For qualifying property that is single-family residential property, (i) be subordinate to all liens on the qualifying property recorded prior to the time the notice of the PACE lien is recorded, (ii) be subordinate to a first mortgage or trust deed on the qualifying property recorded after the notice of the PACE lien is recorded, and (iii) have priority over any other lien on the qualifying property recorded after the notice of the PACE lien is recorded.</p>

# Appendix D: Renovate America HERO Program Subordination Instructions



## HERO Financing Program™ Subordination Application

P: 855-CAL-HERO (855-225-4376)

F: (909) 494-4335

E: [hpasubordinations@heroprogram.com](mailto:hpasubordinations@heroprogram.com)

A: 15073 Avenue of Science, San Diego, CA 92128

The HERO Program offers subordination of HERO assessments to first mortgages or deeds of trust for buyers of HERO assessed homes and HERO property owners seeking to refinance their homes.

### Subordination Requirements

1. Subordination must be required by the lender.
2. Lender must be a bank or credit union and the transaction must be arm's length.

### Applicant Information

- Step 1. Complete and sign Applicant Section of the HERO Financing Program Subordination Application. Please ensure the section is complete and accurate to avoid a delay in processing your subordination request.
- Step 2. Provide HERO Financing Program Subordination Application (all pages) to your escrow company or lender.

*You may complete the Escrow/Lender Section or request your escrow company or lender to complete this. Your escrow company or lender is responsible for submitting the Subordination Package (application and required documents listed below) to HERO Property Advisors. Submission of the Subordination Package will initiate the subordination process.*

### Escrow/Lender Information

- Step 1. Complete the Escrow/Lender Section of the HERO Financing Program Subordination Application.
- Step 2. Submit Subordination Package (all required documents listed below) to HERO Property Advisors by email, mail or fax. An incomplete Subordination Package may delay the processing time of your subordination request.

### Required Documents:

- Copy of the completed **Subordination Application** signed by primary applicant
- Copy of **Preliminary Title Report** with the HERO assessment you would like subordinated
- Copy of **Credit Report** for primary applicant (pulled as part of the lender's financing process)
- **Return shipping label**

**Email:**  
[HPASubordinations@heroprogram.com](mailto:HPASubordinations@heroprogram.com)  
Subject line: Subordination Package

**Fax:**  
(909) 494-4335

**Mail:**  
HERO Program  
15073 Avenue of Science  
San Diego, CA 92128  
Attn: Subordination Package

### Next Steps:

The HERO Program will review the Subordination Package and prepare a Subordination Agreement to be recorded against the property. This agreement will be sent with Escrow Instructions to the address provided with the return shipping label for execution by all applicants and recordation.

HERO Financing Program Subordination Application – August 2016  
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## HERO Financing Program™ Subordination Application

P: 855-CAL-HERO (855-225-4376)

F: (909) 494-4335

E: [hpasubordinations@heroprogram.com](mailto:hpasubordinations@heroprogram.com)

A: 15073 Avenue of Science, San Diego, CA 92128

**ALL FIELDS ARE REQUIRED AND MUST BE COMPLETED IN FULL TO PROCESS YOUR REQUEST.**

### ESCROW/LENDER SECTION

#### Preferred Contact Information

Please provide the best contact information for questions and confirmations regarding this subordination request. This person should be working with, or on behalf of, the escrow company or lender associated with this transaction.

<b>Contact Name:</b>		<b>Position Title, Company:</b>	
<b>Contact Phone Number:</b> (xxx) xxx-xxxx		<b>Email Address:</b>	

#### Information for Subordination Agreement

All information must be complete and accurate. This information will appear on the Subordination Agreement to be recorded against the property. Any changes to this information will cause a processing delay of three business days.

<b>Exact Amount of New First Final Mortgage:</b>	\$				
<b>Estimated Settlement Date: (MM/DD/YYYY)</b>					
<b>Lender Company Name:</b>					
<b>Lender Company Address:</b>					
	<b>City:</b>		<b>State:</b>		<b>Zip Code:</b>

#### HERO Property Information

<b>HERO ID or Property/Parcel No.</b>					
<b>Property Address:</b>				<b>County:</b>	
	<b>City:</b>		<b>State:</b>		<b>Zip Code:</b>
<b>Are you buying or refinancing this property?</b>	<input type="radio"/> Buying <input type="radio"/> Refinancing				
<b>Is this property closing in a trust?</b>	<input type="radio"/> Yes	<input type="radio"/> No	<b>Trust Name:</b>		
<b>Is this a reverse mortgage?</b>	<input type="radio"/> Yes	<input type="radio"/> No	<b>Maximum Reverse Mortgage Amount:</b>	\$	

#### Escrow and Title Information

<b>Escrow Officer Name:</b>		<b>Escrow Officer Phone Number:</b>			
<b>Escrow Officer Email Address:</b>			<b>Escrow Reference #:</b>		
<b>Escrow Company Name:</b>					
<b>Escrow Company Address:</b>					
	<b>City:</b>		<b>State:</b>		<b>Zip Code:</b>
<b>Title Company Name:</b>			<b>Title Reference #:</b>		

HERO Financing Program Subordination Application – August 2016

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## HERO Financing Program™ Subordination Application

P: 855-CAL-HERO (855-225-4376)

F: (909) 494-4335

E: hpasubordinations@heroprogram.com

A: 15073 Avenue of Science, San Diego, CA 92128

### APPLICANT INFORMATION

#### Contact Information for Primary Property Owner/Buyer

<b>First Name:</b>		<b>Middle Initial:</b>		<b>Last Name:</b>	
<b>Social Security:</b> (xxx-xx-xxxx)		<b>Birth Date:</b> (MM/DD/YYYY)			
<b>Contact Phone Number:</b> (xxx) xxx-xxxx		<b>Email Address:</b>			
<b>Mailing Address (if different from Property Address):</b>					
	<b>City:</b>		<b>State:</b>		<b>Zip Code:</b>

#### Contact Information for Additional Property Owner(s) / Buyer(s)

<b>Property Owner 2: First and Last Name:</b>		<b>Contact Phone Number:</b> (xxx) xxx-xxxx	
<b>Property Owner 3: First and Last Name:</b>		<b>Contact Phone Number:</b> (xxx) xxx-xxxx	
<b>Property Owner 4: First and Last Name:</b>		<b>Contact Phone Number:</b> (xxx) xxx-xxxx	

### Acknowledgements

This application enables Renovate America to subordinate the HERO assessment, at the request of your lender. Renovate America will provide your escrow company with a Subordination Agreement, who will in turn provide this to your lender.

By signing below,

1. I understand and agree that if I, the escrow company or lender, does not provide Renovate America with my credit report, I authorize Renovate America to obtain my credit report using the social security number that I provided above.
2. I authorize Renovate America to obtain any additional information about my loan or loan application, and I authorize the escrow company or the lender to release such information to Renovate America at its request, for the purposes of processing the subordination request.

Primary Applicant Signature

Date

Digital or electronic signatures are **not** acceptable.

HERO Financing Program Subordination Application – August 2016

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## Appendix E: List of PACE Eligible Improvements by Program

Table 15: Eligible Improvements

Renovate America California HERO		
<ul style="list-style-type: none"> <li>Advanced Energy Storage</li> <li>Electric Vehicle Charging Stations</li> <li>Fuel Cell Generation Systems</li> <li>Small Wind Turbines</li> <li>Air Sealing</li> <li>Attic Insulation</li> <li>Cool Roof – Prescriptive</li> <li>Heat Reflective/Cool Wall Coverings</li> <li>Insulated Siding</li> <li>Radiant Barrier</li> <li>Under Floor Insulation</li> <li>Wall Insulation</li> <li>Air Source Heat Pump</li> <li>Attic Fan</li> <li>Biomass Furnace</li> <li>Boiler</li> <li>Central Air Conditioner</li> <li>Duct Replacement</li> <li>Evaporative Cooler</li> <li>Furnace</li> </ul>	<ul style="list-style-type: none"> <li>Geothermal Heat Pump</li> <li>Heat/Energy Recovery Ventilator</li> <li>Hydronic Radiant Heating Mini-split Air Conditioner</li> <li>Mini-split heat pump</li> <li>Ventilation Fan</li> <li>Whole House Fan</li> <li>Ceiling Fan</li> <li>Lighting Controls</li> <li>Lighting Fixtures</li> <li>Automatic Pool Covers</li> <li>Electric Heat Pump Pool Heater</li> <li>Natural Gas Pool Heater</li> <li>Pool Pump</li> <li>Electric Heat Pump Water Heater</li> <li>Gas Tankless Water Heater</li> <li>Natural Gas Storage Water Heater</li> <li>High-Efficiency Faucet</li> <li>High-Efficiency Showerhead</li> </ul>	<ul style="list-style-type: none"> <li>High-Efficiency Toilet</li> <li>Hot Water Delivery System</li> <li>Artificial Turf</li> <li>Drip Irrigation</li> <li>Drought Tolerant Landscaping</li> <li>Graywater Systems</li> <li>Rainwater Catchment System</li> <li>Rotating Sprinkler Nozzles</li> <li>Weather Based Irrigation Control Systems</li> <li>Solar Invertor</li> <li>Solar Panel</li> <li>Solar Pool Heating Collector</li> <li>Solar Water Heating System</li> <li>Exterior Doors</li> <li>Exterior Window Shading Device</li> <li>Exterior Windows</li> <li>Skylights and Tubular Daylighting Devices</li> <li>Window Film</li> </ul> <p>Energy Audits and Custom Projects may also be financed</p>
Ygrene California		
<p><b>1. Alternative Energy Upgrades</b></p> <ul style="list-style-type: none"> <li>Alternative energy storage system</li> <li>Co-generation system</li> <li>Electric vehicle charging station</li> <li>Fuel cell power system</li> <li>Hydrogen fuel cell power system</li> <li>Natural gas system</li> <li>Wind turbine power system</li> <li>Emerging technologies</li> <li>Custom measures (with approval)</li> </ul> <p><b>2. Solar Photovoltaic</b></p> <ul style="list-style-type: none"> <li>Solar photovoltaic system</li> <li>Solar inverter</li> <li>Emerging technologies</li> <li>Custom measures (with approval)</li> </ul> <p><b>3. Solar Thermal</b></p> <ul style="list-style-type: none"> <li>Solar thermal water heating</li> <li>Solar thermal pool heating</li> <li>Custom measures (with approval)</li> </ul> <p><b>4. High-Efficiency Lighting</b></p>	<ul style="list-style-type: none"> <li>Indoor LED lighting fixture</li> <li>Lighting control system</li> <li>Outdoor LED lighting fixtures</li> </ul> <p><b>5. High-Efficiency Pool Equipment</b></p> <ul style="list-style-type: none"> <li>Automatic pool cover</li> <li>Electric heat pool pump</li> <li>Gas pool heater</li> <li>Pool pump and motor</li> <li>Custom measures (with approval)</li> </ul> <p><b>6. Building Envelope</b></p> <ul style="list-style-type: none"> <li>Air sealing</li> <li>Cool wall coating</li> <li>Insulation – attic</li> <li>Insulation – exterior</li> <li>Insulation – hot water pipe</li> <li>Insulation – under-floor</li> <li>Insulation – wall</li> <li>Insulation – carpet</li> <li>Radiant barrier</li> <li>Reflective pain</li> <li>Roofing – cool</li> <li>Roofing – insulated</li> </ul>	<ul style="list-style-type: none"> <li>Roofing – reflective</li> <li>Weather stripping Custom measures (with approval)</li> </ul> <p><b>7. HVAC</b></p> <ul style="list-style-type: none"> <li>Air conditioner – central</li> <li>Air conditioner – mini split</li> <li>Air filtration system</li> <li>Biomass/wood stove</li> <li>Boiler</li> <li>Duct replacement</li> <li>Duct sealing</li> <li>Evaporative cooler</li> <li>Fan – ceiling</li> <li>Fan – whole house</li> <li>Furnace – electric</li> <li>Furnace – gas</li> <li>Heat pump – geothermal</li> <li>Heat pump – mini split</li> <li>HVAC systems</li> <li>Hydronic radiant heating system</li> <li>Ventilation system</li> <li>Ventilator – exhaust fixture</li> <li>Ventilator – heat/energy recovery</li> <li>Custom measures (with approval)</li> <li>High-Efficiency Water Heating</li> </ul>

## Ygrene Florida

- |  |   |   |
|--|---|---|
| <p><b>1. Energy Efficiency</b></p> <ul style="list-style-type: none"> <li>• Air sealing and ventilation</li> <li>• Air filtration</li> <li>• Building envelope</li> <li>• Duct leakage and sealing</li> <li>• Bathroom, ceiling, attic and whole-house fans</li> <li>• Insulation</li> <li>• Weatherstripping</li> <li>• Sealing</li> <li>• Geothermal exchange heat pumps</li> <li>• Air conditioners</li> <li>• Evaporative coolers</li> <li>• Natural gas storage water heater</li> <li>• Tankless water heater</li> <li>• Solar water heater system</li> <li>• Reflective insulation and paint or radiant barriers</li> <li>• Cool roof</li> <li>• Windows and glass doors</li> <li>• Window film</li> <li>• Skylights</li> <li>• Solar tubes</li> <li>• Pool pumps</li> </ul> | <ul style="list-style-type: none"> <li>• Lighting (fixture retrofits only)</li> <li>• Additional building openings to provide natural light</li> <li>• Occupancy sensor lighting fixtures</li> <li>• Task ambient lighting</li> <li>• Classroom lighting</li> <li>• Refrigerator case LED lighting with occupancy sensors</li> <li>• Wireless daylight-lighting controls</li> <li>• Kitchen exhaust variable air-volume controls</li> <li>• Wireless HVAC controls and fault detection</li> </ul> <p><b>2. Generation</b></p> <ul style="list-style-type: none"> <li>• Solar thermal hot-water systems</li> <li>• Solar thermal systems for pool heating</li> <li>• Photovoltaic systems (electricity)</li> <li>• Emerging technologies</li> <li>• Home stand-by generators – LPG and NG</li> </ul> <p><b>3. Wind Resistance</b></p> <ul style="list-style-type: none"> <li>• Roof deck and foundation strength improvements</li> </ul> | <ul style="list-style-type: none"> <li>• Secondary water barrier and sea walls</li> <li>• Wind-resistant shingles or other roofing</li> <li>• Gable-end bracing</li> <li>• Roof-to-wall bracing</li> <li>• Roof-to-wall connection reinforcement</li> <li>• Storm shutters</li> <li>• Impact windows and doors</li> </ul> <p><b>4. Custom Measures</b></p> <ul style="list-style-type: none"> <li>• Building energy –management controls</li> <li>• HVAC duct zoning –control systems</li> <li>• Irrigation pumps and controls</li> <li>• Lighting controls</li> <li>• Industrial and process-equipment motors and controls</li> <li>• Fuel cells</li> <li>• Wind-turbine power system</li> <li>• Natural gas</li> <li>• Hydrogen fuel</li> <li>• Other fuel sources (emerging technologies)</li> <li>• Cogeneration (heat and energy)</li> </ul> |
|--|---|---|

## Renew Financial CaliforniaFIRST

- |   |  |  |
|---|--|--|
| <p><b>1. Drought Tolerant Landscaping</b></p> <ul style="list-style-type: none"> <li>• Artificial turf (not available in some cities in Los Angeles County)</li> <li>• Permeable Ground Cover</li> </ul> <p><b>2. Electric Vehicle Charging Station</b></p> <p><b>3. Storage and Fuel Cells</b></p> <ul style="list-style-type: none"> <li>• Advanced energy storage systems</li> <li>• Stationary fuel cell power systems</li> </ul> <p><b>4. HVAC</b></p> <ul style="list-style-type: none"> <li>• Air-source heat pump</li> <li>• Attic fan</li> <li>• Boiler</li> <li>• Ceiling fan</li> <li>• Central air conditioner</li> <li>• Duct insulation</li> <li>• Duct replacement</li> <li>• Duct sealing</li> <li>• Ductless mini-split</li> <li>• Energy Recover Ventilation (ERV) system</li> <li>• Evaporative cooler</li> <li>• Furnace</li> <li>• Geothermal heat pump</li> </ul> | <ul style="list-style-type: none"> <li>• Radiant heat (floor, wall, ceiling)</li> <li>• Ventilating fans</li> </ul> <p><b>5. Indoor Water Efficiency</b></p> <ul style="list-style-type: none"> <li>• High efficiency faucets</li> <li>• High efficiency showerheads</li> <li>• Toilets</li> <li>• Urinals</li> <li>• Water delivery systems</li> </ul> <p><b>6. Drought Tolerant Landscaping</b></p> <p><b>7. Insulation and Air Sealing</b></p> <ul style="list-style-type: none"> <li>• Air sealing</li> <li>• Attic insulation</li> <li>• Floor insulation (over unconditioned space)</li> <li>• Foam insulation – Attic/Roof</li> <li>• Wall insulation</li> </ul> <p><b>8. Lighting</b></p> <ul style="list-style-type: none"> <li>• Indoor lighting fixtures</li> <li>• Lighting control</li> <li>• Outdoor lighting fixtures</li> </ul> <p><b>9. Pool Equipment</b></p> <ul style="list-style-type: none"> <li>• Automatic pool covers</li> <li>• Gas pool heaters</li> <li>• Heat pump pool heater</li> <li>• Pool pump and motor</li> </ul> <p><b>10. Outdoor Water Efficiency</b></p> | <ul style="list-style-type: none"> <li>• Cool roof – prescriptive</li> <li>• Exterior coating</li> <li>• Insulated siding</li> <li>• Radiant barrier</li> </ul> <p><b>12. Solar Photovoltaic</b></p> <ul style="list-style-type: none"> <li>• Solar invertors</li> <li>• Solar panels – with monitoring</li> <li>• Solar panels – without monitoring</li> </ul> <p><b>13. Solar Thermal</b></p> <ul style="list-style-type: none"> <li>• Solar pool heating</li> <li>• Solar water heating</li> </ul> <p><b>14. Water Heating</b></p> <ul style="list-style-type: none"> <li>• Electric heat pump tank water heater</li> <li>• Gas storage tank water heater</li> <li>• Gas tankless water heater</li> <li>• Hot water tank insulation</li> <li>• Pipe insulation – hot water</li> <li>• Water heat recovery</li> </ul> <p><b>15. Wind Energy</b></p> <ul style="list-style-type: none"> <li>• Small wind turbine</li> </ul> <p><b>16. Windows and Doors</b></p> <ul style="list-style-type: none"> <li>• Applied window films</li> <li>• Doors</li> <li>• Exterior shade products</li> <li>• Skylights and tubular daylighting</li> </ul> |
|---|--|--|

- Heat Recovery Ventilation (HRV) system
- Heating and air conditioning package unit
- Pellet stove or insert
- Programmable thermostat control
- Whole house fans

- Drip irrigation
- Greywater systems
- Rainwater catchment systems
- Rotating sprinkler control
- Weather-based irrigation control systems

- devices
- Windows

For the complete list of Eligible Projects and Products with specifications see: <https://californiafirst.org/homeowner-overview/eligible-projects-products/>

11. Roofing and Siding
- Cool roof – performance

## PACEfunding

### 1. Solar Photovoltaic

- Solar panel
- Solar inverter

### 2. Solar Thermal

- Solar water heating
- Solar pool heating

### 3. Alternative Energy

- Small wind turbine
- Advanced energy storage system
- Electric vehicle charging station
- Stationary fuel cell power system

### 4. Cogeneration

- Microturbine
- Internal combustion engine
- Fuel cell

### 5. HVAC

- Air-source heat pump
- Central air conditioner
- Furnace
- Evaporative cooler
- Boiler
- Geothermal heat pump
- Hydronic radiant heating
- Mini-split air conditioner
- Mini-split heat pump

- Biomass / wood stove
- Duct replacement
- Heat/energy recovery ventilator
- Exhaust ventilation fixture
- Whole house fan
- Attic ventilation fixture
- Ceiling fan

### 6. Windows, Doors, and Skylights

- Window
- Door
- Skylights and tubular day lighting device
- Applied window film
- Exterior window shading device

### 7. Building Envelope

- Cool wall coating
- Cool roof – prescriptive
- Cool roof – performance
- Attic insulation
- Wall insulation
- Under-floor insulation
- Radiant barrier
- Air sealing

### 8. High Efficiency Water Heating

- Gas storage water heater
- Electric heat pump storage water heater

### 9. High Efficiency Pool Equipment

- Gas tankless water heater
- Pool pump and motor
- Electric heat pump pool heater
- Gas pool heater
- Automatic pool cover

### 10. High Efficiency Lighting

- Indoor lighting fixture
- Outdoor lighting fixture
- Lighting control

### 11. Indoor Water Efficiency

- High-efficiency toilet fixture
- High-efficiency faucet fixture fitting
- High-efficiency showerhead
- Hot water delivery system

### 12. Outdoor Water Efficiency

- High-efficiency sprinkler nozzle
- Weather-based irrigation controller
- Drip irrigation
- Rainwater catchment system
- Gray water system
- Artificial turf

See <https://www.pacefunding.com/wp-content/uploads/2015/11/eligibleprojects.pdf>

## AllianceNRG

There are thousands of products that can be financed with the AllianceNRG Program such as:

### 1. Energy Efficiency Improvements

- Air conditioning;

- Water heating;
- Windows and doors
- Insulation and duct sealing
- Lighting and controls
- Electric vehicle charging equipment

### 2. Renewable Improvements

- Solar photovoltaic systems
- Solar thermal systems
- Solar water heaters and attic fans
- Geothermal heating and cooling
- Wind microturbines

## Sonoma County Energy Independence Program (SCEIP)

- Attic Fan
- Solar Co-Generation System
- Cool Roof
- Core Plumbing System
- Doors, Glass
- Doors, Solid, Insulating
- Duct Insulation
- Duct Replacement

- HVAC Duct Zoning Control System
- HVAC Ducted Heat Pump System
- HVAC Ductless Split System Heat Pump
- HVAC Furnace, Natural Gas
- HVAC Heat Pumps -

- Photovoltaic (PV) Systems - Rooftop
- Pool Equipment, Pool Circulating Pumps
- PV Hybrid System (Solar, Solar Thermal, Heating)
- Rainwater Cistern
- Sealing, Whole Building

- Duct Sealing
- Electric Vehicle Plug-in Station
- Electronic Air Cleaner/Filter
- Encapsulated Crawl Space
- Energy Analysis - Building Performance Test
- Exterior Siding, Insulating
- Faucet w/ Fixed Aerator
- Fuel Cells
- Geothermal Well Drilling
- Graywater System
- Home Energy Management Control System, Permanent
- Hot Water Heater, Instantaneous
- Hot Water Recirculation System
- Hot Water System, Demand Initiated
- HVAC Air Conditioning - Package Unit
- HVAC Air Conditioning - Split System Unit
- HVAC Combined Hydronic System
- Geothermal Exchange Closed Loop
- HVAC Heat Pumps - Geothermal Exchange Open Loop
- HVAC, Evaporative Coolers
- Hydronic Radiant Heat
- Insulation, Attic
- Insulation, Crawlspace
- Insulation, Hot Water Pipes
- Insulation, Reflective or Radiant Barriers
- Insulation, Sub-floor
- Insulation, Wall
- Irrigation Control System
- Irrigation System
- Lighting Control Systems with Occupancy Sensors
- Lighting, High Efficiency, Hard-Wired Fixtures
- Photovoltaic (PV) Battery Back-up Systems
- Photovoltaic (PV) Systems - Ground Mount
- Showerhead
- Skylights
- Solar Thermal Systems for Hot Water
- Solar Thermal Systems for Pool Heating-Evacuated Tubes
- Solar Thermal Systems for Pool Heating-Panels
- Solar Tubes
- Toilets, High Efficiency
- Ventilation for .35 ACH
- Water Heater, Heat Pump
- Water Heater, Natural Gas Storage
- Water Heater, Tankless
- Water Softener, Demand Initiated
- Weather-stripping
- Whole House Fan System
- Whole House Water Manifold System
- Wind Turbine
- Window Filming
- Windows

## mPOWER Placer

- 1. Water Conservation Measures**
  - High Efficiency Toilets
  - Dual Flush Toilets
  - Showerheads
  - Aerators (kitchen faucet)
  - Aerators (bathroom faucet)
  - Hot water recirculation
  - Demand initiated hot water systems
  - Whole house manifold systems
  - Core plumbing systems
  - Hot water pipe insulation
  - Demand initiated water softeners
- 2. Outdoor Water Conservation**
  - Electrically operated swimming pool covers
  - Weather-based or smart irrigation controllers
  - Replace grass with artificial turf
  - Replace grass with concrete pavers
  - Permanently installed rainwater cisterns
  - Drip irrigation systems in gardens, planters and beds
  - Matched precipitation sprinklers
  - Evapotranspiration based irrigation controllers
  - Whole house fans
  - Air Source Heat Pump – split system and packaged system
  - Geothermal Heat Pump – closed loop water to air, open loop water to air, closed loop water to water, open loop water to water
  - Home energy management control systems
  - Duct insulation
  - Duct sealing
  - Evaporative Coolers and all water/ice based cooling units
  - Wood stoves and fireplace inserts
  - Biomass boilers, stoves and fireplace inserts
  - Natural gas storage water heater
  - Tankless water heater
  - Cool roof system
  - Reflective roofs and coatings
  - Attic and wall insulation
  - Reflective insulation or radiant barriers
  - Insulated siding
  - Attic fans with thermostatic controls
- Lighting retrofit
  - Lighting controls and sensors
  - Pool circulating pumps
- 4. Solar Equipment**
  - Solar thermal systems (hot water)
  - Solar thermal systems for pool heating
  - Photovoltaic systems – battery backup systems, off-grid system, PV system sized for EV charging
  - Nano/thin film photovoltaic
  - High intensity (parabolic solar panels)
- 5. Custom Measures**
  - Alternative energy generation (other than PV)
  - Building energy management systems
  - HVAC duct zoning control systems
  - Irrigation pumps and controls
  - Fuel cells
  - Natural gas energy generation custom measures
  - Hydrogen gas energy generation custom measures
  - Other gas energy generation custom measures
  - Co-generation (heat and energy) energy generation custom

<ul style="list-style-type: none"> <li>• Irrigation system retrofits</li> </ul> <p>3. <b>Residential Energy Efficiency Measures</b></p> <ul style="list-style-type: none"> <li>• Home EV Charging Installations</li> <li>• Minimum efficiency HVAC systems – natural gas furnace, split systems and packaged systems</li> </ul>	<ul style="list-style-type: none"> <li>• Windows</li> <li>• Skylights</li> <li>• Solar tubes</li> <li>• Additional building openings to provide natural light</li> <li>• Window film</li> <li>• Weather-stripping</li> <li>• Home sealing</li> </ul>	<p>measures</p> <p>For full specifications and financing terms for improvements see: <a href="http://www.mpowerplacer.org/wp-content/uploads/2016/02/Residential_Eligible_Improvements.pdf">http://www.mpowerplacer.org/wp-content/uploads/2016/02/Residential_Eligible_Improvements.pdf</a></p>
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**Vermont PACE**

<p>1. <b>Energy Efficiency Measures</b></p> <ul style="list-style-type: none"> <li>• Blower-door assisted air sealing</li> <li>• Insulate building envelope (attic, basement, walls, crawl space, kneewall, etc.)</li> <li>• Seal and insulate heating and cooling distribution systems (ductwork, piping)</li> </ul>	<ul style="list-style-type: none"> <li>• Install new efficient heating and/or cooling system</li> <li>• Install new efficient water heating system</li> <li>• Replace windows, doors, or skylights</li> <li>• Whole-home ventilation</li> <li>• Electric vehicle charging stations</li> </ul>	<ul style="list-style-type: none"> <li>• Health and safety measures</li> <li>• Energy audit</li> </ul> <p>2. <b>Renewable Measures</b></p> <ul style="list-style-type: none"> <li>• Solar electric (PV) system</li> <li>• Solar hot water system</li> <li>• Small wind system</li> <li>• Micro-hydro system</li> <li>• Health and safety measures</li> </ul>
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## Appendix F: PACENation Consumer Protection Recommendations for Residential PACE

The minimum standards recommended by PACENation for consumer protection are summarized below. For the full text of PACENation’s guidance, see <http://pacenation.us/wp-content/uploads/2016/08/PACENation-CPP-V1-2016.05.10-1.pdf>

**Table 16: PACENation Consumer Protection Recommendations for Residential PACE**

Consumer Protection Policy Area	Minimum Standards As Recommended by PACENation
Eligibility and Risk	<p>Minimum “Eligibility and Risk” standards for 4 key attributes of every financed project:</p> <ol style="list-style-type: none"> <li>1. <u>Properties</u>: <ul style="list-style-type: none"> <li>• The Program should be made available to the entirety of the existing residential housing stock in political boundaries of the Program</li> <li>• The Program is not available to: commercial properties (including residential properties with 5+ units), new properties under construction, and properties that cannot be subject to an assessment or levy</li> </ul> </li> <li>2. <u>Encumbrances</u> – eligible properties will have the following attributes: <ul style="list-style-type: none"> <li>• All mortgage-related debt on the Property may not exceed 90% of the Property’s fair market value (“FMV”), or assessed value if market value data is unavailable or unreliable, at the time of initial approval</li> <li>• Reliability of the Program FMV model should be verified through an accepted and regular audit process, sampling appraisal data as a means of measurement and verification</li> <li>• The financing may not exceed (A) (i) 15% of the FMV of the Property, up to the first \$700,000 of the Property’s FMV, and (ii) 10% of the remaining value of the Property above \$700,000 minus (B) any existing PACE assessments on the Property</li> <li>• The total mortgage-related debt on the underlying Property plus Program financing may not exceed the FMV of the Property</li> <li>• The total amount of any annual property taxes and assessments shall not exceed 5% of the Property’s FMV, determined at the time Program financing is approved</li> </ul> </li> <li>3. <u>Eligible Improvements</u> – See Appendix E</li> <li>4. <u>Homeowners</u> are eligible only if: <ul style="list-style-type: none"> <li>• The applicant is the homeowner of record</li> <li>• Property tax payments for the assessed Property are current. Additionally, the homeowner must certify that there has been no more than one late payment for the shorter of (i) the previous three years, or (ii) since the present homeowner acquired the Property</li> <li>• The homeowner is current on all mortgage debt, and has been late on such payments no more than once (30 days maximum) during the 12-month period preceding funding</li> <li>• The applicant has not had any active bankruptcies within the last 7 years; provided, however, that this criterion can be met if a homeowner’s bankruptcy was discharged between two and seven years before the application date, and the homeowner has had no past due payments (mortgage and non-mortgage) for more than 60 days in the most recent 24 months</li> <li>• The homeowner has no involuntary lien(s) recorded against the Property in excess of \$1,000</li> <li>• There may be no pending Notice of Default on the property and no more than one recorded Notice of Default for the shorter of (i) the previous three years, or (ii) since the present homeowner acquired the Property.</li> </ul> </li> </ol>

## Disclosures and Documentation

### 1. Document Timing:

- Before commencement of any Program-financed project, a homeowner needs to:
  - Submit an application
  - Receive approval of the Measures from the Partner
  - Execute documentation covering the terms and disclosures summarized in this Section
- Following installation of the Measures, a homeowner needs to:
  - Execute an acknowledgement that the installation of the Measures has been completed satisfactorily
  - Receive a final summary of costs and payments

### 2. Terms – the following need to be reflected in its disclosures:

- The amount financed including the cost of the installed Measure(s), plus Program fees and capitalized interest
- The repayment process and schedule
- The payment amounts
- The term of the financing
- The rate of interest charged (should be fixed, not variable)
- A payment schedule that fully amortizes the amount financed
- The nature of the lien or obligation created upon recordation
- The specific improvements to be installed
- The 3-day right to cancel the financing
- The right to withhold approval of payment until the project is complete
- Any other relevant state specific rights, notices, or requirements
- The partner is responsible for preparing, delivering, and arranging disclosure documents to reflect the above terms.

### 3. Disclosures Policy:

- Partners are responsible for confirming delivery to, and receipt by, homeowners of the Disclosures. They also are responsible for obtaining written acknowledgement that homeowners have read and understood them.
- Key Disclosures are (expressed in #2, Terms as well):
  - Term of financing: maximum time period of the financing
  - Amount financed: Total amount financed
  - Annual payment amount
  - Annual interest rate / APR
  - Improvements financed
  - FHFA risks
  - Right to cancel
  - The right to prepay with clearly defined penalties
- Additional Disclosures
  - Program overview
  - Property tax repayment process
  - Tax benefits
  - Privacy policies of the Program
  - Federal disclosures
  - Foreclosure – Risk of foreclosure and the foreclosure process

### 4. Confirmation of Terms:

- Partners need to confirm live by telephone with the homeowner applicant each of the following Program financing terms listed below. These confirmation requirements do not apply to contractors who have reached the Partner's top rating category, though all contractors need to carry out these confirmation requirements for any applicant who is over 64 years old. Over the phone, the Partners will discuss the following with the homeowner:
  - The reason for the specific improvement(s) being obtained by the homeowner
  - His or her total estimated annual payment
  - The date that the first tax payment will be due

	<ul style="list-style-type: none"> <li>○ The term of the Program financing</li> <li>○ Any additional fees (including recording fees) that will be charged</li> <li>○ That he/she may make payments on the Program financing either directly to the county assessor’s office or through his or her mortgage impound account</li> <li>○ That no Measures other than the Pending Project are underway, and that the homeowner must inform the Partner if he/she authorizes any new Measures</li> </ul>
Financing Terms	<ol style="list-style-type: none"> <li>1. <u>Interest Rates</u>: Partners should offer fixed simple interest rates and payments that fully amortize. Variable interest rates and negative amortization are forbidden.</li> <li>2. <u>Sustainable Funding Source</u>: Partners should establish a sustainable source of capital for funding PACE projects separate from the Authority’s general fund or budget. Partners must demonstrate capacity to fund assessments.</li> <li>3. <u>Subordination</u>: States with senior lien PACE statutes should make a subordination option available to homebuyers and homeowners.</li> <li>4. <u>Contractor Fees</u>: Partners can only charge fees to contractors offering Program financing as long as the Partners: <ul style="list-style-type: none"> <li>• Clearly and conspicuously disclose such fees to homeowners</li> <li>• Require that contractors absorb such obligations and do not pass such fees on to homeowners</li> </ul> </li> </ol>
Operations	<ol style="list-style-type: none"> <li>1. <u>Operational Consumer Protection Policies</u>: The Program and its Partners will provide people, and develop processes, tools, and technology necessary to support the consumer protection measures described in detail elsewhere in this policy, including: (i) risk and underwriting processes; (ii) terms and documentation delivery systems; (iii) documentation, maintenance and retrieval processes; (iv) disclosure development, delivery and acknowledgment receipt; (v) post-funding support for homeowners and other stakeholders such as real estate professionals; (vi) data security measures; (vii) privacy policy development and protections; (viii) marketing and communication oversight; (ix) protected class data and communication processes; (x) contractor management and engagement; (xi) eligible product database and/or list development and maintenance; (xii) implementation of the maximum financing amounts; (xiii) key metrics reporting; (xiv) closing and funding processes (including the ability to fulfill financing obligations); (xv) examination data production; and (xvi) implementation of procedures to identify and prohibit conflicts of interest within and associated with the Program.</li> </ol>
Post-Funding Homeowner Support	<p>Establishing and operating an executive office responsible for customer care is fundamental to the consumer protections that the Program provides.</p> <ol style="list-style-type: none"> <li>1. <u>Proactive Engagement</u>: Partners should proactively monitor and test consumer protections delivered to homeowners and request feedback from homeowners and contractors to identify areas in need of improvement.</li> <li>2. <u>Onboarding</u>: Partners should develop and implement a post-installation onboarding procedure for homeowners.</li> <li>3. <u>Payments</u>: Partner should have disclosures and resources in place to resolve any questions regarding payments, including questions on: prepayment, catch up payments, payment timing, payment amount reconciliation, and more.</li> <li>4. <u>Inquiries and Complaints</u>: Partners must receive, manage, track, timely resolve, and report on all inquiries and complaints from homeowners</li> <li>5. <u>Real Estate Transactions</u>: Partners must develop capabilities to assist homeowners and real estate professionals on matters of refinancing and selling Properties.</li> </ol>
Data Security	<ol style="list-style-type: none"> <li>1. <u>Information Systems</u>: Partners must develop and comply with secure and tested processes to protect personal information, including: <ul style="list-style-type: none"> <li>• A cyber-security policy that, at a minimum, requires data encryption “during transmission” and “at rest”</li> <li>• A protocol for access to info based upon job function and need-to-know criteria</li> <li>• Measures that protect the security and confidentiality of consumer records and information</li> <li>• Monitoring and logging all remote access to its systems (through VPN or otherwise)</li> <li>• Data security policies that are subject to auditing and penetration testing conducted by</li> </ul> </li> </ol>

	<p>an independent auditor hired by the Authority at least annually and any time a chance is made that may have any potential impact on the servers, security policies or user rights</p> <ul style="list-style-type: none"> <li>• Ensuring minimum viable configurations are in place on all servers</li> </ul> <p>2. <u>Personnel</u> – Partners are responsible for:</p> <ul style="list-style-type: none"> <li>• Informing and enforcing compliance with the Program’s data privacy and security policies on the part of every employee, contractor, vendor, etc.</li> <li>• Preventing unauthorized copying, disclosure, or other misuse of consumer info</li> </ul>
Privacy	<p>1. <u>Privacy Policy</u>: Partners must develop and deliver a privacy policy that complies with state and federal law (Gramm-Leach-Bliley Act) to homeowners prior to obtaining personal identifying information.</p> <p>2. <u>Application Process</u>: All personal identifying information should be provided directly by the homeowner to the Partner, and not by a contractor or other third party.</p>
Marketing and Communications	<p>1. <u>Prohibited Practices</u>: Any practices that are or appear to be unfair, deceptive, abusive, misleading, in violation of federal/state laws, providing tax advice, or otherwise inappropriate</p> <p>2. <u>Permitted Practices</u>: Any practices that promote informed decisions and is not prohibited by #1 above</p> <p>3. <u>Tax Advice</u>: No Partner, Contractor, or other related third party who is not a tax expert may provide tax advice to homeowners regarding Program financing</p> <p>4. <u>Payments in Exchange for Financing</u>: No Partner may provide a direct cash payment or other thing of material value to a Registered Contractor or Affiliated Individual</p>
Protected Classes	<p>1. <u>General</u>: Partners must develop controls and methods to ensure compliance with state and federal laws that cover individuals in protected classes, including those based on race, religion, color, marital status, gender, sexual orientation, national origin, citizenship, presence of children, disability, age, veteran status, participation in a public assistance program, or because an applicant has in good faith exercised any right under the Consumer Credit Protection Act.</p> <p>2. <u>Elders</u>: Partners must ensure that homeowners over 64 years of age understand the purpose of each Measure, and the terms of financing.</p> <p>3. <u>Financing Application Access and Decisions</u>: Partners must provide legally unbiased access to all applicants.</p>
Registered Contractors	<p>1. <u>Policies</u> – To become “Registered Contractors,” one must meet the requirements of the Program’s Contractor Participation Agreement (PCPA):</p> <ul style="list-style-type: none"> <li>• Compliance with any relevant state contractor code of conduct</li> <li>• Be licensed and insured, and be in good standing with any relevant state licensing board</li> <li>• PCPA should only be executed by a person who is authorized to act on behalf of the Registered Contractor</li> <li>• Oversight and management of employees, independent contractors, and subcontractors who provide services to Registered Contractors accessing the Program</li> <li>• Meet all other state and local licensing, training, and permitting requirements</li> <li>• Compliance with the Program’s marketing policies</li> <li>• Ensure all Affiliated Individuals register with the Program, including completing the Program’s identity verification procedures</li> </ul> <p>2. <u>New Contractors</u> – Partners should:</p> <ul style="list-style-type: none"> <li>• Monitor newly Registered Contractor for a specified period until the new Contractor has completed the required number of Measures</li> <li>• Provide additional quality assurance steps for Measures completed during the above specified probationary period</li> <li>• Review the Registered Contractor’s work to confirm satisfactory completion of projects during the probationary period</li> </ul> <p>3. <u>Contractor Management</u>: Partners should implement contractor management systems to manage and track contractor training and compliance violations</p> <p>4. <u>Contractor Training</u>: Partner should make contractor training available that, at a minimum, addresses: (i) code of conduct; (ii) protected classes; (iii) other consumer protection measures as required by the Program</p> <p>5. <u>Remedial Action</u>: Partners will warn, suspend, or terminated a Registered Contractor or</p>

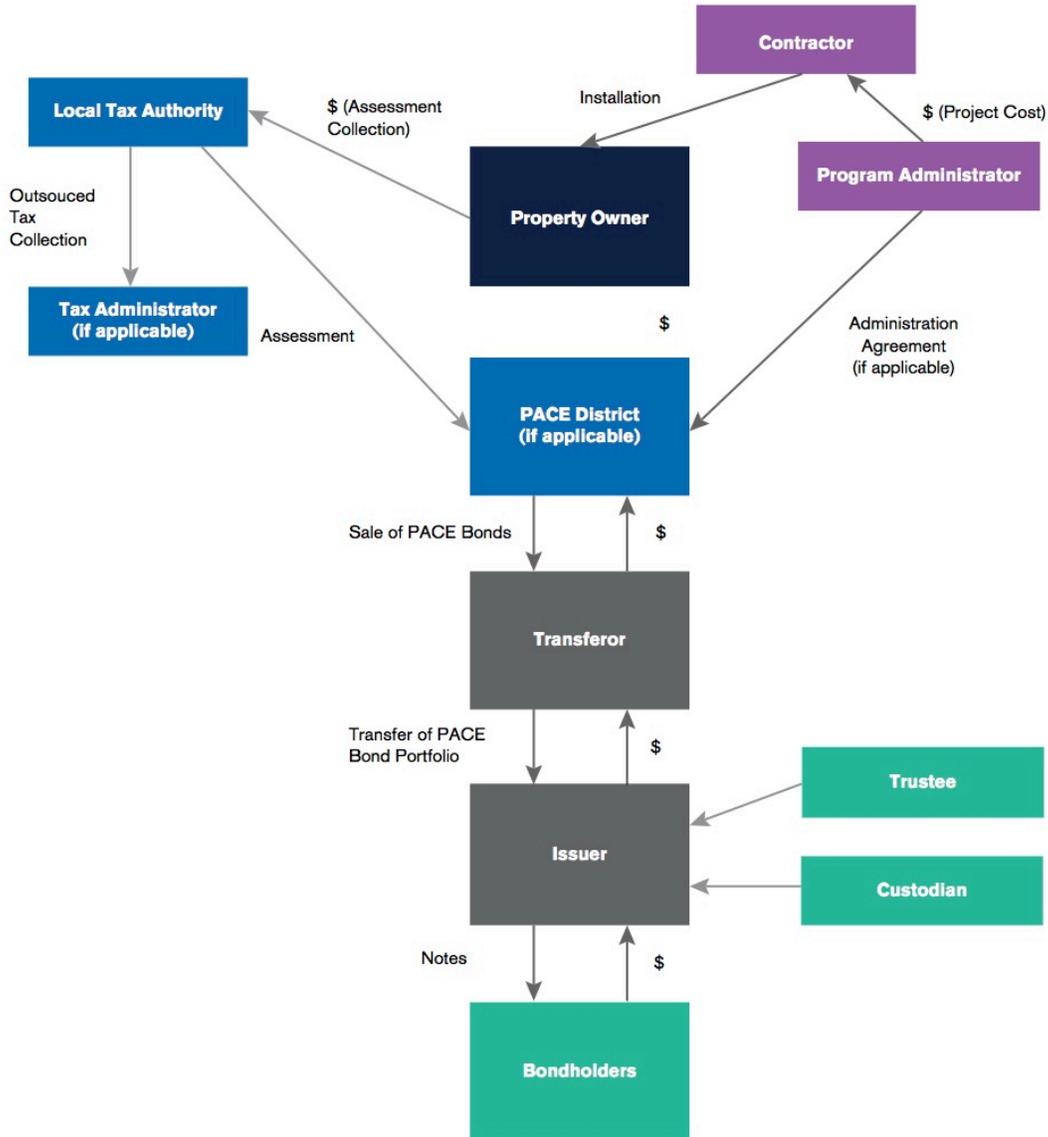
	Affiliated Individual based on violations of the PCPA. The Program does not accept applications from suspended or terminated contractors.
Eligible Products	<p>1. <u>Policies</u> – It is the policy of the Program to:</p> <ul style="list-style-type: none"> <li>• Establish and maintain an eligible products database</li> <li>• Define a process for adding to or modifying the eligible product database</li> <li>• Ensure that eligible product performance standards are calibrated and verified using U.S. DOE and EPA-approved criteria</li> <li>• Use credible third party sources to determine the useful life of each installed product, which will be used to set the maximum term for financing</li> <li>• Require that each product is permanently affixed to the Property</li> </ul> <p>2. <u>Procedures</u>: Partner needs to confirm that the homeowner applying for Program financing intends to install eligible products, and that at the time of funding such improvements have been installed.</p> <p>3. <u>Ineligible Products</u>: Financing of ineligible products is prohibited. Products not included on the eligible products list may be submitted for review by the Program</p>
Pricing	<ul style="list-style-type: none"> <li>• The Program will develop maximum financing amounts (MFAs) based on market data and each Partner’s experience, but will not set pricing for installation of eligible products and projects.</li> <li>• Each Partner will, at a minimum, establish an MFA for each product type.</li> <li>• Within each MFA, there is a low to high range of justifiable pricing, depending on the particular product within a product type.</li> <li>• Each Partner will establish processes to enforce the MFA rules.</li> <li>• A project may only be funded for an amount great than the MFA if the amount exceeding the MFA is justified by reasonable standards.</li> </ul>
Reporting	<p>1. <u>Reporting Categories</u>: Metrics in the following categories are to be developed and reported quarterly to the Authority: (i) number of projects funded; (ii) project amount funded; (iii) estimated amount of energy savings; (iv) estimated amount of renewable energy produced; (v) estimated amount of water savings; (vi) estimated amount of greenhouse gas emissions reductions; (vii) estimated number of jobs created.</p> <p>2. <u>Reporting Standards</u>: All data should be collected for using standardized, third party verified methodologies. Methodologies, assumptions, and sources should be made available to the Authority. Reports should include only aggregate data to protect sensitive customer info.</p>
Closing & Funding	<p>1. <u>Installation Completion Sign-off</u>: Confirm, before funding, that the eligible products financed are installed, operational, and in a condition acceptable to the homeowner and contractor. Homeowner and contractor need to sign a document stating as such.</p> <p>2. <u>Permits</u>: Homeowners seeking finance should obtain required permits for the installation of Measures and provide verification thereof upon request.</p> <p>3. <u>Funding</u>: Disburse funds only for complete projects.</p> <p>4. <u>Recording</u>: Record the Notice of Assessment and Payment of Contractual Assessment Required documentation in a manner consistent with state law.</p> <p>5. <u>Asset Verification</u>: Program must confirm that product(s) listed on the Completion Certificate have been installed and that the Partner has developed and implemented an acceptable randomized onsite inspection protocol.</p>

## Appendix G: PACE Securitization Structure

Figure 4: Transaction Structure

### Transaction Structure

The following diagram illustrates a possible PACE transaction structure:



Source: <http://www.dbrs.com/research/284631/rating-u-s-property-assessed-clean-energy-pace-securitizations.pdf>

The majority of PACE securitizations involve the securitization of PACE bonds issued by PACE districts or local governments.<sup>175</sup> The underlying PACE bonds are limited obligation improvement bonds that

<sup>175</sup> It is unclear what the underlying securities and overall securitization structure of Ygrene's first securitization in July 2015 are. The deal was privately placed and few details about the transaction are publicly available.

are secured by the PACE assessments, these bonds are issued as frequently as weekly by the PACE district/local government to fund the projects secured by the PACE assessments. The PACE bonds are typically bought and warehoused by the PACE administrator until there is sufficient volume for securitization at which time the notes are sold into the secondary market. In this scenario, a sub-entity of the PACE administrator typically acts as the transferor (the purchaser of the PACE bond from the PACE district) and a separate entity of the PACE administrator then acquires the PACE bond portfolio from the transferor and acts as the issuer and issues the ABS notes which are secured by the portfolio of PACE bonds. The underlying cash flows from the PACE bonds/PACE assessments service principal and interest on the ABS notes. The payment priorities for the ABS notes are established in accordance with pre-defined cash flow waterfalls and the notes also benefit from several structural and credit enhancements<sup>176</sup> The diagram on the next page illustrates in more detail the structure of a typical PACE securitization:<sup>177</sup>

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<sup>176</sup> For more information on the structure of PACE securitizations and the methodology used for rating these transactions see: DBRS "Rating U.S. Property Assessed Clean Energy (PACE) Securitizations, September 2015,

<http://www.dbrs.com/research/284631/rating-u-s-property-assessed-clean-energy-pace-securitizations.pdf>

<sup>177</sup> Diagram from DBRS "Rating U.S. Property Assessed Clean Energy (PACE) Securitizations, September 2015,

<http://www.dbrs.com/research/284631/rating-u-s-property-assessed-clean-energy-pace-securitizations.pdf>

## Appendix H: PACE Securitizations to Date

Table 17: Completed PACE Securitizations

	Name	Security	Amount	Rating	Advance Rate	Green Bond Status	Coupon	Tenor
1.	HERO Funding Trust 2014-1	219 PACE bonds backed by 5,890 residential PACE assessments in CA	\$104 million	AA (Kroll)	97%	Sustainalytics: Renovate America uses a robust and credible Green Bond Framework that is aligned with ICMA's	4.75%	16.71 years
2.	HERO Funding Trust 2014-2	261 PACE bonds backed by 6,858 residential PACE assessments in CA	\$129 million	AA (Kroll)	97%	Sustainalytics: Renovate America uses a robust and credible Green Bond Framework that is aligned with ICMA's	3.99%	16.33 years
3.	HERO Funding Trust 2015-1	16 PACE bonds backed by 11,282 residential PACE assessments in CA	\$240 million	AA (Kroll)	97%	Sustainalytics: Renovate America uses a robust and credible Green Bond Framework that is aligned with ICMA's	3.84%	15.23 years
4.	HERO Funding Trust 2015-2	18 PACE bonds backed by 7,558 residential PACE assessments in CA	\$160 million	AA (Kroll)	97%	Sustainalytics: Renovate America uses a robust and credible Green Bond Framework that is aligned with ICMA's	3.99%	14.81 years
5.	HERO Funding Trust 2015-3	32 PACE bonds backed by 8,939 residential PACE assessments in CA	\$202 million	AA (Kroll; DBRS)	97%	Sustainalytics: Renovate America uses a robust and credible Green Bond Framework that is aligned with ICMA's; Considered to be Green Bonds per	4.28%	14.46 years

							ICMA standards	
6.	Ygrene 2015	Residential & Commercial PACE assessments in CA & FL	\$150 million	AA (Kroll)	97%			
7.	Renew Financial (September 2015)		\$50 million					
8.	HERO Funding Trust 2016-1	28 PACE bonds backed by 9,252 residential PACE assessments in CA	\$218 million	AA (Kroll, DBRS)	97%	Sustainalytics: Renovate America uses a robust and credible Green Bond Framework that is aligned with ICMA's; Considered to be Green Bonds per ICMA standards	4.05% 14.78 years	
9.	HERO Funding Trust 2016-2	24 PACE bonds backed by 13,432 residential PACE assessments in CA	\$305 million	AA (Kroll, DBRS)	97%	Sustainalytics: Renovate America uses a robust and credible Green Bond Framework that is aligned with ICMA's; Considered to be Green Bonds per ICMA standards	3.75% 14.95 years	
10.	HERO Funding 2016-3	Initially 180 PACE bonds backed by 12,394 residential PACE assessments in CA	\$320 million	AA (Kroll, DBRS); CB1 (Moody's)	97%	Sustainalytics: Renovate America uses a robust and credible Green Bond Framework that is aligned with ICMA's; Considered to be Green Bonds per ICMA standards; GB1 (Excellent) from Moody's	Class A1 Notes – 3.08%; Class A2 Notes – 3.91% 14.56 years	
11.	Golden Bear 2016-1	347 PACE bonds backed by 4,804 residential	\$123 million	AA (Kroll)	97%	Considered to be Green Bonds per ICMA standards	3.75% 19.12 years	

		PACE assessments in CA						
12.	Golden Bear 2016-2	18 PACE bonds backed by 4,226 residential PACE assessments in CA	\$115 million	AA (Kroll)	97%	Designated as Green Bonds	3.16%	19.32 years
13.	GoodGreen 2016-1 Trust	PACE bonds backed by 7,761 residential & commercial PACE assessments in CA & FL	\$185 million	Class A notes rated AA (Kroll), AAA (Mornings tar); Class B notes rated BBB (Kroll), A (Mornings tar)	Class A notes – 97%, Class B notes – 99.7%	GB1 (Excellent) from Moody's	Class A Notes – 3.23%; Class B Notes – 5.24%	18.10 years
14.	Ygrene 2016	Residential and commercial assessments in multiple states, including CA & FL	\$145 million	Rated Class A Notes				
15.	HERO Funding 2016-4	139 PACE bonds backed by 9,008 residential PACE assessments in CA	\$284 million	AA (Kroll; DBRS)	97%	Considered to be Green Bonds per ICMA standards	Class A1 Notes – 3.57%; Class A2 Notes – 4.29%	15.48 years