# Work Group Report

## Residential – Property Assessed Clean Energy (R-PACE)

To the Chairs of the House Appropriations and Senate Finance and Appropriations Committees of the Virginia General Assembly. As required by Budget Item 125 (E) in the 2020 – 2022 biennium budget.

Respectfully submitted by the Virginia Department of Energy – December 1, 2021

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- Jane Elias, Division Manager, Energy and Sustainability Division, Sonoma County
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- Stacey Tutt, Director of the Consumer Law Clinic, University of California Irvine

# Executive Summary

The Commonwealth recognizes that effectively addressing climate change and enhancing resilience will advance the health, welfare, and safety of its residents. In order to address climate change, it is the established policy of the Commonwealth to reduce carbon emissions by maximizing energy efficiency programs and enhancing the ability of private property owners to generate their own renewable energy.[1] Creating financing mechanisms will be necessary to meet these goals. This was the impetus for the creation of the R-PACE Work Group established pursuant to Budget item 125 (E) in the 2020 – 2022 biennium budget.

[1] See the Commonwealth Clean Energy Policy (45.2-1706.1)

PACE is a financing tool for energy efficiency, clean energy and resiliency upgrades to residential and commercial property. PACE enables property owners to finance the upfront costs of such upgrades through securing a special assessment lien on the property that is collected and enforced in a manner similar to real property taxes. PACE programs exist for commercial properties (commonly referred to as commercial PACE or C-PACE) and residential properties (commonly referred to as residential PACE or R-PACE).

The focus of this report is on residential PACE, which is not currently available in Virginia as opposed to commercial PACE, which was adopted in 2009. R-PACE and C-PACE are similar in that they require permissive legislation at the state level followed by an enabling ordinance by a locality to establish a program. However, R-PACE has not been adopted across the country to the same extent as C-PACE due to concerns regarding consumer protections, impacts on mortgage lenders and other programmatic issues.

This report summarizes the issues and considerations identified by Virginia Energy and the R-PACE Work Group. Furthermore, this report assesses the feasibility and approach to a potential R-PACE program by examining a number of factors such as: experience in other states, federal action on R-PACE, regulatory frameworks, consumer protections and energy equity. The work group did not reach full consensus on the approach to a Virginia R-PACE program, and it is Virginia Energy's recommendation to await further developments from R-PACE enabled states before pursuing a program. However, if the General Assembly elects to adopt an R-PACE program in the near term, this report concludes with legislative guidance and program recommendations that could serve as a path forward for R-PACE in Virginia.

# Introduction

As previously mentioned, Budget item 125 (E) in the 2020 – 2022 biennium budget directed Virginia Energy to establish a work group to determine the feasibility and approach of a Virginia R-PACE program. The work group included a diverse range of stakeholders with expertise in PACE, banking, mortgage lending, real estate, home building, and clean energy. Virginia Energy included these stakeholders and several additional experts.

The work group solicited comments from the public by posting a notice of each meeting to the Virginia Regulatory Town Hall website, the Commonwealth Calendar and reserving time on the agenda for the public to speak. Additionally, a public comment forum was open on the VA Regulatory Town Hall Website from June to September 2021 where comments could be submitted electronically. The public comments received at the meeting and through the public comment forum are included in Appendix A. The work group held a total of four meetings through virtual and in-person means. Each meeting featured presentations from work group members and other experts on R-PACE. Archived recordings, slide decks and minutes of these meetings are available on Virginia Energy's website.

**Work Group meeting information:**

| Date | Details | Location |
|---|---|---|
| June 9th, 2021 | Virtual meeting | Virtual |
| June 29th, 2021 | Virtual meeting | Virtual |
| July 15th, 2021 | Hybrid in-person / virtual | Libbie Mill Library, Richmond, VA |
| September 20th, 2021 | Hybrid in-person / virtual | Libbie Mill Library, Richmond, VA |

# Overview of R-PACE

***Program Overview***

R-PACE is a mechanism for financing energy efficiency, renewable energy, and resiliency improvements through a tax lien. PACE programs allow a property owner to finance the upfront cost of energy or other eligible improvements on a property and then pay the costs back over time through a voluntary assessment, typically administered as part of their property taxes. The debt is tied to the property, not the property owner, and the repayment obligation automatically transfers with property ownership unless otherwise agreed upon during a sale. PACE transactions are generally private agreements that are funded by private capital providers and do not use public funds. Administrators of PACE programs – typically third parties – are compensated through transaction fees.

For R-PACE to take effect, the Virginia General Assembly would need to pass legislation that mandates or permits localities to operate an R-PACE program. Once a locality has passed an enabling ordinance and designated a program administrator, property owners would have access to PACE financing.

Commercial PACE is currently available in Virginia at the state level and enabled locally in 15 jurisdictions. Twelve programs have program administrators with information found here: virginiapace.com and Arlington-pace.us. The first C-PACE loan in Virginia was announced in 2021 in Arlington County. Virginia Energy is currently mandated to engage an administrator to operate a model state program that can be easily adopted by local governments and anticipates that the program will be operational by early 2022.

R-PACE is currently available in three states, California, Florida and Missouri. To date $7.3 billion in loans has funded 306,000 home upgrades. C-PACE programs are active in 32 states, however, most states to date have not implemented R-PACE.

For more information on the concept and structure of PACE programs see the Department of Energy's PACE site (https://www.energy.gov/eere/slsc/property-assessed-clean-energy-programs).

***Benefits of R-PACE***

PACE programs provide a mechanism where borrowers can leverage their real assets to finance energy improvements on their properties. Typically, PACE transactions are fully financed with private funds and offer a means to facilitate private investment in energy efficiency, renewable energy, resiliency and other upgrades that provide benefits to the individual and society, for example through lower home energy use, increased renewable energy production and greater climate resiliency. In Virginia, this investment would contribute to the targets set forth in the Virginia Clean Economy Act and the Commonwealth's Clean Energy Policy, regarding energy efficiency and distributed generation as well as other carbon reduction goals.

Where borrowers do not have access to other financing options but do own their homes, R-PACE presents an opportunity for them to improve their property, potentially with a positive return on investment. In the examples of properly designed energy efficiency upgrades or renewable facilities, such as solar panels, the measures should typically provide a positive cash flow to the borrower as bill savings generated by the improvements should be greater than the associated costs on a monthly or annual basis. This can be particularly beneficial to lower income homeowners who are unable to procure commercial loans and whose utility bills often represent a substantial proportion of their household expenditures. The ability to transfer the assessment to a new owner is also considered to be a major benefit as it would avoid the issue of borrowers being unable to recoup investments in clean energy.

### *Alternative and complementary programs*

There are a wide variety of measures that are designed to assist homeowners in implementing clean energy upgrades. Below are brief descriptions of some of the most notable measures that are either in effect or could be employed by the Commonwealth.

#### Currently available programs

**Monetary Incentives** - Direct monetary incentives can reduce the cost of clean energy upgrades. A major source for these types of programs are the utilities. Virginia's investor-owned electric utilities are mandated to provide demand-side management programs, including no-cost or low-cost programs for low-income households. These programs do not currently offer the higher cost upgrades that PACE can provide, however, they often provide a lower cost alternative for the products and services that are available.

Direct incentives can be made available to all citizens or target particular sections of the population. For example, HB 2789, passed in 2019, requires Dominion Power and Appalachian Power Company to provide incentives to low income, elderly and disabled individuals for the installation of measures that reduce residential heating and cooling costs and enhance the health and safety of residents. The bill also requires the utilities to develop a future program for the installation of solar arrays that will only be available to participants in the initial energy efficiency program. Each program can be funded up to $25 million.

**State and federal programs** - Both the federal Department of Energy (DOE) and Virginia's Department of Housing and Community Development (DHCD) operate Weatherization Assistance Programs that provide weatherization and other energy efficiency measures to low-income residents at little or no cost. As part of the Regional Greenhouse Gas Initiative (RGGI), the Department of Housing and Community Development (DHCD) will receive 50% of the revenue from the carbon allowance auction to fund low-income energy efficiency programs. The first three quarterly RGGI auctions in which Virginia participated generated $142 million in revenues, therefore, the DHCD program can expect to have substantial funding moving forward.

**Commercial loans** - Commercial loans are an alternative method for financing property upgrades. Financing costs are typically higher for these products, however, they cannot directly lead to a property foreclosure, as they are typically unsecured or lightly secured (e.g., against the clean energy equipment). PACE originated as a product to assist those individuals who owned property but were not in a position to utilize commercial loans.

**Green/energy efficient mortgages** - These products offer borrowers the opportunity to repay clean energy upgrades over a long-term contract that is underwritten and regulated as a mortgage. For example, Freddie Mac's GreenCHOICE Mortgages program offers loans for up to 15% of a property's value for a thirty-year term. Borrowers have to qualify in order to participate which may exclude homeowners that would benefit from energy and/or resilient upgrades.

## Upcoming and potential programs

**Clean Energy Advisory Board (CEAB) -** CEAB was established in 2019 to create a pilot program for disbursing loans or rebates for the installation of solar energy infrastructure in low-income and moderate-income households. The CEAB has yet to receive dedicated funding. The pilot program is currently at the RFP stage.

**Shared Solar -** In 2020, the General Assembly established a shared solar program that allows utility customers to purchase solar energy through a subscription rather than installing their own facility. This program mandates that 30% of subscribers must qualify as LMI and this group is also exempt from the mandatory minimum charge. Subscriptions will be available starting in 2023.

**Green banks** - Green banks are typically public or quasi-public entities, initially capitalized with public funds. These entities are dedicated to leveraging those public funds to attract larger amounts of private capital to invest in green projects. In the 2021 Virginia General Assembly session, HB1919, gave localities permission to establish green banks. These entities could act as either an alternative to PACE, by providing other funding mechanisms for green projects, or they could be used to provide PACE financing. The Solar Energy and Loan Fund (SELF) operating in St. Lucie County, Florida is one example of a green bank structure that includes R-PACE as one of its products.

**On-bill financing** - Tariffed on-bill financing allows ratepayers to repay the cost of clean energy upgrades through a surcharge on their utility bill. The financing and installation can be supplied by either the utility or a third-party and is not secured against the property and are instead tied to the utility meter. Rappahannock Electric Cooperative is currently operating a pilot on-bill tariff scheme, Pay-As-You-Save (PAYS), but it is not yet widely available in Virginia.

**Tax abatements** - A property tax abatement for clean energy upgrades would fully or partially recompense borrowers over time through a property tax exemption. Virginia Code §58.1-3220 authorizes localities to provide "for the partial exemption from taxation of real estate on which any structure or other improvement no less than 15 years of age has undergone substantial rehabilitation, renovation or replacement for residential use", therefore, major clean energy projects on older buildings could potentially qualify under existing law.

### ***Federal action on R-PACE***

CFPB Rulemaking

Section 307 of the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA) amended the Truth in Lending Act (TILA) to mandate that the Consumer Financial Protection Bureau (CFPB) prescribe certain regulations relating to "Property Assessed Clean Energy" (PACE) financing.[2] The required regulations must carry out the purposes of TILA's ability-to-repay (ATR) requirements, currently in place for residential mortgage loans, with respect to PACE financing, and apply TILA's general civil liability provision for violations of the ATR requirements the Bureau will prescribe for PACE financing. The EGRRCPA directs that such requirements account for the unique nature of PACE financing. An initial comment period has been held regarding the rulemaking, however, it is likely to be several years before the final rule is published.[3] Any action the Commonwealth may take on R-PACE should consider the mandates that will come into place when the rule is finalized.

FHFA & FHA Policies

In 2010 the Federal Housing Finance Agency (FHFA) directed Fannie Mae and Freddie Mac not to purchase or re-finance mortgages with PACE liens and reserved other potential actions. In early 2020, FHFA held a comment period seeking input on potential changes to its PACE policies. No further action has been taken at this time. FHFA entities are estimated to purchase over 60% of mortgage-backed securities (MBS) and banks would be very reluctant to provide mortgages on PACE properties if they are unable to securitize those loans

In December 2017 the Department of Housing and Urban Development (HUD) announced that the Federal Housing Administration (FHA) will no longer insure new mortgages on properties that include PACE assessments. In July 2016 the FHA had issued guidance allowing homes with PACE assessments to use their products but this is no longer permitted following the 2017 announcement. FHA products constitute a sizeable proportion of the mortgage market, representing approximately 18% of overall mortgages.[4]

### ***Experience in other states***

R-PACE is currently available in three states, California, Florida and Missouri (Toledo, Ohio is also launching a program in the near future). To date $7.3 billion in loans has funded 306,000 home upgrades in these states. There are also several states that have enabled R-PACE but do not have active programs, Minnesota is one example discussed below and Maine and Vermont also fall into this category.[5] The

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[2] Congress.gov, *S.2155 — 115th Congress (2017-2018), Economic Growth, Regulatory Relief, And Consumer Protection Act* (Accessed at https://www.congress.gov/bill/115th-congress/senate-bill/2155/text?overview=closed&__cf_chl_jschl_tk__=pmd_U7GDyk1o1bRX56t8QcqoSd2hy_wT.KJxGm_Mf1DcEuw-1631130737-0-gqNtZGzNAlCjcnBszQil on September 9, 2021)

[3] Regulations.gov, *Residential Property Assessed Clean Energy Financing*, Doc ID: CFPB-2019-0011-0001 (Accessed at https://www.regulations.gov/document/CFPB-2019-0011-0001 on August 23, 2021)

[4] NASEO, *Residential Property Assessed Clean Energy (R-PACE): Key Considerations for State Energy Officials Issue Brief – March 2018*, 6 (Accessed at https://www.naseo.org/data/sites/1/documents/publications/NASEO%20R-PACE%20Issue%20Brief.pdf on October 1, 2021)

[5] Ibid.

following provides a brief overview of the history and impact of R-PACE in each state, with a particular focus on California as the largest and longest market R-PACE program in the country.

### California

The first PACE program was created in California in 2008 and has resulted in substantial investment in clean energy products. In 2020, $307 million was spent on PACE projects in the state.

A series of laws were passed between 2013 and 2020 to address consumer protections and other concerns that had arisen as the program expanded rapidly in the state. Below is a brief description of those measures and more details on the state's regulatory structure can be found in Appendix B. Despite the many programmatic changes there are still consumer advocacy groups and other stakeholders that have continued to express concerns about the program's impact on consumers.[6]

**2013** - Established the PACE Loss Reserve Program, a fund designed to make first mortgage lenders whole for any direct losses incurred due to the existence of a PACE lien on a property during a foreclosure or forced sale. (Bill No: *SB 96*)

**2016 -** Mandated a broad series of consumer disclosures for PACE assessments due to concerns that borrowers did not fully understand the nature and terms of the PACE contracts they were entering. (*AB 2693)*

**2017** - Strengthened consumer protections and established a regulatory framework for the residential PACE industry in California, including the establishment of the Department of Financial Protection and Innovation (DFPI) as regulatory authority for R-PACE. Measure included "ability-to-pay" and income verification requirements, strengthened underwriting standards and payment history reviews and mandated phone calls with all customers confirming financing terms prior to execution of financing documents. The legislation also established PACE contractor licensing, oversight, and training requirements.

These measures were the result of two major concerns, first, that borrowers were entering into agreements they did not fully understand that put them at high risk of foreclosure or other financial difficulties and, second, that unscrupulous contractors were misrepresenting the efficacy of the products they were marketing and the obligations and risks associated with PACE financing. (*AB 1284, SB 242)*

**2018** - Modified laws related to bankruptcy and mortgage payment history that automatically disqualified homeowners prior to the determination of their ability to pay and applied additional protections under circumstances when an R-PACE applicant is not approved for financing. Expanded R-PACE by allowing homeowners in certain jurisdictions to use R-PACE financing to make wildfire resilience and safety improvements to their homes. (*AB 2063, SB 1087*, *SB 465*)

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[6] NCLC, *Los Angeles County Ends PACE Program Marred by Fraud, Abuse, and Unaffordable Loans* (Accessed at https://www.nclc.org/media-center/los-angeles-county-ends-pace-program-marred-by-fraud-abuse-and-unaffordable-loans.html on September 1, 2021)

**2020** - Created additional disclosure requirements and consumer rights to improve borrower's understanding of the agreements they were entering. Also prohibited R-PACE assessment contracts from containing a prepayment penalty and prohibited R-PACE program administrators from executing an assessment contract related to a property that is subject to a reverse mortgage. (*AB 1551, AB 2471)*

In addition to these legislative changes to the program, DFPI has also introduced regulatory provisions that address consumer disclosures, advertising standards, dishonest practices and contractor management. DFPI also requires program administrators to report a wide variety of program data as well as their processes for determining ability-to-pay, property valuation and the useful life of installed improvements.

The earlier measures contributed to an 80% decrease in the volume of R-PACE transactions, from $1.5 billion in originations in 2016 to $300 million in originations in 2020, with the largest program administrator Renovate America filing for bankruptcy in late 2020. Regulations related to the 2017 and 2018 legislation were published in August 2021 and became effective on October 1, 2021, therefore, it is too soon to assess their full impacts.[7]

Also, in 2020, two PACE Authorities, the County of Los Angeles and Western Riverside County Of Governments (WRCOG), ended their programs. LA County's website cited the new legislation described above and explains that "[d]espite these efforts [to improve oversight] and the implementation of stronger consumer protection practices, the County cannot be certain these measures will provide sufficient protection for all consumers".[8] WRCOG's decision was based on the observation that there had been a "marked declined in the volume of residential PACE assessments", while simultaneously, there had also been a "marked increase in the number of recorded payoffs of existing PACE assessments".[9]

### Missouri

Missouri's R-PACE program was established in 2010. The Missouri program has experienced similar issues to California in regard to a lack of consumer understanding of how PACE works and concerns over misleading marketing practices and fraud. As a result Missouri passed HB 697 in 2021, a bill that increases oversight of program administrators, caps project value relative to property value, adds consumer disclosures and adds new restrictions on contractors. It is still too early to know the full impact of this legislation.

### Florida

Florida's R-PACE program was established in 2010. In 2020, $592 million was spent on PACE projects in the state. There have been no legislative changes since its inception, although there have been attempts

[7] California Department of Financial Protection and Innovation (DFPI), *Property Assessed Clean Energy (PACE) Program Administrators Webpage*
(Accessed at https://dfpi.ca.gov/pace-program-administrators/#pace-law on September 8, 2021)
[8] Los Angeles County, *Residential PACE Program* (accessed at http://pace.lacounty.gov/ on October 14, 2021)
[9] Western Riverside County Of Governments (WRCOG), Executive Committee Regular Meeting Agenda, Dec 7, 61-62 (accessed at https://wrcog.us/AgendaCenter/ViewFile/Agenda/_12072020-461 on October 14, 2021)

to amend the program.[10] As is the case with Missouri and California, there have been concerns regarding consumer protections in Florida. In 2020, Hillsborough County and Hernando County halted their R-PACE programs, following Collier County's decision to do the same in 2019.[11] However, Florida is also home to the Solar Energy Loan Fund (SELF), which created and now administers the only non-profit R-PACE program in Florida for St. Lucie County.[12] SELF implements more stringent consumer protections than the state law requires, which may be mitigating consumer issues for its R-PACE program.[13]

### Minnesota

R-PACE financing is not currently available in Minnesota. However, in 2010, the Minnesota Legislature passed PACE-enabling legislation for both R-PACE and C-PACE. The PACE statutes were amended in 2013 and in 2017, the Minnesota Legislature suspended the statutory authority to implement R-PACE programs, while continuing to allow C-PACE programs.[14] Additionally, in 2017, the Minnesota Legislature created the Residential PACE Consumer Protection Legislation Task Force, chaired by the Minnesota Department of Commerce.[15] This work group struggled with some of the same issues as Virginia's R-PACE Work Group. In 2020, Minnesota passed R-PACE specific legislation that authorized a program but removed the super priority lien status, which may prevent an active program from developing.[16] R-PACE programs in Maine and Vermont also required subordination of the R-PACE lien, and currently R-PACE financing is not available in either state.[17]

In sum, the provisions put in place in California and Missouri could provide guidance on the minimum standards the Commonwealth should employ to regulate a potential R-PACE program. Even after the substantial market contraction caused by the previously described legislative and regulatory actions, there is still sizeable demand for R-PACE loans in California.

# Feasibility and approach of a Virginia R-PACE Program

[10] Tampa Bay Times. *Florida bill seeks to expand PACE loan program*. (Accessed at https://www.tampabay.com/news/business/2021/02/08/florida-bill-seeks-to-expand-controversial-pace-programs/ on October 1 2021)
[11] Ibid.
[12] Solar Energy Loan Fund. *PACE*. (Accessed at https://solarenergyloanfund.org/loan/pace/ on October 1, 2021)
[13] Ibid.
[14] Minnesota Department of Commerce. *Residential PACE Consumer Protection Legislation Task Force* (Accessed at https://mn.gov/commerce-stat/pdfs/pace-report-2018.pdf on September 27, 2021)
[15] Ibid.
[16] 2020 Minnesota Statutes. See: https://www.revisor.mn.gov/statutes/cite/216C.437
[17] NASEO, *Residential Property Assessed Clean Energy (R-PACE): Key Considerations for State Energy Officials Issue Brief – March 2018*, 6 (Accessed at https://www.naseo.org/data/sites/1/documents/publications/NASEO%20R-PACE%20Issue%20Brief.pdf on October 1, 2021)

### *Market Research*

To predict the potential size of the Virginia R-PACE market, it is prudent to examine the states with active R-PACE programs to consider the amount of investment in dollars as well as the number of projects that have been implemented. PACE Nation provided Virginia Energy with data for California and Florida, but did not have investment or project data for Missouri. According to this data the amount of cumulative investment in California totals to nearly $5.7 billion and $1.6 billion in Florida since 2014. Additionally, there has been 306,361 projects between both states since 2014.[18]

It is important to keep in mind that Virginia is different from the R-PACE states in terms of population size, number of households, and median income. The chart below shows that Virginia is significantly smaller than California and Florida in both population and housing units. It is also worth noting that in 2020 Florida saw $592 Million in R-PACE investments while California only saw $307 Million. This may be an indicator that the legislative changes in California have impacted the market, which would explain why a smaller state like Florida exceeded California's dollar investment. However, the NCLC has postulated that the market decrease in California may also be due to increased awareness amongst consumers of the consumer protection issues. It is challenging to compare the states due to the differences in program implementation, but Virginia's market size would be influenced by the safeguards put into place when implementing a potential program.

| | Virginia | California | Florida |
|---|---|---|---|
| Population estimates, July 1, 2019 | 8,535,519 | 39,512,223 | 21,477,737 |
| Housing units, July 1, 2019 | 3,562,143 | 14,366,336 | 9,673,682 |
| Median household income (in 2019 dollars), 2015 - 2019 | $ 74,222 | $ 75,235 | $ 55,660 |

*Data source: census.gov*

The age of Virginia's housing stock is a good indicator of the market need and potential interest for energy efficiency financing programs. Typically, older homes are substantially less energy efficient given that they were built under older building codes. Nearly 80% of America's housing stock is at least 20 years old, and of those, 38% were built before 1970. In Virginia, the median age of owner-occupied housing units is between 31 – 35 years old (as of 2019).[19] Virginia has made significant progress in recent years to increase energy efficiency in newly built homes. As evidenced by the American Council for an Energy-Efficient Economy (ACEEE) ranking Virginia 1st in the South in their 2020 State Energy Efficiency Scorecard.[20] However, there are a large number of older homes in Virginia that do not meet current energy efficiency standards.

[18] Please see Appendix C for this data provided by PACE Nation

[19] Freddie Mac. *Could Lenders Hold the Key to the Aging Housing Stock Crisis?* August 28, 2019. (Accessed at https://sf.freddiemac.com/articles/insights/could-lenders-hold-the-key-to-the-aging-housing-stock-crisis on September 24, 2021)

[20] VAEEC. *Virginia Hits Energy Efficiency Milestone*. (Accessed at ACEEE Archives - Virginia Energy Efficiency Council (vaeec.org) on September 24, 2021)

### *Super Priority Lien Status of R-PACE*

R-PACE assessments are considered a super priority lien meaning that they are given priority before other debt secured against the property, including the mortgage. In the event of a foreclosure, the R-PACE obligation would be paid off before any other loans associated with the property, including the mortgage.[21] This is a particularly divisive issue. The home mortgage and real estate communities, as well as the consumer advocates who provided material to the work group, believe the lien status allows R-PACE to downgrade the security of the mortgage, defy traditional lending practices, and potentially lead to foreclosure or home loss for the borrower.[22] From the perspective of PACE advocates subordinating the PACE assessment would lead to higher interest rates for PACE products, a particular concern when considering low-to-moderate (LMI) customers, and greatly, if not totally, reduce its efficacy in providing economic, social and environmental benefits.

A compromise is difficult due to the fact that the lien status is a defining characteristic of an R-PACE program.[23] More specifically, the priority lien status is what makes PACE a property assessment rather than a traditional loan. The two are inextricably linked and removing the priority lien status of an R-PACE program would more closely resemble a traditional home improvement loan. The three states with active R-PACE programs (California, Florida, and Missouri), give R-PACE super priority lien status. However, as previously mentioned, Minnesota passed legislation in 2020 that allows R-PACE to exist but without the super priority lien status.[24] This approach has led to no active programs in Minnesota.[25] Most R-PACE advocates contend that without the priority lien status, R-PACE simply does not work.

### *Impact of R-PACE on key stakeholders*

The following groups represent the primary affected stakeholder groups:

#### Consumers

A PACE loan provides another option to borrowers who are considering clean energy upgrades. For low-income homeowners and other borrowers without access to commercial loans or government programs, it may offer the only way to finance these upgrades. Well-designed and properly implemented PACE projects could potentially provide borrowers with a positive cash flow as utility bill savings (or savings from insurance premiums in the case of resiliency or storm water measures) resulting from the upgrades exceed the monthly or annual financing costs.

A concern with PACE, as evidenced by the experience of other states, is that borrowers do not always fully understand the nature and terms of a PACE loan. Government involvement in the administration of the

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[21] NASEO. *Property Assessed Clean Energy (PACE).* (Accessed at https://www.naseo.org/issues/energy-financing/pace on October 18, 2021)

[22] NASEO. *Residential Property Assessed Clean Energy (R-PACE): Key Considerations for State Energy Officials.* (Accessed at https://www.naseo.org/data/sites/1/documents/publications/NASEO%20R-PACE%20Issue%20Brief.pdf on September 24, 2021)

[23] Ibid.

[24] See the 2020 Minnesota Statutes: https://www.revisor.mn.gov/statutes/cite/216C.437

[25] PACE Nation. PACE Programs. (Accessed at https://www.pacenation.org/pace-programs/ on September 27, 2021)

tax assessment has been misconstrued by some as indicating a monetary incentive or loan guarantee. Contractors, who usually act as the point of sale for PACE products, have intentionally and unintentionally misrepresented the program leading to borrowers facing hefty property tax bills for inappropriate projects. In part, this is because, without proper safeguards, they are incentivized to sell more expensive upgrades than households can afford or actually require to meet their clean energy needs.

R-PACE lenders have indicated that they rarely, if ever, foreclose on properties due to R-PACE loans. PACE Nation, the national PACE advocacy organization, is aware of only nine instances where bondholders initiated judicial foreclosure for nonpayment of the PACE assessment. The Consumer Law Clinic at UCI have described scenarios from California in which PACE loans can lead directly to foreclosures without the R-PACE lender being the entity to pursue foreclosure.

- As previously mentioned, R-PACE loans are super-priority loans and thus are paid first in transactions related to a property. Often these payments are made as part of the escrow transfer wherein mortgage holders pay property taxes on behalf of the property owner. It is when the mortgage holder subsequently increases a borrower's monthly payments to account for this that the borrower may become in arrears and may ultimately face foreclosure
- Government entities are electing not to foreclose on R-PACE properties despite tax arrearages. In some instances they will sell the debt, at a premium, to a third party debt collector with a five-year no foreclosure agreement. In California, this type of delinquent debt accrues an 18% annual interest rate giving the debt collector an incentive to delay collection. As of 2021, most of these contracts will not have reached the five-year point and subsequently identifying them as PACE loans may be difficult.

The Consumer Law Clinic at UCI is working to collect more exact data on the number of foreclosures and other financial problems that can be attributed to PACE loans. They may soon have access to Renovate America's records as part of that entity's bankruptcy proceeding and they are pursuing other data sources.

### Energy industry

R-PACE mainly impacts certain qualifying segments of the energy industry, primarily the energy efficiency, distributed solar and home resiliency sectors. A study by Berkeley Lab found that R-PACE programs increased deployment of residential solar systems in California by about 7 – 12% in the cities with active R-PACE programs.[26] However, this study only examined the amount of solar systems that were deployed but not if they were implemented appropriately and yielded a sufficient return on the participant's energy bills. There have been instances of R-PACE contractors installing inoperable solar arrays.[27] A potential

[26] Berkeley Lab. (Accessed at https://emp.lbl.gov/publications/assessing-pace-california-residential on October 1, 2021)
[27] Bloomberg. *The Subprime Solar Trap for Low-Income Homeowners.* (Accessed at https://www.bloomberg.com/news/features/2021-04-06/the-subprime-solar-trap-for-low-income-homeowners on October 1, 2021)

Virginia R-PACE program would need to implement safeguards to ensure the work is completed to a required standard.

Real estate

The work group included representation from the Virginia Realtors Association, whom expressed concerns regarding the risk of R-PACE loans due to their priority status as a tax lien on the property. This was also a concern for the Virginia Bankers Association (VBA), the Home Builders Association of Virginia (HBAV), and the Virginia Mortgage Bankers Association (VMBA). The real estate community believes that R-PACE assessments could hinder the home sales market due to buyer reluctance and lack of understanding of purchasing a home with an R-PACE loan attached to it. This may require the home seller to pay off the balance of the R-PACE loan before they can sell, which could be problematic depending on their financial situation.

Banking

The mortgage banking industry's primary concern regarding R-PACE is related to FHFA's 2010 decision not to allow Fannie Mae or Freddie Mac to purchase or refinance mortgages with PACE liens. FHFA regulated transactions represent over 60% of the secondary market for mortgages and banks would be reluctant to provide mortgages on PACE properties if they are unable to securitize those loans. From the perspective of mortgage bankers and the FHFA institutions the position of PACE as a first priority loan needs to be changed before they can confidently fund mortgages on PACE properties. However, the PACE industry regards the priority loan status to be an essential part of the program that cannot be eliminated without a substantial, and perhaps a total, contraction in the market for PACE products.

The banking industry, as represented on the work group by VBA and VMBA, are also concerned that allowing R-PACE lenders to operate without the same regulatory requirements as commercial lenders creates an unfair disparity between R-PACE lenders and traditional lenders when providing energy project financing. R-PACE advocates have indicated that it is the absence of suitable products and willingness to lend from traditional banking institutions that creates the market for R-PACE.

To alleviate some of the mortgage industry's concerns regarding PACE, the PACE Loss Reserve Program in California is designed to make first mortgage lenders whole for any direct losses incurred due to the existence of a PACE lien on a property during a foreclosure or forced sale To date, there have been no claims made on the loss reserve. However, the Consumer Law Clinic at the University of California, Irvine (UCI) School of Law has stated that mortgage lenders are making some claims to program administrators but these are not being processed and sent to the Loss Reserve Program. Additionally, a representative of the National Consumer Law Center (NCLC) who presented for the work group's September 20 meeting, indicated that mortgage holders may not know that the PACE loan is the cause of the borrower's payment issues and thus would not be aware that they have recourse to the Program.

### *Impact of R-PACE on low-income borrowers*

The work group had several discussions on R-PACE as a potential tool for low-income property owners to finance eligible upgrades to their home. On one hand, R-PACE has been described as a helpful tool for low-income financing, because in many cases low-income customers do not qualify for typical consumer loans. This is mainly due to poor credit scores or other restrictions. Therefore, R-PACE loans can provide another option to this market by using the equity in their home to finance an R-PACE loan. This is especially true for customers whose homes may represent the majority of their net worth. DFPI's annual report on PACE shows that in 2020 in California around three-quarters of borrowers had household income below the state's area median income (AMI) and slightly over a quarter would qualify as low-to-moderate income (LMI).[28]

PACE may also help to alleviate historical inequities and has been endorsed by the St. Louis chapter of the NAACP on the basis that "where traditional lending institutions and mortgage banks have been shown to lend disproportionately to whites and not to Blacks, the Pace [Set the Pace St. Louis] program has helped address the access-to-capital problem by providing financing for African American families for critical home improvement and maintenance needs".[29]

The other side of this debate is the potential risk of fraud and abuse within the low-income market. Consumer advocates have expressed concerns with low-income individuals using R-PACE for financing, particularly for elderly and non-English speaking borrowers. More specifically, consumer advocates such as the NCLC cite instances of high-pressure or predatory sales tactics by contractors where the potential borrower does not fully understand the financial commitment they are making.[30] The impact of these practices could lead to foreclosure or other financial troubles for the consumer.[31] Furthermore, there are many other low-income energy efficiency and clean energy programs they may be eligible for that could provide energy efficiency or clean energy improvements to their home at low or no cost. These programs are discussed above in the *alternative and complementary programs section.*

By applying necessary consumer protections, risks to vulnerable borrowers can be mitigated. One of the most important safeguards is to ensure any potential customer has the ability to pay the loan. Furthermore, borrowers must understand that they could be responsible for paying the full balance of their loan all at once if they decide to sell or refinance their home. In fiscal year 2020-21, Sonoma County's PACE program saw an 18% early payoff rate from its outstanding loan balance at the beginning of the fiscal year. Much of this was attributed to home sales and refinances where the assessment was not accepted by the lenders. The ability to transfer the assessment upon sale is considered to be one of the major benefits of PACE and, as consumers and lenders become more educated on the value of clean

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[28] California DFPI, *Annual Report of Finance Lenders, Brokers, and PACE Administrators Licensed Under the California Financing Law* (October 2021), 37

[29] St. Louis Post Dispatch, *Adolphus M. Pruitt: Addressing the access-to-capital crisis for underserved St. Louis communities* (Accessed at https://www.stltoday.com/opinion/columnists/adolphus-m-pruitt-addressing-the-access-to-capital-crisis-for-underserved-st-louis-communities/article_e8a226f9-d945-5725-82a9-e6b7a5e2147d.html on October 13, 2021)

[30] NASEO. *Residential Property Assessed Clean Energy (R-PACE): Key Considerations for State Energy Officials.* (Accessed at https://www.naseo.org/data/sites/1/documents/publications/NASEO%20R-PACE%20Issue%20Brief.pdf on September 24, 2021)

[31] Ibid.

energy upgrades, transfers of the assessments may become more common. However, currently available information indicates that many borrowers are compelled to pay off PACE loans during the sale process as they are unable to transfer the assessment.

California has implemented a number of consumer protections in their R-PACE program that seek to address these issues. However, it is still unclear if the most recent measures have completely addressed the consumer protection issues.

# Legislative Guidance

While the basic enabling language for an R-PACE program would likely be similar to the C-PACE statute, the legislation would require an extensive series of additional provisions, primarily targeted at consumer protection, as evidenced by program developments in California and Missouri. Additional requirements may be prudent depending on the level of protection the General Assembly considers appropriate for consumers, mortgage lenders and realtors.

### *Legal and regulatory considerations*

The regulatory structure for a potential Virginia R-PACE program was a main area of consideration for the work group members. There was not consensus amongst the work group on the best regulatory scheme, but the below options illustrate the choices available to policymakers.

- **Option 1** – Regulate R-PACE exactly like all other first and second mortgage and home-equity line products. This would require all originators or "solicitors" (typically contractors) of R-PACE loans, and the PACE loan company to hold a NMLS license and be held to all of the same requirements and oversight by which consumer lenders must abide. Additionally, payment collection and loan servicing must all be regulated by the State Corporation Commission. This option could be problematic, because in the states with active programs, R-PACE is not subject to the same regulatory requirements as mortgage loans. From a technical standpoint, R-PACE loans are property assessments and not the same as mortgage loans. This option has been debated in the past and in July 2017, the distinction was corroborated by the CFPB and a federal court ruling.[32] Additionally, the current CFPB rulemaking will amend the TILA, which is used to regulate mortgage loans, to tailor regulations to R-PACE while considering the unique nature of R-PACE. There are many regulatory requirements for the mortgage lending industry that should be applied to R-PACE, however the exact same regulatory structure may not be possible due to the various differences in lending regulatory structures.
- **Option 2** – Regulate R-PACE as a form of municipal assessment bond financing as opposed to a consumer loan. This is the established regulatory structure for California's R-PACE program. In

[32] NASEO. *Residential Property Assessed Clean Energy (R-PACE): Key Considerations for State Energy Officials.* (Accessed at https://www.naseo.org/data/sites/1/documents/publications/NASEO%20R-PACE%20Issue%20Brief.pdf on September 24, 2021).

California, R-PACE companies are regulated by the DFPI. DFPI does not require the R-PACE companies or their associated contractors to become licensed consumer lenders. But they do license R-PACE lenders as "program administrators" and the contractors typically hold a valid contractor's license.[33]

- **Option 3** – Municipal R-PACE provides a third option that is similar to but contains several key differences from Option 2. Municipal PACE is a construct where the local government is the Program Administrator for the locality's R-PACE Program while funding can be from public or private sources. The primary example reviewed by the work group is the Sonoma County Energy Independence Program (SCEIP) in California.[34] The SCEIP is funded, operated, and owned by the local government of Sonoma County, California. As a local government entity, they are not required to hold a Program Administrator license from the DFPI. They partner with contractors that are involved in the origination and solicitation of the PACE financing. Sonoma County requires that all contractors hold a current and valid contractor's license, adhere to program policies, and carry one million dollars in commercial liability insurance. The county assumes all financial and legal risks of any potential defaults. The SCEIP staff meet face to face with the borrower to ensure that they understand the program and its implications. The flow of funds is transferred directly between the SCEIP and the borrower to reduce the risk of contractor fraud. According to SCEIP's Program Manager, this is the longest running R-PACE program in the country at twelve years, and they have not experienced the same consumer issues as the privately administered R-PACE market in California. As previously stated, in fiscal year 2020-21, Sonoma County's PACE program saw an 18% early payoff rate from its outstanding loan balance at the beginning of the fiscal year. The average yearly payoff rate for the SCEIP is approximately 13%.
    - Some members of the work group expressed an interest in operating a pilot program in a Virginia locality employing the municipal model and incorporating very strict requirements, including lender consent. In the event that a Virginia locality pursues a pilot program, the interested work group members agreed that it should include, at a minimum, all the program measures described in the Program Recommendations section below with two exceptions.[35] Subordinating the lien status and income restrictions would be at the discretion of the participating locality. Appropriate oversight and enforcement authority and mechanisms would also need to be identified. If the pilot program only applies to one jurisdiction, as proposed, it would require special legislation from the General Assembly, which would trigger a two / thirds majority vote requirement pursuant to Article VII Section 1 of the VA Constitution. Currently, two localities have expressed an interest in hosting the pilot program. Virginia Energy takes no position on a potential pilot program.

[33] DFPI. *Property Assessed Clean Energy (PACE) Program Administrators*. (Accessed at https://dfpi.ca.gov/pace-program-administrators/ on October 1, 2021).
[34] Sonoma County, California. *Sonoma County Energy Independence Program (SCEIP)*. (Accessed at https://sonomacountyenergy.force.com/financing/s/ on October 1, 2021).
[35] Meaning both "consensus recommendations" and "non-consensus items for consideration"

# Recommendations

### *Virginia Energy recommendation*

Virginia Energy recommends that the Commonwealth await further developments from the existing R-PACE enabled states to understand the lessons learned before consideration of R-PACE in Virginia. Virginia Energy will continue to assess the legislative and regulatory measures other states implemented to address the consumer protection issues. As stated previously, regulations related to California's 2017 and 2018 legislation were published in August 2021 and became effective on October 1, 2021, therefore, it is too soon to assess their full impacts.[36]

Given its unique features and the sizeable market for clean energy products it has generated, R-PACE should remain under consideration as a tool as it may be able to make a significant contribution to the Commonwealth's efficiency and renewable energy goals if a satisfactory approach can be identified. Clean energy programs in the Commonwealth are expanding rapidly and in a few years it may be possible to determine if those programs are sufficient to meet the state's ambitious goals or whether additional mechanisms, such as R-PACE, are necessary.

Virginia Energy remains in full support of C-PACE as the challenges noted in this report are almost all unique to the residential sector.

### *Program Recommendations*

These recommendations are organized by two categories. "Consensus recommendations", which all workgroup members agreed should be included if Virginia does pursue an R-PACE program[37], and "non-consensus items for consideration", which did not receive consensus support but should be considered when developing a program.

#### Consensus Recommendations

- **Ability to Pay**: R-PACE Administrators should use consumer financial services industry standards to determine that the homeowner has an ability to repay the financed amount by referencing third party information or data models based on the property owner. NCLC does not consider automated modeling to be sufficient and considers verification of each borrower's actual ability to repay to be necessary to ensure project costs are proportionate.[38]
- **Eligible Measures**: R-PACE Administrators should only finance eligible measures, and the work required to enable those measures, consistent with applicable law.
- **Pricing Guidelines and Useful Life Determinations**: R-PACE Administrators should establish maximum financing amounts for eligible measures and set maximum repayment terms based on

[36] California Department of Financial Protection and Innovation (DFPI), *Property Assessed Clean Energy (PACE)Program Administrators Webpage*
(Accessed at https://dfpi.ca.gov/pace-program-administrators/#pace-law on September 8, 2021)
[37] Please note that a pilot program itself is not a consensus recommendation.
[38] NCLC's position is presented as an expert opinion and was not agreed to as a "consensus" recommendation.

standards published by the U.S. Department of Energy, U.S. Environmental Protection Agency, other federal and state government agencies, or reputable third parties. The maximum repayment terms are intended to ensure the financing term does not exceed the anticipated useful life of the eligible measure.

- **Interest Rates**: R-PACE Administrators should only offer fixed interest rates and amortizing payments. Floating interest rates or negative amortization financing terms should not be permitted. Capitalized interest included in the principal balance of the R-PACE financing does not constitute negative amortization.
- **Total Maximum Financing Amount**: The total maximum financing amount per eligible R-PACE property should be set at a percentage of the fair market value of the property, unless otherwise provided by applicable law. R-PACE Administrators should use consumer financial services industry standards to confirm that the combined total of the R-PACE financing and the aggregate outstanding balance of all mortgage debt and all existing R-PACE liens at the time of approval does not exceed 100% of the property's fair market value.
- **Written Financing Disclosures**: Each homeowner should be provided with written disclosures outlining the interest rate, term, payment schedule, and all fees included, as well as the FHFA / FHA rule that all PACE financing, Home Equity Lines of Credit (HELOCs) and Home Equity Loans may need to be paid off in the event of a sale or refinance transaction.
- **5 Day Right to Cancel**: Homeowners may cancel their R-PACE financing for any reason without penalty within 5 business days from the date they sign the R-PACE financing agreement.
- **Homeowner Identification and Verification:** R-PACE Administrators should use appropriate methodology or technology to identify and verify the homeowners.
- **Welcome Call (Confirmation of Initial Terms)**: Prior to providing notice of commencement to the home improvement contractor (or as otherwise required in accordance with applicable law), R-PACE Administrators should conduct a live, recorded telephone call with at least one homeowner on every R-PACE financing application. This call is intended to ensure that the homeowner understands all key financing terms, including project costs, term, interest rate, projected annual payment, any fees, prepayment fees if any, capitalized amounts and the fact that a special assessment or property tax will be levied and a lien recorded against the property.
- **Current on Property Taxes and Mortgage**: R-PACE Administrators should use consumer financial services industry standards to verify that all property taxes and mortgage(s) on the property are current at the time of approval of the R-PACE financing and that the property's mortgage is not currently in a forbearance program.
- **No Reverse Mortgages or Properties Gifted by a Non-Profit Entity**: Properties subject to an existing reverse mortgage product (HECM) should not be eligible for R-PACE financing. Properties gifted to homeowners by non-profit entities should not be eligible for R-PACE financing.
- **Contractor Standards and Management**: R-PACE Administrators should have written protocols for selecting and managing home improvement Contractors. These protocols include (a) confirming the home improvement Contractors are licensed, insured and bonded as required by state law; (b) ensuring the home improvement Contractors complete program training prior to offering R-PACE financing; (c) requiring home improvement Contractors agree to comply with marketing and advertising standards; (d) tracking complaints against the home improvement Contractors; and (e) establishing policies for monitoring the conduct of participating home improvement Contractors. Additionally, the municipal pace model discussed under Option 3 Legislative guidance, requires contractors to hold one million dollars in commercial liability insurance.

- **No Disclosure of Maximum Financing Amount**: R-PACE Administrators should not directly disclose to the home improvement Contractor the maximum amount of financing available to the homeowner.
- **No Cash Bonuses to Contractors**: R-PACE Administrator should not give a Contractor any fee, kickback or other thing of value pursuant to any agreement with the contractor for the referral of PACE business.
- **Printed Copies of R-PACE Financing Documents**: In addition to electronic copies, R-PACE Administrators should provide printed copies of all R-PACE financing documents to homeowners after execution by the homeowners and in accordance with all applicable law.
- **Lien Registry**: R-PACE Administrators should jointly maintain a lien registry to mitigate duplicative liens resulting from R-PACE financing.

### Non-consensus items for consideration

- **Mandatory home energy audits:** Home energy audits, where an energy expert inspects a house and identifies the major causes of inefficiency, can ensure that homeowners are able to invest in the upgrades that will be most cost-effective for their property. PACE advocates are opposed to mandatory audits as this increases the difficulty of executing a PACE agreement and in some cases may be superfluous where a borrower is already certain of the product they desire, for example if their HVAC equipment breaks down and they want to quickly replace the unit. There could be an exemption for this safeguard for certain situations where the borrower has an urgent need for R-PACE financing such as a broken air conditioner. Low-income borrowers could be discouraged from pursuing beneficial clean energy upgrades by the upfront cost of an energy audit, therefore, some incentive or payback to the borrower or lender could encourage participation.
- **Certificate of Completion:** An in-person inspection or otherwise highly thorough audit process to ensure that work is completed to a required standard. PACE providers perceive this measure to have similar problems to home audits in regards to hampering contract execution. SCEIP accomplishes this verification goal through the creation of a "PACE" permit that requires that the building department verify that the work was installed to building code standards.
- **Income restrictions:** To alleviate concerns regarding the negative impacts of PACE on low-income borrowers, the program could be restricted to homeowners that meet certain minimum income criteria. This would protect the most vulnerable borrowers, however, it could raise equity issues if low-income households cannot participate in the program.
- **Project value limits:** Placing an upper limit on the value of projects that can qualify for PACE funding could lower risk for all participants as smaller loans reduce the likelihood of delinquency. This would eliminate certain upgrades from qualifying, for example, rooftop solar is a more expensive option that would likely exceed any assigned value limit, and PACE administrators may be less likely to enter the market if there is less profit opportunity.
- **Additional projects:** In addition to the list of PACE-qualified projects it may be useful to define and limit what additional projects may be considered as part of a PACE loan. In California PACE borrowers have been able to acquire PACE funding for a wide range of maintenance projects provided some PACE-qualifying projects were on their work order. In some instances there are

inherent connections between PACE projects and other upgrades, most notably solar facilities and roof repairs, however, borrowers are less likely to see a positive cash flow from non-PACE upgrades.

- **Definition of PACE:** Virginia's C-PACE program permits resiliency and storm water management projects, as do some R-PACE programs. The payback on these types of projects is less linear than clean energy upgrades (where utility costs are easily measured) as it is harder to quantify avoided damage from weather events.
- **Remove contractors from underwriting and origination process:** Prohibit contractors' involvement in the PACE loan underwriting and origination process and impose strict requirements concerning marketing tactics. The PACE industry is generally against this item. However, several work group members were in support of this recommendation.
- **Lender consent:** Requires borrowers to obtain the consent of their mortgage lender before applying for a PACE assessment. The banking industry would prefer this arrangement as it gives them the discretion to refuse a PACE assessment if they believe it will negatively impact mortgage payments. Lender consent is only likely to be granted where mortgage holders perceive there to be a benefit, such as increased property value, that outweighs the risk of delinquency if PACE payments impede a borrower's ability to afford their mortgage payment. Guarantees or proof of positive cash flow (described below) to borrowers may also help secure lender consent if it places the borrower in a better position to repay their underlying mortgage. The possibility of lender consent would also be significantly improved if the Government Sponsored Entities (GSEs), such as Fannie Mae and Freddie Mac, changed their policies in regard to PACE as this would remove a major impediment for lenders seeking to sell mortgage backed securities. R-PACE lenders are generally opposed to lender consent as they do not anticipate that lenders would grant consent. Lender consent is a feature of C-PACE in Virginia, however, in high-value commercial transactions there is a greater incentive for lenders to facilitate a PACE assessment.
- **Monthly installments:** There should be an option to make payments in monthly installments rather than only at property tax time.
- **Positive Cash flow Guarantee:** The key target market for PACE is customers who are seeking a positive cash flow from the upgrades. PACE lenders or contractors could be required to guarantee that the consumer will experience a positive cash flow as a result of the project, through directly related household expenses, such as utility bills (for clean energy measures) or insurance premiums (for resiliency or storm water measures), being lower. A contractor on the work group indicated that they would be willing to operate on this basis. Other lenders and contractors may consider such a requirement as creating too much risk for them to operate and, at the very least, it is likely to limit the size and scope of available measures. Commercial contractors are more accustomed to executing performance guarantees but it could be a burden on small residential grade contractors who do not have the experience or financial wherewithal to meet this requirement. Customer behavior could also impede positive cash flow through no fault of the contractor. For example, if energy savings for new HVAC units were estimated based on average

cooling during summer months of 70 degrees, and the homeowner decided to lower the thermostat to 60 degrees, the estimated savings would not be achieved.

- **Explicit bill labeling:** Concerns that borrowers, lenders and other stakeholders are often unaware of PACE loans connected to properties have been raised in a number of contexts. In the R-PACE enabled states, tax assessment forms and other documentation tend to name the lending entity in the line item for PACE and not the program, therefore, it is not easy to discern that the PACE loan exists. This creates an obstacle to effective resolution of financial and contractual issues that arise. To avoid this scenario, the PACE assessment should be explicitly labeled as such in the property tax bill and other key documents.
- **Mortgage-equivalent regulation:** Requires that PACE lenders are regulated at a level that is equivalent to mortgage lenders. Consumer advocates have stated that this would better ensure consumer protections through stronger requirements on underwriting and other associated measures. PACE lenders and advocates are generally opposed to being regulated as or equivalent to mortgage lenders, contending that is would represent a substantial overregulation of the industry and stifle the market.
- **Subordination of the PACE lien:** Please see Page 12 for more information on this issue.

# Appendix A: Public Comment

This appendix provides public comment collected by Virginia Energy throughout the course of the work group. The first section includes all comments received through the VA Regulatory Town Hall, which are copied directly from the portal without edit. The second section includes a list of public comments received during the public meetings and links to the recorded meeting.

### *Public comment received through the VA Regulatory Town Hall*

- **Commenter: Girard Gurgick**

  **We need to develop and promote R-PACE and C-PACE now!**

  We have made little to no progress since PACE (Property Assessed Clean Energy) entered the scene as an investment tool to help prevent climate change in 2008. PACE investments minimize market caused investment risk for all consumers and all lenders. Local governments can create a PACE program so that the public at large is not forced to take a major market risk alone to upgrade their property infrastructure to consume minimal amounts of energy,minimize fossil fuel consumption and add renewables on their property.

  By using a Property Assessment, the public may choose to effectively join an individualized special assessment district. Special real estate assessments can survive a sale or transfer of ownership. That, combined with a long term secure investment is what gives PAEC its power. Many homes and commercial properties already have the same type of special assessment real estate taxes paying for water, sewer, roads, bridges and even metro expansion or other similar infastructure beneficial to all. It is interesting that these other assessments survive all sales and transfers and are commonly managed by mortgage payments. They can also be covered by mortgage company escrow collections just like standard real estate taxes and privagte insurance.

  As an example of the power of PACE financing, if you select 10 kW of solar panels costing $25,000 and finance it for the guaranteed life of over 25 years in Richmond (on a 30 degree south facing roof you will generate on average $1,578 dollars per year in electricity). The Federal Tax incentive takes care of 26% of the total costs (this year and next) of the PACE financed amount of $27,500. If you finance it through a 25 year PACE program assessment the annual payment at 5.75% will be $1,544.30 In other words you will be paid a whopping $24.30 per year to let the PACE program provide you with solar panels. I know it's not much money but it is a tool that needs to be made available to all consumers. Solar is easiest to illustrate for how PACE can work but the least rewarding financially. It is more complicated to figure out how geothermal HVAC, better insulation, duct sealing and energy controls will impact savings. They can all usually provide better benefits but are not as easily illustrated.

What can be seen is the asset value has increased by the value of the solar panels and the owner has a few dollars more in their pocket to pay their mortgage. Next year the savings will likely be more. It's hard to see why a mortgage lender wouldn't want to do both the PACE assessment investment and the mortgage. 100% of the PACE re-payment through the special assessment will be made, the term is not as long as a thirty year mortgage and the interest rate is higher. Meanwhile, the mortgage is subject to market risk so (as in 2008) they can end up upside down on a mortgage and even furthe upside down if the solar panels are financed in a bigger mortgage.

Right now if a property owner is contemplating a deck or a Solar PV investment, the deck usually will win. If a builder is contemplating isofoam or fiberglass insulation, fiberglass wins. Even though closed cell foam adds as much as 300% structural resilience, is a moisture and air barrier and reduces the AC tonnage

VA first passed C(ommercial)-PACE enabling legislation in 2009. Counties waited many years to develop programs. The first projects closed within the past month allowing solar panels to be installed on restaurant in Arlington.

Isn't it time to pick up the PACE in your community?

**There are no alternatives to R-PACE (Girard Gurgick cont.)**

There are no alternatives to R-PACE. For the simple reason that there are no other programs that can provide a long-term financial arrangement that does not subject both the lender and the beneficiary to real estate market valuation risk. The mistake made by nearly everyone interpreting PACE is assuming PACE is a loan and that a HELOC or other loan can be found at a lower interest rate and therefore these other existing loan tools are right for the job. They are not. That’s why their exclusive application is failing us miserably. That’s also why, when R-PACE is allowed, its growth in CA reflected an almost 80% year over year rate of growth among homeowners.

If a Virginia homeowner would like to be environmentally conscientious and responsible an invest in reducing their carbon footprint the best path is most likely insulation, a geothermal HVAC system and if the solar exposure works, a solar PV system. There can be other components of course. But, insulation can reduce the AC tonnage requirement substantially. A high performance home may require only 1 ton per 2,500 sf and in an older home 1 ton may only cover 500 sf. The power requirements obviously differ as substantially. A good system per current code requirements may be a 15 SEER system. Geothermal HVAC can be at an equivalent of 45 SEER. So it uses 1/3 the electricity. It can eliminate the need for a furnace. It can eliminate fossil fuel consumption for heat and hot water as it can supply hot water. Typical calculations show a carbon footprint reduction of 75%. There is no outside compressor noise. What’s more it does not lose efficiency when the air temperature gets really hot. (The ground is still around 60º F.) The combination of better insulation and geothermal HVAC can cut the number of solar panels by about half making solar more affordable and possibly creating a net zero home.

All of this would cost from $25,000 to $60,000 for average homes ranging from Jonesville to Ashburn. If they had that kind of cash, most homeowners would probably rather use it for a new car or a great vacation or other home improvements. With an R-PACE program you can do both!

So, if the position that "the existing tools work" had any merit I could happily agree. However, this has proven to be a red herring argument at best.

We face a huge problem in fighting global warming. My three grandchildren, and yours deserve our best efforts to leave them a planet in the same condition or better than the one we inherited. Nationally, White House goals for carbon reduction are for 50% of 2005 levels by 2030. Virginia's goals are for a zero carbon economy by 2045. The questions remain: What do we do to accomplish this? How do we pay for it? We could continue with the indirect carbon taxes that create stricter regulations on power plants, subsidies for cheaper efficiencies such as LED bulbs, we can pay Solar RECS and add to our power bills with Renewable Portfolio Standards instead of carbon credits, (after all if we use no electricity we don't even need solar panels).

I would instead propose we use R-PACE to fund the changes we need and want.

**Why is PACE (Property Assessed Clean Energy) capital not a loan? (Girard Gurgick cont.)**

Because PACE is a special assessment. (Investopedia) "A special assessment tax is a surtax levied on property owners to pay for specific local infrastructure projects such as the construction or maintenance of roads or sewer lines. The tax is charged only to the owners of property in the neighborhood that will benefit from the project. That neighborhood is called the special assessment district"

PACE is a surtax.

It is not a loan. It is not borrowing. It is not your money.

It is a neighborhood of 1 property: YOURS!

It pays for specific infrastructure benefitting the larger community environmentally. The infrastructure is chosen by you.

**PACE must be an efficient process (Girard Gurgick cont.)**

An excerpt from the recent artical on the state's first successful C_PACE transaction in Arlington:

Joe Marhamati of Ipsun Solar said that while C-PACE was created with the best of intentions, it's in need of some streamlining. "I'm not super surprised it hasn't taken off because administratively it's very cumbersome," he said. "It's kind of like going to the DMV to get your loan."

https://energynews.us/2021/07/15/virginia-finally-has-its-first-c-pace-success-story-a-decade-after-initial-law/

We need to avoid this in any program.

One of the biggest differnces I see in R-PACE verses C-PACE financing is lender consent is required in C-PACE. Perhaps what is required is to treat them the same.

Since FHA lenders Perhaps

**PACE and Solar in VA (Girard Gurgick cont.)**

The average Virginian spends a little more than $2,000 a month on energy. What can be accomplished with $2,000 a month to make the home environmentally sustainable instead of spending it at the gas and electric companies?

Is it solar? Suppose 10 kW of solar is added to your roof. 10 kW in the 23120 zip code provides 13,915 kWh per year on average. At 0.11 cents/kWh, which is the current consumer rate, (at present, a 10% increase is expected soon, also it increases slightly every year) the system generates $1,536 dollars in electricity per year. Current tax Incentives have a big impact on solar economics. https://pvwatts.nrel.gov/pvwatts.php

Assume each kW costs $2,400 installed. If this is paid for in a PACE special assessment over twenty-five years, (some panels are guaranteed for 30 years) the payment at 5.39% is $2,047.73 (This also covers adding $5,523 in PACE overhead and accounting for the benefit of the 26% federal tax credit.) By Including the Federal Tax Credit of 26% (this year and next) using a PACE program and finding 25-year PACE financing, any consumer can actually be paid to allow the PACE program to buy the solar panels. Including homes covered by almost all FHA loans, but that's another story.

Bottom Lines: The home value increases by adding solar panels, The consumer has no debt on his finances. There is a property assessment. The owner spends nothing out of pocket. AND the assessment is not required to be paid off by the program if the owner sells the property. The panels stay and so does the PACE assessment. This is another aspect of PACE that makes it very special. The property owner's cash flow is improved by an average of $230 dollars per year in years 3-25, more after that. That's not much but this indicates even solar panels in VA can improve the primary mortgage holder's debt coverage ratio while simultaneously increasing asset value.

It's also smart for a homeowner and the mortgage lender to replace a constantly rising variable cost with a fixed annual payment.

The mortgage industry is decidedly reluctant to accept PACE loans and either erroneously or mistakenly insists that a PACE loan is superior to a mortgage when in fact it is not. ONLY PACE payments IN ARREARS are. FHA had issued a statement saying PACE loans were compatible with FHA mortgages at one point and then reversed itself early in the previous administration.

Solar is the worst performing energy investment, but the idea here is: Can we can make even this change financially beneficial without government spending and further subsidy? The answer is "Yes we can!" This is a conservative and business responsible solution to climate change and energy conservation that will provide local jobs and economic stimulus. It can be utilized throughout the state if enabled.

This is only a first round illustration. It is far more important to get the best answers for each home on a case by case basis. The “reduce before your produce” mantra is key. If you can reduce a home to zero energy, solar panels are unnecessary. Reducing the electrical energy needed by using better weather sealing, insulation, duct sealing, energy controls, LED’s, skylights and geothermal HVAC can all provide better carbon footprint reductions at lower costs and provide better financial returns. The point that needs to be made is where will the capital come from? Pick up the PACE!

Note to Mortgage lenders and the MBA: The preceding evidence a Virginia solar PACE transaction makes it smarter to grant and or approve a PACE loan by all mortgage lenders. With a mortgage investment and a PACE investment by the same mortgage lender being especially beneficial as overhead can be minimized. Repayment is not guaranteed on the primary mortgsge. Repayment is almost guaranteed on the PACE assessment. On the PACE portion, the lender’s capital has no little to no market risk. While subjecting the same amount in a new bigger mortgage increases the lenders market risk.. As in 2008 a 60% decrease in market valuation is a possibiity. However, the assessment value would be undiminished.

**R-PACE and Underserved Communities (Girard Gurgick cont.)**

Adolphus Pruitt, President of the NAACP's St. Louis Chapter, published a compelling op-ed on why PACE financing is so important to historically underserved communities. At any rate the benefit of R-PACE from someone other than me should encourage everyone to pursue this much needed solution. At first, just for non-FHA properties in VA, then....

https://www.stltoday.com/opinion/columnists/adolphus-m-pruitt-addressing-the-access-to-capital-crisis-for-underserved-st-louis-communities/article_e8a226f9-d945-5725-82a9-e6b7a5e2147d.html?mode=comments#tracking-source=in-article

Addressing the access-to-capital crisis for underserved St. Louis communities

By Adolphus M. Pruitt II Mar 20, 2021

Attention to equity and inclusion for underserved communities of color is more pronounced today than ever. In recent reporting by Peabody Award-winning journalist Aaron Glantz, some stark statistics show that discriminatory lending practices still persist.

For those in the African American community, this comes as no surprise. But readers may be surprised to learn that, shockingly, the gap between African American home ownership and white home ownership is wider today than in the Jim Crow era. In fact, systemic racial biases are essentially built-in to credit score algorithms and underwriting resulting in a continuing access-to-capital crisis for underserved communities.

Communities of color are disproportionately denied for lending products such as second mortgages or home equity lines of credit because credit scores include latent discriminatory filters. Further, interest rates are higher for borrowers with lower credit scores; and if credit scoring has biases against communities of color, then the unwarranted higher cost of capital acts as a redline tax. Black families pay more because of systemic biases in traditional lending.

Today, what is needed are new approaches to finance that are not weighed down by past systemic inequities and redlining. One St. Louis program, Set the Pace St. Louis, is trailblazing a new financial tool providing relief and much-needed capital for our underserved neighborhoods.

Home ownership and the capacity to invest in and maintain a family's biggest asset — their home — is a critical part of wealth development for communities. The city's Property Assessed Clean Energy program, known as PACE, is meeting this need by providing financing for vital energy and maintenance repairs and improvements. The program covers 100% of the costs for new heating and cooling systems, roofing, windows and doors, and other energy improvements — part of hundreds of projects that have been completed in north city.

In fact, what is noteworthy about the PACE financing tool is that the terms and rates are the same for everybody — no matter what ZIP code residents live in. This stands in stark contrast to traditional lending models that often fall short of meeting the capital needs of our communities.

Set the Pace St. Louis is also ensuring the program's economic opportunities are available for local minority- and women-owned contractor companies. For the last four years, program administrator Ygrene Energy Fund has conducted numerous training sessions and pre-apprenticeship workshops in partnership with Mokan, our region's leading minority- and women-owned contractor assistance center. In 2017, Mokan recognized Ygrene Energy Fund with a Community Partnership Award for the administrator's commitment to equity and inclusion.

Where traditional lending institutions and mortgage banks have been shown to lend disproportionately to whites and not to Blacks, the Pace program has helped address the access-to-capital problem by providing financing for African American families for critical home improvement and maintenance needs.

Set the Pace St. Louis shows promise as a forerunner of a revolution in finance. With rates and terms the same for all program participants, this simple fact makes Pace more equitable than other financing solutions.

**R-PACE Market Interest, Size, and Potential Volume for a Virginia R-PACE Program (Girard Gurgick cont.)**

Market Interest

A simple analysis of PACE growth in California from 2009 -2015 tells you the market interest is substantial once awakened and has clearly demonstrated explosive exponential growth. The conclusion illustrated is: PACE is a truly effective energy transformation catalyst! Will it enable a smart transition to conservation and renewable energy? The resounding answer is: YES!

R-PACE will be a program that would benefit 100% of all homeowners in Virginia, all the time. It does not add any burden to the taxpayers or the public coffers. Such a program will attract business by keeping energy costs low because it will reduce demand, and it will, add to our energy independence, improve our air quality and help develop jobs in our local communities. Yes, R-PACE can do all that.

By all reports, solar PV is a fast-growing industry. Indexing the national dollar investment for 2009 solar PV installs at 1.00 and establishing solar growth from this starting point to 2015, the index in 2015 stands at 5.5. That is an astounding growth rate of 39% per year. I'm sure we agree that more growth occurs in states with better incentives. Virginia has almost none. Loudoun County is teh ne exception I am aware of.

Establishing a 1.00 index for all C(ommercial)-PACE program investment in 2009 and across the same period C-PACE investments have grown and yield a current index of 10.84. In other words, twice the growth rate of solar. The R(esidential) PACE index is at 30.58. This means the growth in investment in energy conservation and renewable energy for homeowners is growing at 76.5% per year with an R-PACE program in place.

Graph is omitted.

Notes 1. Solar and Geothermal data is national, 2. C-PACE is almost national while R-PACE data is primarily from certain parts of California. R-PACE is also offered in Missouri and Florida. 3. C-PACE has a split incentive issue in owner tenant properties.

**Market Size and Potential Volume (Girard Gurgick cont.)**

To date PACE Nation R-PACE Data Shows:

$7,300,000,000 Invested, 306,000 properties, a $20,200 average project creating 128,000 local jobs.

70% for Efficiency, 21% for renewables and 9% for resiliency

In VA our needs in the resiliency area are for storm water measures, coastal property protection, conservation easements, and soon hurricane measures as storms are increasing in both severity and frequency.

Florida already includes hurricane resistance as resiliency and California includes seismic resiliency measures.

I have frequently prepared Market Size and Potential for Loudoun County testimony at Board of Supervisor hearings over the 10 years effort to get C-PACE going and asking for implementation assistance with R-PACE.

Loudoun County has more than 100,000 SF homes.

AC systems have a 15-year average life. Every year 1/15th or 6,700 need replacement.

If all 100,000 were all replaced at once (obsolete freon) the need could be estimated as follows:

| | |
|---|---|
| 100,000 homes at 5 tons /average system 5 Tons GT or conventional AC | $12,000 |
| 5 Tons GT Loops@ $3,500/T | $17,500 |
| Solar: 25% not shaded and good orientation 7 kW @ $2,500 /kW X 25% | $4,375 |
| Misc Insulation, Duct Sealing, SunTubes, Controls, | $8,000 |
| Total | $41,875 |

Market Potential 100,000 X $41,875 = $4,187,500,000 or $4.2 billion for Loudoun County alone. Excluding about 10 % in PACE program overhead.

This could be developed in aggregate from VA county data for average house size and adjusted based on energy calculations from Water Furnace and PV Watts output. As geothermal and solar both share a 26% Federal Tax Credit for 2021 and 2022 dropping to 22% in 2023. Time is of the essence.

Statewide R-PACE investment need can be grossly estimated based on population ratio as follows:

Loudoun 2019 Population: 413,538; Virginia 2019 Population 8,536,000

Ratio 1:20.6

R-PACE VA INVESTMENT NEED 20.6 X $4.2 Billion or $86.5 Billion, just for R-PACE.

**Why Geothermal HVAC needs R-PACE (and we do too!) (Girard Gurgick cont.)**

Geothermal eliminates fossil fuel combustion for heating and hot water as illustrated in the typical graph on the right. Omitted Graph shows a 75% reduction in tons of carbon. It relly needs PACE because clients resist the added capital for geothermal drilling.  Adding $18,000 to a 5 Ton HVAC system replacemet is not on the consumer wishlist. Yet it is the system with the best outcome for reducing GHG tonnage, i.e. eliminating the use of fossil fuels for heating and hot water.

In addition, geothermal systrems:

1. Reduce overall consumption with SEER equivalent ratings of 43.5 (Waterfurnace and 45.5 (Climate Master) versus code at 14 SEER which is becoming almost dysfunctional at today's higher outside (globally warming) temperatures.

2. Shaves summer peaks for power producers

3. Adds to wintertime load at the power plant

4. Is absolutely quiet outside

R-PACE can allow power companies to lead the way on this conversion.  The utilities need no capital for PACE “incentives”. They can simply provide a path for PACE financings.

- **Commenter: Chase Counts, CHP Energy Solutions**

  **Existing Alternatives for R-PACE**

  I would strongly advise against pursuing R-PACE in Virginia. The PACE model is better suited for commercial properties. R-PACE creates conditions for fraud and abuse by predatory profit-driven companies that do not have the interests of the customers truly in mind, especially for under-resourced communities. This is demonstrated throughout the country where R-PACE exists and was even a featured segment on HBO's Last Week Tonight with John Oliver recently.

  I would also encourage decision-makers to learn from the experience of a Virginia electric utility using private, profit-driven companies to deliver energy efficiency services to income-qualifying households before turning to the weatherization provider network in 2015. The delivery of the program created conditions for contractors to optimize profits without taking building science and how the house works as a system into consideration. This resulted in moisture problems and other health and safety issues for the participants, many of who reached out to weatherization providers later on for support and corrective services. I would be concerned the development of an R-PACE program without stringent guardrails would result in similar outcomes.

  And why develop an R-PACE program with guardrails when income-qualifying households already have access to other programs carrying far less risk? Federal WAP/LIHEAP and current electric and gas utility-sponsored programs in Virginia utilize the licensed, insured, and credentialed weatherization provider network to provide weatherization and energy efficiency services at no cost to the participants. These programs offer a means of receiving energy burden-reducing services without saddling the participants with any financial liabilities. These programs are delivered by mission-driven non-profit weatherization providers with strict training and licensing requirements, material specifications, and standard work specifications defined through the federal weatherization program. These criteria have also been adopted by the utility-sponsored weatherization programs.

  Additionally, the Pay-As-You-Save (PAYS) on-bill tariff model being piloted by Rappahannock Electric Coop is much better suited for income-qualifying households and has a far better track record than R-PACE across the country in the limited rollout it has seen over the past few years. The PAYS model has some of the benefits of R-PACE but avoids the hazards of massive property tax bills for households already under-resourced. I’m cautiously optimistic about PAYS in Virginia and hope it pans out but this may still result in income-qualifying customers assuming debt unnecessarily when they may be better served through federally funded and utility-sponsored programs at no cost.

  In my professional opinion, R-PACE would likely result in more harm than good for the intended beneficiaries of the services and it is attempting to fill a gap that is already filled by programs with less risk to participants. I would encourage decision-makers to avoid introducing R-PACE to Virginia.

- **Commenter: Karen R Lee**

  **Residential PACE can improve community housing and move toward energy efficiency**

  R-PACE is a proven strategy with $800 million in investments already made through loans secured by the future real estate taxes on the homes who participate. The community still gets the tax income but homeowner get upfront money to finance energy efficience upgrades or renewable energy investments for the home. The administration of the program has costs of course, but the benefits to housing value, homeowners' wll being and to shifting to renewable energy far outweigh those according to those who have implemented the program.

  I urge you to approve Virginia implementing this innovative and proven program.

- **Commenter: The Propagation Congregation**

  **Solar Power**

  Thank you for doing your part in our common struggle for human advancement and progress. Your adoption of solar energy and advocacy for clean air and water are commendable. G-d bless you all.

  Imam Bilal Yasin El-Amin

  The Propagation Congregation

  Richmond, Virginia 23220

  http://www.thepropagationcongregation.org/about

  POWUR Solar PBC

  http://www.powur.com/bilalyasin.elamin

- **Commenter: Anonymous**

  **R-PACE program**

  This program sounds like a great idea! If implemented correctly, it could be a "win" for everyone involved.

- **Commenter: Mary Mathena**

  **the R-Pace program**

  This regulation would assist the majority of Virginians when it comes to paying their electric bills. It would also create a process for paying a bill in times of emergency.

- **Commenter: Steven Vogel**

**Feasibility Study on a Residential Property Assessed Clean Energy (R-PACE) Program in Virginia**

Currently, the average electricity bill is unaffordable for more than 75% of Virginia households. As a person of faith & conscience, I believe working families should not have to spend such high percentages of their income to afford essential energy. The Residential Property Assessed Clean Energy (R-PACE) program can help alleviate the energy burden many families are experiencing by providing the mechanism and funding to implement clean energy improvements to their homes. The feasibility study on establishing this program needs to center equity and environmental justice to help communities of color and low-income communities experiencing energy burden.

- **Commenter: Kate Soderman**

**R-PACE**

Currently, the average electricity bill is unaffordable for over 75% of Virginia households. As a person of faith & conscience, I believe working families should not have to spend such high percentages of their income to afford essential energy. The Residential Property Assessed Clean Energy (R-PACE) program can help alleviate the energy burden many families are experiencing by providing the mechanism and funding to implement clean energy improvements to their homes. The feasibility study on establishing this program needs to center equity and environental justice to help communities of color and low-income communities experiencing energy burden.

- **Commenter: Joan Chapman**

**R-PACE program**

I support a feasibility study on a Residential Property Assessed Clean Energy (R-PACE) program in Virginia.

- **Commenter: Talia Moser**

**Sustainable energy**

Glad this topic is getting attention. My husband and I would really like to install solar panels on our home, but it's still financially out of reach. I am aghast seeing so many apartment complexes going up around town with no panels. Hurricane Ida puts a spotlight on our vulnerability and dependence on gasoline for generators. This is going too far. Help!

- **Commenter: Andrew Grigsby, Viridiant**

Viridiant supports the beneficial expansion of financing options that enable energy efficiency and solar upgrades in Virginians homes. R-PACE offers a proven track record of success across multiple jurisdictions. Of course, Virginia must evaluate all options carefully when investing scarce public resources to support a particular policy. Performance contracting and utility bill financing (including tariff-on-bill (TOB)) are comparable financing tools that address some of the same disincentives to clean energy investments that PACE was created to resolve. As allowable within current legislation and administration policy, all options should receive due consideration.

Viridiant also calls attention to the need for coordination, streamlining, and public education concerning clean energy financing as well as other consumer resources as being at least as critical as adding another lending choice. In particular, we note the VCEA's mandates for the efficiency gains that Virginia utilities must make in coming years. The State Energy Office could engage vigorously to ensure that rate-payer-funded efficiency programs and financing options like PACE and TOB are designed and managed to "braid" seamlessly to maximize total benefits to consumers and the industry – while also making needed progress on climate goals.

R-PACE could be a welcome addition to consumer options. It could also be one more mysterious acronym thrown into a poorly functioning marketplace where consumers are vulnerable and broad societal goals are not advancing at the rate needed. Viridiant is not currently able to provide detailed comments on R-PACE's particular merits. We have become convinced that – in the field of residential clean energy financing, incentives, rebates, and weatherization –broad coordination and system-wide optimization is increasingly critical and will require clear leadership from state government to realize its full potential.

### *Public comment received during the work group meetings*

June 9th, 2021 – Virtual meeting

- **Commenter: Joe Lerch** with the Virginia Association of Counties gave a brief public comment indicating that he would be monitoring the workgroup and his organization is interested in financing mechanisms for clean energy at the local level. Please follow this link to view the recorded meeting: click here

June 29th, 2021 – Virtual meeting

- **No public comments were given**

July 15th, 2021 – Hybrid in-person / virtual, Libbie Mill Library, Richmond, VA

- **Commenter: Mike O'Connor** with the Virginia Petroleum & Convenience Marketers Association gave comments. Please review the recording at around the 2:28 mark for these comments. Follow this link to view the recorded meeting: click here
- **Commenter: Rich Dooley** with Arlington County gave comments. Please review the recording at around the 2:31 mark for these comments. Follow this link to view the recorded meeting: click here

September 20th, 2021 – Hybrid in-person / virtual, Libbie Mill Library, Richmond, VA

- **Commenter: Thomas Dick** with the Municipal Electric Power Association of Virginia gave comments. Please review the recording at around the 2:24 mark for these comments. Follow this link to view the recorded meeting: click here

# Appendix B: History of California Residential PACE Legislation and Regulation

The information in this appendix was provided by the R-PACE Work Group's PACE capital financing representative, Bob Giles with Home Run Financing.

**Initial Passage of PACE Enabling Legislation**

- **AB 811** – July 2008, California AB 811 was signed into law allowing cities and counties to form voluntary contractual assessment districts and authorizing PACE programs set up in these districts to finance energy-efficiency, water conservation and renewable energy generation improvements that are permanently attached to real property.

**Summary of PACE Consumer Protection Legislation Since 2013**

- **SB 96** - September 2013, California SB 96 was signed into law establishing the PACE Loss Reserve Program to support residential PACE and protect against default and foreclosure.
- **AB 2693** - September 2016, California AB 2693 was signed into law establishing comprehensive financial disclosures for PACE assessments.
- **AB 1284** and **SB 242** - In October 2017, California AB 1284 and SB 242 were signed into law. Collectively, the bills strengthened consumer protections and established a regulatory framework for the residential PACE industry in California.
    - Established Department of Financial Protection and Innovation (DFPI), formerly Department of Business Oversight, as regulatory authority for all residential Program Administrators.
    - Required evaluation of homeowner's "ability-to-pay" and income verification.
    - Strengthened underwriting standards and payment history reviews.
    - Mandated phone calls with all customers confirming financing terms prior to execution of financing documents.
    - Established comprehensive PACE contractor licensing, oversight, and training requirements.
- Three additional PACE bills were signed into California law in September 2018.
    - **AB 2063** and **SB 1087** modify components of current law related to bankruptcy and mortgage payment history that automatically disqualified homeowners prior to the determination of their ability to pay and applying additional protections under circumstances when a PACE applicant is not approved for financing.
    - **SB 465** expanded PACE by allowing homeowners in certain jurisdictions to use PACE financing to make wildfire resilience and safety improvements to their homes.
- **AB 1551** and **AB 2471** - During the most recent 2019-2020 legislative session two pieces of legislation, AB 1551 and AB 2471 were passed.
    - Prohibits PACE assessment contracts from containing a prepayment penalty.

- Prohibits PACE program administrators from executing an assessment contract related to a property that is subject to a reverse mortgage.
- Requires PACE program administrators to provide the property owner with a printed copy of the financing estimate and disclosure form prior to executing the financing agreement unless the property owner opts out in writing.
- Expanding the 3 day right to cancel to 5 days for anyone 65 years and over.

**DFPI PACE Regulation Overview**

The DFPI, as the state regulator of all residential PACE program administrators, establishes a comprehensive and robust regulatory framework that makes PACE financing one of the most regulated financial products in California and ensures some of the strongest consumer protections and contractor oversight in the home improvement financing market. Below is a summary of the regulations that have been filed with the Office of Administrative Law by the DFPI and will be in effect in the near future for the entire residential PACE industry.

**Licensing:**

- Require licensure of all residential PACE administrators by DFPI through the Nationwide Multistate Licensing System (NMLS). Only administrators with a license to operate in California can administer a PACE program. The DFPI has the power to revoke an administrator's license.

**Policy Regulations:**

- Clarifies a variety of definitions to improve clear understanding of certain regulatory provisions by program administrators.
- Advertising Standards
    - Program administrators are prohibited from advertising PACE in a manner that is untrue or deceptive and must train all enrolled contractors to refrain from the same prohibited advertising including 10 subparagraph prohibitions covering comprehensive communication with the homeowner.
- Assessment Contracts and Disclosures
    - Establishes rules for how program administrators must provide disclosures and information about their PACE project before the property owner signs a PACE assessment contract.
    - Confirmation of property owner's ability to access the internet and confirm emails to ensure all digital communication is clear and accurate.
    - Sophisticated identity verification of the property owner photo identification or through a two-step authentication process including items like tracking IP geolocation information. Program administrator must verify identity of property owner before signing the assessment contract or even the confirm terms phone call can begin.
    - Program administrators must also provide contact information to the DFPI: phone number, email address, and website address.
- Books and Records
    - Establishes rules for program administrators to keep comprehensive records of contractor enrollment, agreements with public agencies, background checks of

contractors, ability-to-pay documentation, among many other record keeping requirements.

- Complaint Processes and Procedures
    - The DFPI requires a comprehensive framework for homeowner complaint processing and resolution procedures.
- Dishonest Dealings and Misleading Statements
    - Prohibits program administrators from paying any contractor for work that the program administrators knows or should have known has not been completed, installed, or performed.
    - Prohibits a program administrator from paying a contractor a price for a project that the program administrator knows or should have known is materially less than the cost of the project.
    - Program administrators must establish policies and procedures that prohibit contractors from misrepresenting the improvements being installed.
- PACE Solicitor Enrollment Standards and Processes / PACE Solicitor Agent Enrollment Standards and Processes / Enrollment Denial / Monitoring Compliance / Cancelling Enrollment
    - Requires program administrators to develop and maintain processes for enrolling contractors that covers a variety of items that must be reviewed before a contractor can operate in a PACE program.
        - CSLB license in good standing and ensuring that all contractors and agents have appropriate licenses for various activities with the CSLB
        - Business and consumer rating website review
        - Review of past civil and criminal actions by the contractor and any consumer complaints.
    - Contractor termination policies and requirements related to terminations in coordination with the DFPI.
    - Establish processes for denying contractors from participating in the program including review of any prior patterns of bad actions by contractors to ensure that quality contractors operate in the program as best can be determined.
    - Program administrators must also monitor the compliance of contractors in the program, creating an additional layer of oversight in addition to all public agencies that
- Training Program
    - Requires program administrators to establish a comprehensive training program for all contractors that includes 6 hours of training.
- Annual Report Data
    - Program administrators must provide a variety of data to the DFPI on an annual basis.
- Ability to Pay Determinations / Property Owner Income
    - Program administrators must maintain processes for determining a homeowner’s ability to pay (ATP) the PACE assessment and verifying a homeowner’s income.
- Automated Valuation Model
    - Program administrators must maintain certain processes and procedures for valuating properties.
- Useful Life of Improvement
    - Regulations relating to the record keeping of determinations of useful life for improvements.
- Commercially Reasonable

- Establishes rules for verification of criteria when approving an assessment contractor for recordation.

# Appendix C: R-PACE Funding Data

The below data was provided to Virginia Energy by PACE Nation. It shows the monetary investment in R-PACE projects in California and Florida.

| | California | | Florida | |
|---|---|---|---|---|
| **Year** | **Annual R-PACE Funding ($)** | **Cumulative R-PACE Funding ($)** | **Annual R-PACE funding** | **Cumulative R-PACE funding** |
| 2014 | | 541,540,000 | | |
| 2015 | 842,031,848 | 1,383,571,848 | | |
| 2016 | 1,591,631,519 | 2,975,203,367 | 124,356,928 | 124,356,928 |
| 2017 | 1,311,838,874 | 4,287,042,241 | 232,194,501 | 356,551,429 |
| 2018 | 721,768,095 | 5,008,810,336 | 276,923,810 | 633,475,240 |
| 2019 | 367,242,791 | 5,376,053,127 | 407,575,687 | 1,041,050,927 |
| 2020 | 307,249,896 | 5,683,303,023 | 592,473,923 | 1,633,524,850 |
| | | *77.7%* | | *22.3%* |

| Combined | | | |
|---|---|---|---|
| **Annual R-PACE funding** | **Cumulative R-PACE funding** | **Annual R-PACE projects (est)** | **Cumulative R-PACE projects (est)** |
| | 541,540,000 | | 22,675 |
| 842,031,848 | 1,383,571,848 | 35,257 | 57,931 |
| 1,715,988,447 | 3,099,560,295 | 71,850 | 129,781 |
| 1,544,033,375 | 4,643,593,670 | 64,650 | 194,431 |
| 998,691,905 | 5,642,285,576 | 41,816 | 236,247 |
| 774,818,478 | 6,417,104,054 | 32,442 | 268,689 |
| 899,723,819 | 7,316,827,873 | 37,672 | 306,361 |

**Projects funded (estimate)**

Adds up to more than 100% due to combined projects

| Year | Renewable energy | Energy and water efficiency | Resiliency |
|---|---|---|---|
| ***2019*** | | | |
| CA | 28% | 86% | 0% |
| FL | 11% | 34% | 64% |
| Combin | 16% | 50% | 44% |
| ***2020*** | | | |
| CA | 24% | 86% | 0% |
| FL | 8% | 31% | 65% |
| Combin | 13% | 47% | 47% |

**Average project size (cumulative)**

23,883