Earth, Wind, and Fire: PACE Plays a Vital ESG Role

Stephanie K. Mah

Stephanie K. Mah

is vice president of Structured Finance Research at DBRS Morningstar and serves on the board of directors at PACENation in New York, NY. stephanie.mah@ dbrsmorningstar.com

KEY FINDINGS

- Two main catalysts are driving momentum in the property assessed clean energy (PACE) sector. Legislation is a major force behind the growth seen in PACE. Second, increased focus on environmental, social, and governance initiatives, for both entities and investors, is another driving factor.
- Commercial PACE has picked up momentum as more property owners become aware of PACE and find it to be an attractive addition to the capital stack for financing qualified building improvements aimed at addressing climate change and natural disaster concerns.
- Interest in new construction and gut rehabilitation commercial PACE has been rising. Four components encapsulate DBRS Morningstar's risk analysis for commercial real estate projects: environmental, construction progress, strength of the sponsor, and the first mortgage lender.

ABSTRACT

Interest in environmental, social, and governance–focused investments has been on the rise as investors look to address critical issues such as climate change, diversity, human rights, and company stewardship, to name a few. At the same time, sustainable investing is at an inflection point. As attention shifts away from how people invest, the focus is migrating to the outcomes of those decisions, such as thinking proactively about how our actions affect the environment. Initially, environmental concerns were addressed primarily through exclusionary practices and avoidance of investments in industries that were deemed harmful to the planet. However, the dialogue has evolved to include more proactive measures with outcomes, including reduction in greenhouse gas emissions, water conservation, and air quality improvement. As property owners look to make building upgrades addressing energy efficiency, renewable energy, water conservation, HVAC concerns, and resiliency measures, property assessed clean energy programs can play a vital role in financing such initiatives.

TOPICS

ESG investing, real assets/alternative investments/private equity, legal/regulatory/public policy*

nterest in environmental, social, and governance—focused investments has been on the rise as investors look to address critical issues such as climate change, diversity, human rights, and company stewardship, to name a few. At the same time, sustainable investing is at an inflection point. As attention shifts away from

how people invest, the focus is migrating to the outcomes of those decisions, such as thinking proactively about how our actions affect the environment.

Historically, environmental factors have been relatively easier to tackle than social and governance concerns because there are more concrete metrics to measure. Initially, environmental concerns were addressed primarily through exclusionary practices and avoidance of investments in industries that were deemed harmful to the planet. However, the dialogue has evolved to include more proactive measures with outcomes, including reduction in greenhouse gas (GHG) emissions, water conservation, and air quality improvement. As property owners look to make building upgrades addressing energy efficiency, renewable energy, water conservation, HVAC concerns, and resiliency measures, property assessed clean energy (PACE) programs can play a vital role in financing such initiatives.

The article is organized into four main sections. The first is a primer on the PACE program, covering eligible projects and attributes of the assessment. Next, the residential PACE (R-PACE) sector is covered, focusing on recent legislative developments, and DBRS Morningstar's approach to rating R-PACE securitizations. The third section highlights trends across the commercial PACE (C-PACE) sector, recent legislative developments, and DBRS Morningstar's approach to rating C-PACE securitizations. Last, insight into how the PACE sector has unexpectedly thrived during the coronavirus is highlighted.

DEFINING PACE

PACE is a long-term financing mechanism that enables building owners to make energy-efficient, energy-renewal, water conservation upgrades as well as resiliency improvements to mitigate against seismic, flood, and wind damage through a voluntary tax assessment tied to the property, without an initial capital outlay. PACE-eligible projects are illustrated in Exhibit 1. Instead of paying for the full amount of the improvement up front, property owners can use PACE assessments to spread out payments over set periods, anywhere from 5 to 30 years, with payment usually remitted along with property taxes. PACE assessments are typically due either annually or semiannually, with a handful of programs allowing for quarterly or monthly payments.

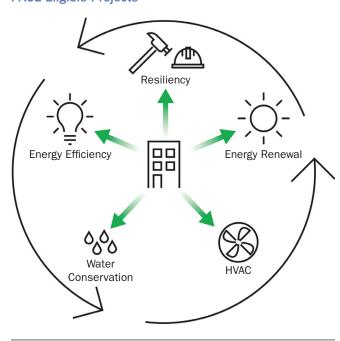
An important distinction is that the assessment stays with the property and does not travel with the borrower. In essence, it's a lien against the building or residence that in some cases may have to be paid off in full should the owner wish to sell the property.

In addition, the PACE assessment enjoys a senior lien status, either equal to or lower than other tax assessments but higher in priority than any mortgage debt obligation. PACE assessments, like property taxes, cannot be accelerated upon foreclosure. Only the delinquent payment is due then, not the entire outstanding PACE balance.

It should be noted, however, that the Federal Housing Finance Agency (FHFA) prohibits Fannie Mae and Freddie Mac from buying mortgages with PACE liens because of the super-senior lien position that a PACE obligation has over a mortgage loan. When a property is sold, the PACE obligation transfers to the new owner and the lien remains with the property. Homeowners with Fannie Mae or Freddie Mac mortgages can add a PACE assessment, but they may have to extinguish it before refinancing or selling the property. As outlined in its Selling Guide, Fannie Mae will not buy any mortgage loans secured by properties that have an outstanding PACE assessment unless the PACE assessment does not have a lien priority over the first mortgage lien. Likewise, the

¹Fannie Mae. 2020. "Selling Guide." https://selling-guide.fanniemae.com/Selling-Guide/Origination-thru-Closing/Subpart-B5-Unique-Eligibility-Underwriting-Considerations/Chapter-B5-3-Construction-and-Energy-Financing/Section-B5-3-4-Property-Assessed-Clean-Energy-Loans/1032996471/ B5-3-4-01-Property-Assessed-Clean-Energy-Loans-08-07-2019.htm.

EXHIBIT 1 PACE-Eligible Projects



US Department of Housing and Urban Development has a similar policy² for FHA-insured mortgage loans.

Moreover, the FHFA is contemplating whether to impose more stringent criteria on residential loans where PACE financing exists, including decreasing loan-to-value ratios for all new loan purchases in areas where PACE financing is offered. The FHFA published its Notice and Request for Input³ on January 16, 2020, in the Federal Register, with written comments due by March 16.

PACENation submitted a response on March 16. refuting many of the concerns raised by the FHFA in its Request for Input. The nonprofit advocacy group cited empirical research⁵ that found that PACE-financed home improvements not only helped to significantly increase home values but also reduced homeowners' energy utility costs, thereby increasing disposable income that could be used toward mortgage repayment. PACENation also pointed to a 2018 DBRS Morningstar study⁶ demonstrating that California homeowners with PACE assessments had lower property tax delinquency rates than those of residential property owners generally. Although the performance history was limited, PACE delinquency

levels were roughly 2%-4% at the peak, declining to less than 1% within 12 months.

From a social perspective, some have contended that R-PACE assessments are targeted at lower credit quality borrowers, thereby raising the spectre of fairness to borrowers. Two recent studies offer evidence to the contrary, with their findings highlighting the positive impact of PACE on low- and middle-income homeowners. According to a 2020 study by the US Department of Energy Lawrence Berkeley National Lab, PACE increases solar adoption in underserved communities. The researchers analyzed the impact of five policies on solar adoption among low- and middle-income households. PACE was one of the three policies found to increase adoption among these traditionally underserved homeowners and ultimately led to a more equitable distribution of solar in communities. Likewise, a 2019 USC study8 also found that PACE availability drove large increases in solar adoption.

²US Department of Housing and Urban Development. "Mortgagee Letter 2017–18." December 7, 2017. https://www.hud.gov/sites/dfiles/OCHCO/documents/17-18ml.pdf.

³Federal Housing Finance Agency. 2020. "FHFA Notice and Request for Input." https://www.fhfa .gov/SupervisionRegulation/Rules/Pages/Property-Assessed-Clean-Energy-(PACE)-Program.aspx.

⁴Federal Housing Finance Agency. 2020. "PACENation Response to FHFA RFI." https://www.fhfa .gov//SupervisionRegulation/Rules/Pages/Comment-Detail.aspx?CommentId=15495.

 $^{^{5}}$ Goodman, L., and J. Zhu. 2016. "PACE Loans: Does Sale Value Reflect Improvements?" The Journal of Structured Finance 21, no. 4 (Winter): 6-14. https://doi.org/10.3905/jsf.2016.21.4.006.

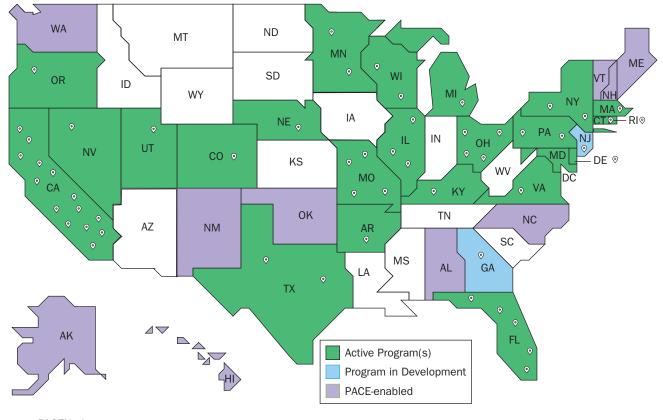
⁶Mezzanotte, C., C. Weilamann, and L. Gutierrez. "Residential PACE Delinquency Trends." DBRS Morningstar, February 2018. https://www.dbrsmorningstar.com/research/323286/dbrs-publishes-commentary-on-residential-pace-delinquency-trends.

⁷E. O'Shaughnessy, G. Barbose, R. Wiser, S. Forrester, and N. Darghouth. 2020. "The Impact of Policies and Business Models on Income Equity in Rooftop Solar Adoption." Nature Energy. https://doi .org/10.1038/s41560-020-00724-2.

⁸Rose, A., and D. Wei. "Impacts of the Property Assessed Clean Energy (PACE) Programs on the Economies of California and Florida." USC Schwarzenegger Institute. March 4, 2019. http://schwarzenegger.usc.edu/institute-in-action/article/impacts-of-the-property-assessed-clean-energy-program-on-theeconomies-of-c.

EXHIBIT 2

PACE Programs



SOURCE: PACENation.

In terms of governance, there are potential conflicts of interest with respect to the contractor arranging the R-PACE financing, determining the cost and scope of the project, and performing the work. Nonetheless, increased consumer protection measures including ability-to-repay, suitability, right-to-cancel, and commencement of work guidelines are significant advances in addressing this imbalance. There are fewer governance concerns for C-PACE because commercial borrowers are more likely to fully understand the value proposition of PACE financing as well as potential drawbacks.

PACE programs are based on a state-level government's ability to foster a public purpose through a special taxing authority, a concept existing as long as 100 years in the United States. The birth of PACE dates back to 2007, when Cisco DeVries, who at the time was the chief of staff for Berkeley mayor Tom Bates, introduced a pilot program in Berkeley, California. The pilot program, called Berkeley FIRST, enabled residential homeowners to pay for solar upgrades through assessments tied to their property taxes.

The first step that has to take place before a PACE program can be implemented is on the legislative front. A state needs to pass legislation that authorizes a local municipality to create a PACE program; however, eligibility requirements vary state by state. Back in 2010, 23 states had passed PACE-enabling legislation, with only a handful of active programs, according to PACENation. Today, 37 states plus the District of Columbia have passed such legislation, and 24 states and D.C. have active programs. Exhibit 2 illustrates which states have active programs, have programs in development, or are PACE-enabled. Over the course of the past decade, PACE has flourished, financing more than 282,000 residential and commercial projects, totaling roughly \$8.4 billion.

R-PACE TOPS \$6 BILLION, BUT VOLUME SLOWING DOWN

R-PACE has a relatively longer track record than C-PACE despite being active in only three states: California, Florida, and Missouri. Approximately 280,000 R-PACE projects have been financed to date, totaling about \$6.3 billion. It's not surprising that California was the birthplace of PACE, because the state has been a fierce advocate in combating climate change. Indeed, California continues to be the pioneer, as it became the first state mandating that new single-family and multifamily homes three stories or fewer have solar panels on their rooftops starting in 2020. This requirement is a positive for the industry, especially in the wake of solar tariffs imposed by the Trump administration in 2018, along with the recent proposal to further increase tariffs and remove the exemption of bifacial solar panels in 2021. With the tariffs, the solar industry initally saw weakened demand in light of higher prices and the expiration of tax incentives.

Even though origination volume is considerably higher for R-PACE relative to C-PACE, the sector has faced obstacles in recent years. Originations in the R-PACE sector have been sharply curtailed by the introduction of increased consumer protection measures (Assembly Bill 12849 and Senate Bill 24210 were both signed into law in 2017) introduced in California following reports of select unscrupulous contractor practices. Specifically, income verification and ability-to-repay rules significantly lengthened processing times for R-PACE assessments. In one extreme example, concerns about adequate consumer safeguards prompted Los Angeles County to terminate its R-PACE program earlier this year. At the federal level, there is also increased oversight with Senate Bill 2155,11 otherwise known as the Economic Growth, Regulatory Relief and Consumer Protection Act, which was signed into law in 2018 and authorized the Consumer Financial Protection Bureau to apply ability-to-repay regulations to PACE financings.

Nonetheless, DBRS Morningstar expects R-PACE origination volume to improve as originators continue adapting to the new consumer protection requirements and legislative adoption advances, providing residential property owners with an alternative way to finance their energy efficiency, energy renewal, and resiliency measures. Earlier this year, the Hawaiian legislature introduced House Bill 1669, 12 proposing to create an R-PACE program, enabling homeowners to finance qualified energy renewable improvements through assessments tied to their properties, though it does not currently include resiliency measures. Potential forthcoming guidance out of the Consumer Financial Protection Bureau would also likely help to bolster the sector. mitigating concerns about adequate consumer protection measures.

In lockstep with the decline in R-PACE origination volume, R-PACE securitization issuance has also tempered since its peak in 2016, which is not surprising given the aforementioned slowdown in assessment origination, especially in California. As illustrated in Exhibit 3, R-PACE asset-backed security volume started to stabilize in 2019, with approximately \$760 million in issuance, but has retreated somewhat this year as securitizations have yet to exceed \$500 million. However, the sector saw a milestone when PACEFunding issued its inaugural 144A compliant securitization,

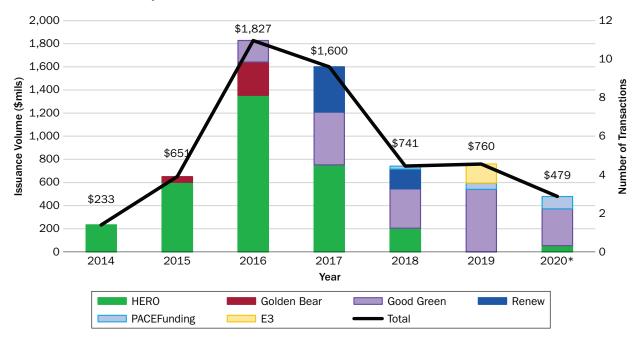
⁹Assembly Bill 1284, California Legislature (2017). https://leginfo.legislature.ca.gov/faces/bill-TextClient.xhtml?bill_id=201720180AB1284.

¹⁰Senate Bill 242, California Legislature (2017). https://leginfo.legislature.ca.gov/faces/billText-Client.xhtml?bill id=201720180SB242.

¹¹Senate Bill 2155, US Congress (2017–2018). https://www.congress.gov/bill/115th-congress/ senate-bill/2155.

¹²House Bill 1669, Hawaiian Legislature (2020). https://www.capitol.hawaii.gov/measure_indiv .aspx?billtype=HB&billnumber=1669&year=2020.

EXHIBIT 3 R-PACE Asset-Backed Security Issuance



NOTE: *As of November 3.

SOURCE: Finsight.

PACEFunding 2020-1, 13 during the summer of 2020. DBRS Morningstar rated the transaction.

DBRS MORNINGSTAR'S APPROACH TO RATING R-PACE **SECURITIZATIONS**

DBRS Morningstar has a published methodology, titled Rating US Property Assessed Clean Energy (PACE) Securitizations, 14 that outlines its approach. The primary risk in PACE securitizations is liquidity. When property owners fail to pay PACE assessments, cash flow to a deal could be disrupted. Liquidity risk is mainly associated with the timing and amount of recovery of delinquent amounts. In the absence of sufficient historical tax payment data for residential properties, DBRS Morningstar uses its RMBS Insight 1.3: US Residential Mortgage-Backed Securities Model and Rating Methodology¹⁵ to estimate the likelihood that there will be a default on the mortgage that triggers a corresponding nonpayment on the R-PACE assessment.

DBRS Morningstar's RMBS Insight model default rates are influenced by specific property characteristics—such as loan-to-value (LTV), mortgage seasoning, and a

¹³ DBRS Morningstar. 2020. "PACEFunding 2020-1: Presale Report." https://www.dbrsmorningstar .com/research/361970/pacefunding-2020-1-presale-report.

¹⁴DBRS Morningstar. 2019. "Rating US Property Assessed Clean Energy Securitizations." https:// www.dbrsmorningstar.com/research/348704/rating-us-property-assessed-clean-energy-pace-securitizations.

¹⁵DBRS Morningstar. 2020. "RMBS Insight 1.3 US Residential Mortgage-Backed Securities Model and Rating Methodology." https://www.dbrsmorningstar.com/research/359116/rmbs-insight-13-us-residential-mortgage-backed-securities-model-and-rating-methodology.

homeowner's credit profile such as FICO score—and regional economic characteristics, including house prices and unemployment rates.

Given the seniority of the amortizing R-PACE lien and corresponding low LTV, DBRS Morningstar expects that the liquidation proceeds from a foreclosure sale will be sufficient to bring the R-PACE assessment current. However, there may be occasions where the land is condemned or becomes permanently unusable and ceases to generate tax revenue. DBRS Morningstar addresses this abandonment risk by assuming a loss severity at the portfolio level.

Last, DBRS Morningstar conducts an operational risk review of key parties involved in not only the origination but also servicing of PACE assessments. Typically, the local municipality services the PACE assessments, including collections and recordkeeping, but in some cases a third party may conduct or monitor direct billing and collection efforts.

PENDULUM SHIFTS TO C-PACE

While R-PACE origination volume has taken a pause the past 24 months, C-PACE has picked up momentum as more commercial property owners and developers become aware of PACE and find it to be an attractive addition to the capital stack for financing qualified building improvements aimed at addressing climate change and natural disaster concerns. More than 2,500 C-PACE projects have been financed to date, totaling roughly \$2.1 billion, according to PACENation. In many cases, C-PACE can help local municipalities meet community sustainability, GHG emission reductions, and other energy-related goals. On the securitization side, in 2018 Cleanfund Commercial PACE Capital, Inc. issued the market's inaugural public C-PACE transaction, CLEAN 2018-1,16 which was rated by DBRS Morningstar.

Lender's consent is an important distinction between C-PACE and R-PACE projects. Unlike R-PACE programs, most C-PACE programs require borrowers to obtain the mortgage lender's consent before financing is provided. C-PACE originators have required lender's consent in most of their financings. According to PACENation, 217 institutions have provided lender's consent to C-PACE projects.

LEGISLATIVE ADVANCES

On the legislative front, much progress has been made in the past year. New York passed Assembly Bill 7805¹⁷/Senate Bill 6523A, ¹⁸ paving the way for C-PACE financing on new construction projects. This follows the New York State legislature passing Senate Bill S6599, 19 also known as the Climate Leadership and Community Protection Act, and the New York City Council passing the Climate Mobilization Act²⁰ in 2019, both of which aim to reduce the carbon footprint and mitigate the effects of GHG emissions.

Although New York had its own C-PACE program previously, there were programming issues that kept it from taking off, such as limited options and high rates.

¹⁶ DBRS Morningstar. 2018. "CLEAN 2018-1: Presale Report." https://www.dbrsmorningstar.com/ research/329995/clean-2018-1-presale-report.

¹⁷ Assembly Bill 7805, New York State Senate (2019–2020). https://www.nysenate.gov/legislation/ bills/2019/a7805/amendment/c.

Senate Bill 6523A, New York State Senate (2019–2020). https://www.nysenate.gov/legislation/ bills/2019/s6523/amendment/a.

⁹Senate Bill 6599, New York State Senate (2019–2020). https://legislation.nysenate.gov/pdf/ bills/2019/S6599.

⁰Climate Mobilization Act, New York City Council (2019). https://council.nyc.gov/data/green/#green bills.

The program has since been retooled as an open program, operated by Energy Improvement Corporation. Energy Improvement Corporation takes care of billing and directs commercial property owners to remit payments to the corresponding capital providers. The revamped program, combined with the legislative milestones seen over the past 24 months and the sheer density of buildings in need of improvements, sets the stage for New York to potentially become the largest C-PACE market in the country.

Legislative progress also occurred in other parts of the country. The Oklahoma legislature passed Senate Bill 1592, 21 expanding the Oklahoma Energy Independence Act to also apply to industrial, educational, agricultural, and nonprofit properties. The measure authorizes counties to collect fees for costs incurred when administrating the PACE program and allows the retention of third parties to administer the PACE program. In addition, the Washington legislature passed House Bill 2405,²² authorizing the creation of a PACE program, dubbed "C-PACER" because it includes not only qualifying improvements related to energy efficiency, energy renewal, and water conservation but also resiliency measures, hence the R in the name. C-PACE legislation is also pending in Delaware and Michigan.

RESILIENCY UPGRADES AND EXTREME WEATHER EVENTS

While earlier on, property owners used PACE mostly for energy renewal and energy efficiency initiatives, resiliency measures have moved to the forefront as building owners have increasingly faced natural disasters, including wildfires, earthquakes, and hurricanes. In fact, California lawmakers amended legislation in 2018 to address the wildfires that continue to plague the state, with Senate Bill 465²³ allowing community facilities districts to use PACE as a financing alternative for fire-hardening efforts. This law, known as the Wildfire Safety Finance Act, took effect in 2019.

Earthquake preparedness has also been top of mind for California legislators. The Los Angeles City Council passed Ordinance 183893,²⁴ which also took effect in 2019. The ordinance requires select buildings identified by the city's Department of Building and Safety to improve their structures by increasing seismic resiliency. Exhibit 4 depicts the various PACE-eligible resiliency projects. The resiliency phenomenon is not isolated to the commercial side, as residential homeowners have also taken measures to bolster their homes to mitigate hurricane and storm damage.

In addition to resiliency developments in California as just mentioned, Massachusetts introduced legislation (Senate Bill 2552²⁵) in 2020 that would extend the state's C-PACE programs to include financing for resiliency-related improvements. Meanwhile, in New Jersey, Assembly Bill 2374²⁶ was engrossed in the summer of 2020. The bill directs the Economic Development Authority to establish a PACE program for financing storm resiliency projects. For example, allowable PACE projects would include (1) flood resistant construction enhancements including walls that would mitigate

²¹Senate Bill 1592, Oklahoma State Legislature (2020). http://www.oklegislature.gov/BillInfo .aspx?Bill=sb1592&Session=2000.

²²House Bill 2405, Washington State Legislature (2019–2020). https://app.leg.wa.gov/billsummary?BillNumber=2405&Year=2019&Initiative=false.

²³ Senate Bill 465, California Legislature (2017–2018). https://leginfo.legislature.ca.gov/faces/ billNavClient.xhtml?bill_id=201720180SB465.

²⁴Ordinance 183893, Los Angeles City Council (2015). https://www.ladbs.org/docs/default-source/ publications/misc-publications/ordinanc.

²⁵ Senate Bill 2552, The 191st General Court of the Commonwealth of Massachusetts (2020). https://malegislature.gov/Bills/191/S2552.

Assembly Bill 2374, State of New Jersey 219th Legislature (2020). https://www.njleg.state .nj.us/2020/Bills/A2500/2374_I1.PDF.

EXHIBIT 4 PACE-Eligible Resiliency Projects

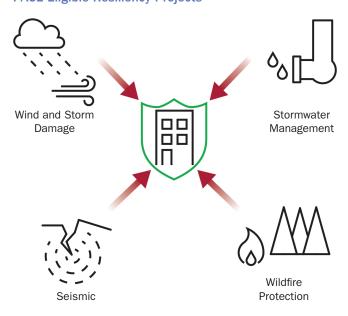


EXHIBIT 5 States Allowing PACE for New Construction Projects

Arkansas	District of Columbia	Minnesota	Oklahoma
California	Illinois	Missouri	Virginia
Colorado	Kentucky	New York	Washington
Delaware	Michigan	Ohio	Wisconsin

NOTE: Gut rehabs/redevelopments are also possible in Texas, Oregon, and Florida, and possibly other states.

SOURCE: PACENation.

flood damage and (2) hurricane-resistant measures. C-PACE resiliency legislation was also introduced in Connecticut and Maine earlier in 2020.

Although Florida failed to pass legislation introduced in 2020 that would have expanded its PACE program to include additional improvements such as replacing seawalls, raising electrical boxes, and elevating home foundations to promote greater resiliency, the state's program does cover wind resistance improvements. Ygrene Energy Fund, a major PACE provider and an issuer whose securitizations DBRS Morningstar has rated, estimates that in Florida over the past 8 years, it has funded at least \$711.2 million in resiliency property upgrades aimed at fortifying structures against extreme weather conditions. Wider adoption of PACE is likely to increase should additional mandates pass.

NEW CONSTRUCTION DEMAND UP

In addition to resiliency efforts, the market has seen more interest in new construction and gut rehabilitation C-PACE deals as property owners strive to make their buildings more energy efficient or resilient. With supporting legislation, PACE programs are increasingly being considered as an attractive addition to the capital stack to help meet those initiatives, and many of these discussions are taking place at the onset. Often, PACE is viewed as an appealing substitute for other parts of the capital stack, relative to more expensive alternatives such as mezzanine debt or preferred equity financing.

As illustrated in Exhibit 5, 16 states currently allow PACE to be used for financing new construction

projects, either through specific legislation or legal opinion, according to PACENation. However, gut rehabs and redevelopments are also possible in Florida, Oregon, and Texas. To date, at least 13 states have completed new construction/rehab/redevelopment projects. From 2016 to 2018, there were only about 12 new construction projects financed by PACE, totaling approximately \$117.5 million. However, the segment experienced considerable in growth in 2019, when financings outpaced the prior 3 years collectively, exceeding \$183.3 million and accounting for roughly 27% of all C-PACE volume, bringing the cumulative total to more than \$300.8 million. Legislative language does not always necessarily specifically stipulate new construction for PACE, although there is one state—New Hampshire—that expressly prohibits PACE being used for such projects.

The benefits of new construction C-PACE are like those for C-PACE overall. In most C-PACE programs and in some state legislation, the lender's consent is required before providing PACE financing. It is worth noting that DBRS Morningstar has seen a small number of C-PACE assessments in securitizations where lender's consent may not have been obtained (e.g., in cases where the assessment amounts are relatively small). DBRS Morningstar considers the lender's consent a credit positive because it encourages borrower discipline. Program administrators typically impose limits on

PACE financings through underwriting requirements, setting a threshold for not exceeding a certain percentage of the property's value. In new construction projects, these conversations with the lender often occur earlier in the process because developers have more flexibility with incorporating green-energy upgrades without having to deal with legacy systems at an existing property.

Four components encapsulate DBRS Morningstar's risk analysis for commercial real estate projects: environmental, construction progress, strength of the sponsor, and the first mortgage lender. From an environmental perspective, although air, water, noise, and waste pollution are inherent in any new construction project, environmental risk in C-PACE is generally caused by preexisting issues such as underground storage tanks, or the type of development being proposed (i.e., industrial manufacturing). Any environmental liability could take precedence over the PACE lien. Environmental risk underscores the importance of site selection and an active project manager to mitigate pollution damage to surrounding areas.

The second risk is construction progress, specifically whether the project is completed on time and on budget. Because construction cycles are relatively long, project managers need to proactively manage risks. Although the land value and approval of all required permits can help alleviate new construction risk, even if a developer has all the required permits, the project may still go awry. To alleviate concerns about timing, a project manager may require that construction reaches certain development milestones before disbursing additional funds. An administrator's experience has an impact as well, where an experienced construction lender will likely be able to better navigate such financial draws, relative to a smaller regional bank. Most construction projects also set aside capitalized interest funded with a portion of the PACE financing proceeds to cover PACE assessment payments until the expected project completion date or stabilization date.

An additional oversight measure is tracking disbursements, where the PACE lender coordinates with a bank loan officer to apportion the funds for energy renewal, efficiency, HVAC, and resiliency purposes. In other instances, a third party—in many cases a principal with the developer—may provide a completion guarantee. This guarantee helps to alleviate the construction completion risk because an additional party has a vested interest in the project's completion. Nonetheless, the guarantor's financial condition is also relevant because the backstop is only as strong as the guarantor's financial wherewithal, especially relative to its existing leverage.

One additional requirement may relate to reaching certain efficiency levels. In some instances, PACE originators may require that a building meet certain targets to make the property eligible for C-PACE financing. Select states have savings-to-investment ratio requirements or mandatory energy savings guarantees. Therefore, the lender may require an independent review of the cost-benefit analysis to determine the project's financial feasibility. In addition, location comes into play, DBRS Morningstar considers properties in infill locations and major metropolitan cities as having a more established track record and less variability in sustainable cash flow than that of properties in rural or tertiary markets. The completion guarantee also provides the lender leverage to bring the developer to the negotiation table should the project go awry.

The last two risk factors are related to external parties in a commercial real estate project, namely, the sponsor and the first mortgage lender. Once the project is completed, the strength of the sponsor, or the general partner, is critical in the ongoing management of the property because the sponsor not only makes management decisions but also is responsible executing the business plan. In addition, the nature of the first mortgage lender is another important consideration, because the strength of the lender comes into play as the first line of defense should aspects of the project deviate from the plan.

DBRS MORNINGSTAR'S APPROACH TO RATING C-PACE SECURITIZATIONS

As mentioned earlier, the primary risk in PACE securitizations is liquidity. To evaluate the frequency of C-PACE assessments becoming delinquent, DBRS Morningstar may review historical property tax payment data for commercial real estate properties in PACE districts where the assessments are located. In the absence of sufficient historical property tax payment data, DBRS Morningstar typically uses historical commercial mortgage default data as a proxy to estimate the propensity for C-PACE assessments to become delinquent. For these pooled commercial asset deals, the LTV has no direct applicability as it does in single-asset single borrower transactions.

DBRS Morningstar focuses on property type and location as the main drivers in estimating expected delinquency probabilities for pooled C-PACE transactions. DBRS Morningstar views the frequency of commercial mortgage defaults to be a conservative proxy for C-PACE delinquencies, as first mortgage lenders or servicers may advance property tax and related assessment payments.

Similar to R-PACE, given the seniority of the amortizing PACE lien and corresponding low LTV, DBRS Morningstar expects that the liquidation proceeds from a foreclosure sale will be sufficient to bring the PACE assessment current. However, there may be occasions where the land is condemned or becomes permanently unusable. DBRS Morningstar addresses this abandonment risk by assuming a loss severity at the portfolio level.

If a C-PACE delinquency should occur, C-PACE assessments have structural features that encourage multiple parties to rectify the delinquency. PACE LTV ratios are typically limited to 30% or lower, incentivizing the borrower to bring the payment current to prevent a foreclosure on the property. If the borrower fails to rectify the delinquency, the low PACE LTV motivates the mortgage lender to cure the delinquency to preserve the lien on the property. Moreover, if the property changes hands, the obligation to pay the PACE assessment is transferrable, with the new owner taking over responsibility for payments. The new owner must pay any outstanding PACE assessment installments and penalties when buying a property.

Across DBRS Morningstar-rated transactions, C-PACE delinquencies, as measured by loan balance, have been low—typically below 4%—although hotel delinquencies have been slightly higher. Those delinquencies that did occur were typically rectified in a relatively short time frame, within one or two payment periods.

Single-Asset C-PACE

There is also increased interest in single-asset C-PACE. When analyzing single-asset C-PACE transactions, DBRS Morningstar uses its CMBS group's North American Single-Asset/Single-Borrower Ratings Methodology,²⁷ which is an LTV-driven model. DBRS Morningstar conducts a review to ascertain the condition and quality of the property as well as an analysis of available historical operating performance, financial statements, appraisals, rent rolls, and relevant third-party reports, including engineering and environmental reports. Once the property analysis is complete, DBRS Morningstar estimates the property's stabilized net cash flow (DBRSM NCF). Afterward, DBRS Morningstar applies a stressed capitalization rate to the DBRSM NCF to derive the DBRS Morningstar value of the property.

²⁷ DBRS Morningstar. 2020. "North American Single-Asset/Single-Borrower Ratings Methodology." https://www.dbrsmorningstar.com/research/357477/north-american-single-assetsingle-borrower-ratings-methodology.

PACE IS GAINING GROUND DESPITE THE PANDEMIC

Initially, there was some concern that the COVID-19 pandemic might negatively affect PACE volume because of uncertainty in the market, but to the contrary, it has accelerated PACE interest on both the residential and commercial side. Because the residential business relies heavily on contractors being inside homes, originators expected the onset of pandemic in the United States to significantly curtail those visits.

However, with a good portion of the labor force working working from home for extended periods, the exact opposite occurred. Delayed home improvements that were once on the back burner moved to the forefront. Although solar installations experienced a sharp decline in the second quarter following shelter-in-place measures, installers quickly adapted and transitioned to a digital model. With more homeowners working from home, they became sensitive to rising electrical costs. Meanwhile, more traditional lenders took a pause, leaving an opening for PACE to fill that financing need.

Similarly, on the commercial side, banks became more cautious with their lending, often choosing to sit on the sidelines. However, most new projects still require first mortgage financing, and first mortgage lender's reluctance can ultimately delay projects. PACE originators have stepped in and filled that void, serving as an alternative means of financing qualified improvements for commercial properties, especially in the retail and hospitality sectors, which have been most hurt by the pandemic as a result of forced closures and travel restrictions. Moreover, property owners who had initially planned to incorporate PACE into their projects later in the year accelerated those efforts while financing was still available. Petros PACE Finance, LLC (Petros), a major C-PACE lender, recently reported that they originated 30% more C-PACE originations in H1 2020 than in all of 2019.

In addition, surging demand for air purification, filtration, and ventilation systems is also accelerating interest in PACE as a means for financing these measures. In some cases, tenants are telling landlords that they will not return until a safer workplace is provided, with sufficient air-handling systems integrated. Deferred maintenace also needs to be addressed. In some ways, vacancies make it easier for property owners to make these upgrades.

Heightened demand for retroactive financing is another development that has accelerated during the coronavirus. Both Greenworks Lending and Petros, issuers whose securitizations DBRS Morningstar has rated, have seen sharp spikes in retroactive financings since the onset of the pandemic. Although originators typically finance PACE projects during the construction phase, there has been increased interest in using retroactive financing, which allows property owners to obtain additional financing for new projects that have already been completed, in some cases up to 3 years ago. In particular, commercial property owners find the ability to delay the first repayment for as long as 24 months after closing attractive, especially in this constrained lending environment, providing much needed liquidity. Meanwhile, there is no completion risk in these cases, which is compelling to originators. However, state legislation needs to stipulate that PACE can be used for retroactive financing.

PACE TO MOVE FROM ESOTERIC TO MAINSTREAM

Two main catalysts are driving momentum in the PACE sector. Legislation is a major force behind the growth seen in PACE to date, whether it is the state authorizing the creation of a PACE program or an environmental initiative mandating that certain

measurable objectives are achieved. Second, increased focus on ESG initiatives, for both entities and investors, is also a driving factor. Again, the migration from how people invest to focusing on the tangible outcomes of those investments is likely to continue. As property owners seek ways to finance their energy efficiency, energy renewal, and resiliency improvements, PACE can be an important part of the capital

To order reprints of this article, please contact David Rowe at d.rowe@pageantmedia.com or 646-891-2157.