Joe Indvik: All right. Welcome, everyone. My name is Joe Indvik. I'm the Finance lead on the Department of Energy's Better Buildings Initiative. And today were going to be discussing how to use commercial PACE financing to improve efficiency and resiliency in buildings. This is a topic that I'm particularly excited to be discussing with you. I think our panelists are as well. It's also a bit of a hot topic these days, given all the weather-related disasters that we've been facing recently. So really excited to dive into the details in just a moment.

Before that, a quick logistical note. We will have time for Q&A at the end of the hour so please enter your questions via text in the chat box that you see on your screen. And if your question is for a specific speaker, please note that person in your question and I will direct the question to them. And you can enter questions at any point throughout the webinar so feel free to do that as folks are speaking. And we'll try to get to as many of those as we can. The other thing to be aware of is that this session will be archived and posted to the web for your reference. We will send out a link to all the webinars at a later date.

So without further ado, on our next slide, let's see what it holds. The main take away we want you to have from this webinar is a practical understanding of how Commercial PACE financing can be used to improve resiliency and energy performance in your buildings or in the buildings of your organizations that you work with. So we are going to be mainly speaking to building owners and operators who might be interested in improving their own facilities. But if you are in the industry or just generally interested in this topic, I think this webinar will be useful for you as well. So next slide, please.

In the next hour, there's three things I want to cover here. So we'll do a quick introduction to Commercial PACE in case you're not familiar with the model. We will also do a quick overview of a recent trend and the current state of the Commercial PACE financing ____. And then we'll talk briefly about why many organizations are finding Commercial PACE to be a great way to get resiliency projects done. And then finally, we'll spend the bulk of our time diving into some successful case studies from around the country with our esteemed panelists to give you a sense for how this is worked in practice and what the results of actually been.

So the next slide, speaking of our panel, we're very fortunate to have an amazing group with us today representing three financing

companies that are really leading the market when it comes to Commercial PACE financing for resiliency. So I'm going to let them introduce themselves a little bit more fully during their presentations if they wish. But we've got Andrew from Greenworks, Michelle from Counterpointe and Will from CleanFund who are going to be speaking in that order today.

I should note that all three of those companies, actually, if you'll go back a minute. All three of those companies are financial allies of the Department of Energy Better Buildings Challenge which means they've committed to funding energy efficiency and renewable energy projects and to working with the Better Buildings community to help you get your projects done. So after the webinar, if you are interested in moving forward with PACE financing in your facilities, all three of our panelists and their organizations would be more than happy to speak with you to get your projects moving. And I'm always happy to speak as well to get you connected to the right people. That's really why we are here as a Financial Allies Network so please let me know if you have questions.

Okay. On the next slide, we're going to briefly do an overview of Commercial PACE financing. Next slide again. So what is Commercial PACE? PACE of course stands for Property Assessed Clean Energy. And this is a specialized financing mechanism designed for energy efficiency, renewable energy, water conservation and a wider range of projects as well in commercial buildings. Residential PACE is also available, but we are focused on commercial for today.

So there's a lot of complexity to PACE but there's really four things that define what Commercial PACE is. So first, it can provide 100% upfront financing of costs associated with qualified energy and water measured. And second, and of course the reason we call it property assessed clean energy in the first place is that the customer repays the financing as an assessment on their property tax bill as opposed to repaying the lender directly as they would under a traditional financing arrangement. So those are a couple of benefits. So first, it connects the financing to the property rather than to the individual borrower which I'll talk about in a second. That's very important. Second, under most leases, it enables either to sort of share the payments with your tenants which can help overcome the split incentive problem. And third, it provides some added security to the lender and in many cases, a lot of lenders offer better terms than they would under traditional financing products than the loans and leases.

Speaking of better terms, PACE financing is often available over a 10- to 20-year repayment which is a lot longer than most other financing mechanisms. And then of course, spreading payments out over a longer period can reduce the cash flow impact for customers in the near term and in many cases, we see that the PACE finance projects are actually cash flow positive from day one, meaning that the savings exceed the tax assessment payment.

And finally, as I mentioned, the financing with PACE is connected to the building rather than to the borrower which means that the financing will transfer upon sale of the building. So that can create a good incentive to invest in the long-term resiliency and energy performance of your buildings, even if you are planning to sell in five, 10 or 15 years.

Moving on to the next slide. A quick overview of how a typical Commercial PACE financing transaction is arranged. All of these programs work a little bit differently, but this gives you kind of an indicative sense of who the parties involved typically are. So the investors will put up the capital to fund the project and then the contractor uses that capital to do an install. And then the building owner makes repayments in the form of a special tax assessment paid on their property tax bill back to the local taxing authority. And then there's also typically a PACE administrator who kind of runs the program, does marketing and make sure everything runs smoothly.

Moving on to the next slide. Another important thing to note about PACE is that because property taxes are involved, it's only available in locations where the appropriate legislation and programs are in place. So specifically, it requires both PACE-enabling legislation to be passed at the state level as well as PACE to be adopted at the city or county level within that state. So we have seen very fast growth in the adoption of Commercial PACE so far. We've got 33 states plus DC, this is the data as of this month, that have PACE-enabling legislation. And 20 states plus DC that have programs in place. And we've seen nearly $600 million in Commercial PACE financing that's been deployed across almost 1500 projects. And that growth is particularly fast when you consider that PACE really only came on the scene around 2008 or 2009, so all of those projects have been since that period. And most market analysis points towards Commercial PACE continuing to grow in the foreseeable future.

And if you'll go back to the last slide for a moment, all this information, including this map is available on PACENation which is a great industry group that has a fantastic website that tracks PACE programs, legislation and pretty much everything you want to know about Commercial PACE. So I highly recommend that you check that out.

Moving on to the next slide. If you're wondering what types of buildings Commercial PACE has been used in, the short answer is just about every type of commercial building. So office, mixed-use, retail, industrial and healthcare have been the biggest chair so far. But as you can see, PACE is applicable to a wide variety of building types.

Moving on to the next slide. You might also be wondering what types of measures can be financed with Commercial PACE. This slide gives you a good indication of the typical measures it can support. The applicable technologies are going to vary by program and by state but in general, if a project either saves energy or water or generates power, there's a good chance it's going to qualify for Commercial PACE. And there's even some cases where non-energy related projects were qualified like seismic retrofits in California, for example, which we're going to hear about from CleanFund later in the webinar.

Okay. On to the next slide. Now that we've done a quick overview of all the moving parts of PACE, I want to talk a little bit about why organizations are often finding Commercial PACE to be a good way to improve resiliency in their buildings. On to the next slide.

I just want to briefly talk about kind of the imperatives to invest in resiliency first. So I think as we all know, this has become a top priority for a lot of building owners and operators and particularly in 2017, we had a historic year in terms of the quantity of weather and climate related disasters which totaled $300 billion in federal damages. On this map here from the National Oceanographic and Atmospheric Administration shows the events, 16 events, that costs at least $1 billion in damages, many of these events were actually quite a bit more than $1 billion. And I think the interesting thing about this is these events were spread pretty easily across the country. So resiliency matters everywhere, not just in principal areas where we most often think about it. And it's also important to note that many of these disasters can be at least partially mitigated by improving building resiliency. So this past couple years in particular have led to an increased interest in scalable

sources of capital to help cover the upfront cost of resiliency measures and Commercial PACE is one of the mechanisms that stepping in to help fill that gap.

So on to the next slide. I want to quickly address what we mean when we are talking about resiliency. So this is a simple taxonomy that we developed as part of the Commercial PACE for Resiliency Toolkit which is kind of the inspiration for this webinar and I'll talk about it a little bit more in a second. But essentially, we split resiliency measures into three buckets. So you have energy supply projects, which generates the work to manage energy on site so things like renewable energy, battery storage, etc. And of course, having on-site energy resources to keep the lights on, even if there's a grid or a fuel supply disruption. And then we have resource conservation measures which reduce total energy and water demand, which of course means you can operate water on backup power and are vulnerable to disruptions. And then we've got structure hardening projects. So these directly mitigate things like property damage, bodily harm, system outages during direct impact events like hurricanes and earthquakes.

So one really important thing to note here is that there's strong overlap between energy performance and resiliency. You'll notice that the majority of these measures are things that you may well want to pursue anyway just because of the potential to save energy and save money. And even for the projects like structure hardening projects that don't have an obvious energy component, opening up the building can often present an opportunity to implement energy efficiency measures while you're in there anyway. So while you are pitching projects internally, don't forget to consider both the energy and the resiliency benefits of many of these upgrades.

So moving on to the next slide. So why specifically do building owners find Commercial PACE to be a good fit for their resiliency projects? Well, there's three big reasons that we frequently hear in our conversation with building owners. The first is that resiliency can be capital-intensive. And the fact that PACE can cover not only 100% of the hard costs like equipment costs, but also soft costs like labor, installation, etc. That can be great for organizations that have limited budgets for this stuff or generally want to limit their capital expenditures when it comes to improving resiliency. Second, the longer-terms of Commercial PACE of 10 to 20 years typically can be also very helpful because it helps to sort of smooth out the cash flow impact of these investments which can make them a little bit more palatable in the long term. And third, the fact that the financing transfers upon building sale is huge

because it means that whereas previously you may not have been incentivized to invest in a property that you are planning to sell in five or 10 years, now, there's a little bit more of a financial incentive to do so because the financing will transfer automatically with the property if you were to sell it in the future.

Moving on to the next slide. So because of the imperative for investing in resiliency that we talked about as well as the increased interest in Commercial PACE to support resiliency, we recently released this Commercial PACE for Resiliency Toolkit that's part of Better Buildings. So this is designed to be a one-stop shop of information and case studies for you. It's available online now at the link you see here or if you just Google "Better Buildings Commercial PACE for Resiliency Toolkit," that will get you there as well. And the toolkit includes an overview fact sheet, some introductory webinars and three really in-depth case studies looking at examples of where CPACE has been successfully used to make resiliency happen. And I'm happy to report that all three of the organizations that helped us develop these case studies are on the call with us today. So rather than have me tell you more about this, I figure we have each of those companies, so Greenworks, CleanFund and Counterpointe tell you a little bit about them.

Moving on to the next slide, I'm really excited. We have an opportunity to hear from these companies which as I mentioned, are doing great, market-leading work on Commercial PACE for resiliency. So each of our speakers is going to tell you a little bit about their work, highlight a few specific projects that they think are particularly informative. And we hope a few of those examples will resonate with you as you look at your resiliency projects in your own facilities.

So, before I handed over, a quick reminder that you are free to ask questions anytime during the presentation using the question chat box on your screen. And with that, I will hand it over to Andrew from Greenworks to speak to us about their projects.

Andrew Zech: Thanks, Joe. And appreciate you and the Better Building's team organizing the webinar today. I think it's a fantastic way to marry your convening power and the idea that it's PACE and the idea that is resiliency with some real world examples of how projects are getting done on the ground. So excited to be presenting today.

As Joe mentioned, my name is Andrew Zech and I lead business development for a firm called Greenworks Lending. Greenworks is

one of the largest commercial PACE companies in the country. We lend in 14 states and the district of Columbia currently. And my role at Greenworks is really twofold; the first is to partner with most building owners and contractor partners toward developing projects to help make PACE a turnkey part of their daily lives. And then the second is actually working projects through to completion. And we are a balance sheet lender, so we only get paid when the project gets done. So we are always hustling alongside our partners to get projects to the finish line.

The project that Joe and the Better Buildings team had asked me to talk through today is a really neat one that we financed about a year and a half ago in Hartford, Connecticut that included, among other things, the nation's first PACE financed microgrid. And so I'll talk a little bit about the resiliency pieces of that project but also wanted to zoom out a little bit and share some of the motivations of the owner and developer for the project overall because at the end of the day, it's the financial motivations that really make those projects come to life.

So the project in question, you can see on the right-hand side of your screen is 777 Main Street in Hartford, Connecticut. And this is one of those aging beauty buildings that are in so many of our downtowns. 777 Main Street was for a long time the tallest building in Hartford, Connecticut. I'm sure it's been eclipsed at this point. And it was really seen as an icon of Hartford's glory days as the insurance capital of America. And so this was the building that the city and in fact the whole state of Connecticut had a vested interest in seeing brought back to life. When the Hartford National Bank had moved their headquarters out of 777 Main, the building was left vacant for a number of years.

So it was brought back to life really on the back of a gentleman named Bruce Becker who is a principal at Becker and Becker who is just a phenomenally inspiring social and environmentally conscious developer. He is the building owner that all of us kind of search for who wants to be revitalized in their downtown areas and doing so in a way that is environmentally conscious as well as being financially beneficial to his investors.

And when he took a look at this building, he saw a natural candidate for a large mixed-use component. All of those upper floors have now been transformed into residential apartment and condo units, a total of 285 of them. As well as office, dining, retail and event space in the lower floors. Something that would make this building and around the clock center of activity in Hartford.

He also wanted to make sure that the building was going to achieve Lead Platinum Certification. That was a key component both because of the impact that it has on the financial returns for the building but also because of the impact that it has on the rent per square foot. So it's always got to be both sustainability and financially driven. And the idea to incorporate a fuel-cell centered microgrid for this project was driven by one of the key anchor tenants that he was trying to attract to the space. It was a pretty big retail client of his and wanted to install a pharmacy and health clinic combo on the ground floor that needed the ability to have powered dependably, even in the event of grid outages.

So that was the challenge that he was up against. And we, as Greenworks Lending, were able to fund this project but before we dive into the specifics of it, I always want to highlight that we are calling out one very small piece of a very large project with partners that range from Eversource, the local utility there that heads up and did a fantastic job putting together an incentive package that helped make this possible; Dusan and Encon, who were two of the biggest providers of the technology; Fairfield County Bank, Ridgefield Bank and the Capital Region Development Authority, all of them held mortgages for a past credit structures on this property who needed to buy into the PACE structure before it could be used.

So if we flip the slide to the next one, we can dive into the technology itself. So the key resiliency component of this project was a microgrid. And the centerpiece of the microgrid was the Dusan Fuel Cell, a 400kw fuel cell, as well as this rooftop solar array. If you look at this building, you can kind of tell if you are solar developers that this is not necessarily the most natural fit for solar panels but the incentives in the state of Connecticut made hoisting solar panels all the way to the roof of 777 Main Street financially feasible. And then importantly for microgrids, obviously, there needed to be a relatively sophisticated set of software that would allow this building to go into island mode in the event of a grid disruption. And so in a very short span of time, the building can kind of shut off from the grid and produce all of the electricity that it needs through the fuel-cell and solar array. And of course, that is heated by the fact that a number of the other pieces of equipment in this building were incredibly energy-efficient. So one of Joe's points that he made early on in the webinar was that fact that resiliency and efficiency often go hand in hand. And that was certainly the reality here. So Bruce had designed stability and I believe that they achieved something like 74% above code performance which is just unheard of for a

building of this age. And huge components to that were LED lighting, low-flow fixtures, energy and heat recovery systems and smart thermostats all throughout the units. He also is a big believer in recharging stations so that was another key component of the project.

Now, one of the things to tie this into PACE that I did want to call out because Bruce was certainly not short on funding for the project. He is a very well-respected developer. He has lines of banks who are kind of tripping over themselves trying to offer him mortgages. He was given a number of different incentive packages and tax credit structures from the city of Hartford and the state of Connecticut since this was such a public interest project. But he chose to incorporate PACE into the capital stack anyway. And that, of course, begs the question why. What was the differential value that PACE and Greenworks were bringing to the table?

And so down at the bottom half of the slide, I wanted to call out a few of the bullet points that we are seeing to be really attractive to developers for projects like this. So the first is that PACE reduces the cost of capital on a project like 777 Main St. It is long dated assets where typically we are lending 20 or 25-year terms and because of that, it's not going to be cost competitive with the first year mortgage in terms of pure interest rate. But it does give the developer the ability to take out as much mortgage as they can get, frequently 65% or 70% of the building's value. And then to add a slice of PACE on top of that that would have otherwise had to be filled with mezzanine debt, preferred equity or some other source of gap financing that would typically clock in at a price tag of 10%, 12%, 14% interest rate. So it was dramatically reducing his cost of capital.

The second thing that was real important from the developer's perspective was being able to spread out those payments over 20 years. And we will take a look at the energy savings that were driven by the system in just a second. But by reducing the annual payment, it did make the project cash flow positive from day one.

And then the third and fourth are really tied. This allowed the developer here to increase their leverage on the property and thus put in less equity, not to a dangerous level that would have been a focus of compliance in the bank, but to get to a level where the returns for the investors were dramatically higher than they would have been otherwise. And so all of that made possible the energy related operating savings that we'll transition to in a second.

So if you could turn the slide, will take a look at the energy savings themselves. So as you can see here, a combination of fuel-cell and solar savings were driving really robust energy savings, even in addition to the resiliency that the system was providing. The fuel-cell clocking in at about 3.4 million kW per year. The solar system, obviously, much smaller at 142 kW per year. But a combined 3.5 million kW hours being generated, that would lead to an avoided electrical cost of $602,000 annually plus would allow the building to actually sell some of that power back to tenants, generating an additional $180,000 of income. There were additional avoided thermal costs, obviously the fuel-cell was being used to serve as electricity and heat recapture that was driving $87,000 in annual savings. And that was offset partially by the fact that additional natural gas which needs to be purchased to drive the fuel-cell. But net/net, driving $740,000 of annual net savings and that was a system that could be funded with zero dollars out-of-pocket through a combination of the mortgage, the tax credits and the CPACE'd financing. So a great win both for Becker and Becker, a great win for the tenants of the building and a great win for the city of Hartford. We often times talk about the benefits to the landlords and the tenants, but this was a section of Hartford that was really looking for a shot in the arm in terms of boosting property values and attracting new tenants. And this project was just what the doctor ordered.

So with that, Joe, I'll hand it back to you and move on to the next case study. But happy to take questions either now or to wait until the end and answer questions about this case study. Oh, and a final point, my marketing guru, Adam Moskowitz, wanted me to make sure to include a call out to our website and there is a video of this 777 Main St. case study that is on our website. GreenworksLending.com. and then there's a case study section and you can find this video. So go take a look. Give us a call and we are happy to help with any projects that need CPACE funding.

Joe Indvik: Fantastic. Thanks, Andrew. That was great to hear. Also, congratulations on the success of that project, too. I'm going to hand it over to Michele here in a second, but I have one question that I wanted to address just to make sure we are all on the same page before we continue. So one person smartly asked, what's the difference between CPACE and PACE. And sometimes those terms get thrown around a little bit loosely. So PACE is the general term for Property Assessed Clean Energy Financing. And then there's two different varieties of PACE. So you have Commercial PACE which often goes by CPACE which is applied to any potentially nonresidential building. And then you have residential

PACE or RPACE which is specifically for single-family residential. So just wanted to clear that up for the folks who were a little bit confused about that terminology. But with that, I will hand it over to Michelle.

Michele Pitale: Thank you. This is really exciting. A large part of the assessments that we finance are resiliency improvements and this is a wonderful opportunity to talk about something PACE for Resiliency which is sometimes not the first thing that people think about. Next, please.

So my name is Michele Pitale. I am the Pro Head of Middle Markets for Counterpointe sustainable real estate. We have a partnership with Hannan Armstrong. Hannan Armstrong is a publicly traded REIT with over $4.6 billion in assets under management. And they have focused on sustainable infrastructure markets for over 35 years. Counterpointe was one of the first in PACE, both as a program administrator through public/private partnership and as a capital provider, providing up to $100 million per project. We are managed by Commercial Real estate Professionals and we are the commercial real estate partners of Hamman Armstrong as Hamman Armstrong Sustainable Real Estate. Next

This partnership arose because we believe that commercial real estate finance and sustainability finance have arrived at a convergent point. The partnership provides product that allow owners to take advantage of this convergence and really advance commercial sustainability finance. Next.

Nationwide, PACE provides financing for clean energy improvements. Individual state public safety issues have led legislatures to include other improvements in their PACE enabling legislation. These additional eligible improvements vary by state, but they are generally directed at risk mitigation and as resiliency. We are program administrator in some of the largest active jurisdictions and I will focus on what we have seen for resiliency in these states. Next.

As a program administrator in states at risk for major disasters, we've seen PACE used extensively for multiple types of resiliency projects. While most major disasters including California are due to fire, the state is most associated with seismic risks. California has declared 12 earthquake disasters since 1971. Through state legislation enabling water conservation and seismic strengthening, PACE financing is being used for resiliency to prepare for these

disasters. In Florida, 2017 saw Hurricanes Nate, Irma, Harvey and Maria. We were all happy to learn that the properties I'm going to present in the case study came through 2017 well, despite being in the Florida panhandle after wind resistant improvements financed by PACE. Next.

In 2015, San Francisco partnered with Counterpointe Energy Solutions to provide PACE financing for its soft story retrofits program. PACE can be used for the common good and to support government planning for resiliency. 2017 California state law later enabled PACE financing for seismic strengthening throughout the state. Next.

We'd seen a lot of use of PACE for seismic. It shows owners are taking advantage of the fixed rate terms up to 30 years to reduce seismic risk. Next.

I'd like to take time to talk about green roofs for a moment because I think they are a powerful tool to improve both a property's and a community's resiliency. They are extremely efficacious at storm water management and they modulate ambient temperature to help reduce urban heat island effect. They provide many benefits to communities and there is legislation that is being considered or currently enacted in several cities throughout the country that mandate green roof installations in new construction. This is one of the strongest things – PACE is very applicable for capital-intensive projects such as green roofs and can help owners eliminate value engineering, PACE can provide the financing that stops green roofs from being eliminated from some budgets and really green roofs are no longer considered a luxury for the environmentally conscious because PACE has provided the financing tool that makes these economically advantageous. Next.

The Florida PACE Funding Act included the clean energy financing associated with PACE, but it also enabled PACE financing for roof, wall and opening upgrades. I did a quick review of several counties in our program and saw that most of the resiliency PACE assessments were being used for window and door upgrades. We have recently seen an influx of PACE financing for generators, mostly in response to recently enacted Florida legislation which is mandating generators be installed in nursing homes and assisted living facilities. Next.

These are Florida transactions. These owners are typical in that they combine wind resistant resiliency improvements along with

energy efficiency upgrades. Most of the upgrades here were lighting and HVAC improvements. Next.

The finances of an assisted living and nursing home, they have multiple factors to consider as they must provide extensive services to residents, have capital reserves, equipment and other state requirements. In addition, they typically rely heavily upon Medicaid or Medicare for reimbursements. These owners had a mortgage that was maturing in two years and they were looking for a source of capital to upgrade their facility to install impact windows and doors and to upgrade their roof to be more hurricane resistant without refinancing their mortgage or using equity capital. They explored several different options before settling on PACE for the improvements. As an added bonus, they also added new elevators to the building and through the 2017 hurricane season, they came through very well and their utility savings are estimated at $26,000 per year which is an added bonus on top of the improved resiliency.

Thank you for this opportunity and I look forward to speaking to anyone that wants to discuss cost-benefit analysis of PACE for any of their resiliency projects or any questions regarding PACE overall. Thank you.

Joe Indvik: Great. Thanks so much, Michelle. Let's go to the next slide here, I think we have some contact information for Michelle as well. There we go. Thanks a ton. That was great. And finally, the third represent her here, I want to turn it over to Will from CleanFund. so Will, take it away.

Will Clark: Thanks, Joe. I appreciate the opportunity and it's exciting to talk about the Seton project. My name is will Clark and I'm the VP of Originations at CleanFund. We are a California-based, CPACE Apple provider. I've been around since 2009. And so today, were going to talk about the CPACE for seismic resiliency which as some of you have no doubt realized, is a big deal in California. Next slide, please.

So awareness of seismic risks to hospitals is not new. After 1906, the San Francisco earthquake, to hospitals became infected with the plague and were burned to the ground as a preventative measure. A 1971 earthquake in Sylmar destroyed much of a VA hospital and killed about 40 patients. So legislation was passed shortly thereafter that sought basic seismic upgrades to hospitals. The 1994 Northridge earthquake revealed while some of the seismic improvements helped keep the structures upright, many

hospitals were not able to open because the equipment or utility services within the hospital were heavily damaged. As a result, California implemented new seismic requirements that required more resiliency over time with an initial deadline of 2020. The ultimate goal is for hospitals to survive a significant earthquake and to be able to provide services for more than 48 hours without outside assistance by 2030. Next slide.

Seton Medical Center is located between San Francisco and San Jose in Daly City, California. For any of you who fly into SFO you will see it on your way into the city on the hillside on the left. It was built by the Daughters of Charity which is the Catholic non-profit. It provided medical care in California since the 1850s. Seton was billed in 1963. Given the age and the amount of work that was required, I'll periodically identify a few important components of our credit decision to complete this transaction. For example, as the largest employer in Daly City, and with one of the only 24-hour emergency rooms on the Pacific Coast, about 50 miles south of San Francisco, Seton has an outsize role in the region. We feel confident that if things went sideways or go sideways with the project, their strong external support from the hospital. Next slide.

Seton was billed as a sunshine hospital. And you can see a little bit of that in this façade photograph. And what that means is that each room is exposed to outside sunlight and air. It also means that it's a very complex façade that requires extensive seismic outfits. Seton had a dire need for seismic compliance but years of losses, culminating in a $65 million loss in the system in 2015, meant the capital it was scarce. And with a back log of deferred maintenance and the need to add and to expand the medical services and a major regulatory deadline looming, Seton needed a long-term, low cost source of funds. CleanFund was the lead capital source and worked closely with our friends at Petros to provide $40 million of necessary funding to meet the 2020 seismic requirements. Unlike 777 Main St. project that our colleagues at Greenworks spoke about, you'll notice that in fiscal year 2015, there was a pretty substantial net loss. The CPACE proceeds were a core component of their repositioning and reap capitalization of this hospital specifically. That meant that we had to take a pretty deep dive into the debt obligations of the Daughters of Charity system and the specific obligations, bond obligations of the Seton Hospital complex. We also looked at the recapitalization and the repositioning plans from a leadership team and then we evaluated their progress to date. Next slide, please.

This is an aerial photo of the Seton complex. It provides context for the work to be undertaken. A total effective square footage somewhere around the order of 350,000 ft.^{2}. The main tower of the pavilions dated from 1963 and that area houses the patient rooms. The 1978 base houses surgeries, administrative offices and diagnostics. So an important component to the retrofit is providing more cohesion and service redundancy throughout the hospital. Addressing the structural complexity is particularly challenging as we'll see in the very next slide.

I'm not going to read the improvements for seismic compliance was pretty intrusive. This work takes place below grade in the foundations, it took place in internal spaces and in the external curtain wall. In California, CPACE for seismic work does not require any energy audit or savings to investment hurdle. Nevertheless, from the list, you can see several areas where energy efficiency would be naturally expected.

Obviously, it takes an immense amount of engineering and operational coordination to keep the hospital open while undergoing these repairs. Because CPACE is a long-term form of finance which is fully committed day one, it provided Seton with the flexibility to schedule upgrades as necessary and the confidence that the full amount of funds was available. Next slide.

You don't need me to read this list either but while not as intrusive as seismic upgrades, these non-seismic upgrades affect much of what the public sees. This is the core component to the requirement that hospitals remain operational following a seismic event when resources are otherwise unavailable. While structural improvements have limited effects on efficiency, these nonstructural improvements will generally have some type of associated energy savings. They provide additional comfort and some portion of the CPACE assessment will be offset by direct energy savings, to say nothing of the repair and maintenance savings that you realized by upgrading obsolete or outdated equipment. Next slide.

Joe spoke about the flexibility of CPACE, specifically, eligible costs such as direct upgrades and soft costs associated with engineering and architecture. This is a partial list of the categories covered by CPACE in a seismic contest. Because CPACE is long-term fixed-rate financing, it's not tied to the performance of a specific system or upgrade. It reflects what buildings are, complex and interconnected components that generate efficiencies and savings over the lifetime of building. And so this multilayer aspect

of CPACE enables the property owner to upgrade and install systems that collectively contribute to a better building. Next slide.

Complex projects like seismic upgrades touch every major and minor building system generating large savings by replacing outdated equipment and smaller savings that are realized over the full term of the system. Those savings aren't always easy to model or to understand which of course is one reason why seismic upgrades in California do not have minimum efficiency requirements. Nevertheless, the Seton project is an excellent example of the policy goals of CPACE, enabling a valuable but capital constrained resource to make needed upgrades.

And the need to upgrade to improve our build environment is urgent and necessary. Our friends at Better Buildings provide the guidance and science and CPACE can be an important component at providing the finance. Thank you for your time.

Joe Indvik: All right. Thanks so much, Will. That was great. We got a ton of questions here so were going to try to get through as many of these as we can. However, I have a few notes here at the end, if you want to go through the next slide, Hope. And there's Wills contact information by the way.

So wanted to mention a few additional resources and some things may want to consider if you are looking at PACE financing in your own facilities. Obviously, talking to any of the panelists today would be a great next step but there's some other additional reading you can do and some websites we suggest that you check out as well.

So for the next slide, I mentioned these guys before but it's worth mentioning again. PACENation is a fantastic industry group that maintains a constantly updated website from all of the PACE policies, programs and administrators. We had one question here about where you can find a list of programs amidst raters and PACENation has a fairly, I believe comprehensive list of all the active PACE programs and details and websites to reach each of those programs. So I highly recommend you check that out. They also have some additional resources like fax sheets and explainers if you need help kind of pitching PACE internally. On to the next slide.

I also want to highlight the Better Buildings Financing Navigator. So this is a tool that we developed through the Better Buildings Initiative to help organizations access financing for energy

efficiency and renewable energy projects. This is a free, publicly available online tool that pulls together information about PACE and all of the other major financing mechanisms for efficiency and renewables and puts it into kind of one easily digestible package. So rather than going out and reading all the 50 or 60 white papers that are on this topic, we read those white papers for you and kind of condense them down into a 10 or 15-minute online experience. And you can use the navigator to explore different financing options. You can answer some questions about your particular project and preferences and we will match you to financing options that might be a good fit based on those preferences. And I think most importantly, this is also an opportunity to connect with the Better Buildings financial allies, three of whom we have with us today. There's another 40 partners in Better Buildings. We have them all listed out and you are able to sort and filter them based on the products they offer as well as some other factors. So that's a great way to find someone to speak with if you want to move forward with your project. Version 1.0 of the Navigator is currently online at the URL that you see there, and you can also just Google "Better Buildings Financing Navigator" and I'm happy to report that we are going to be launching version 2.0 in late June of this year, so very soon. And that's going to expand some of the features, include renewable energy financing options and some other additions as well. On to the slide after that.

I want to make a quick plug for the Better Buildings Summit coming up in August. This is an event that we do every year as part of Better Buildings and financing is a big part of the content here. Some were going to have tons of financing contacts at the summit this year. We're also going to be doing financial speed dating so if you are a partner in Better Buildings or an attendee and would like to speak with a financing provider about your project, you can sign up when you register for speed dating and we will match you with financial allies that might be a good fit for little 15-minute, quick conversations to learn more about their models. So I highly recommend that you come to the summer. And one more slide after this.

Yes, one final note. Again, the inspiration for this webinar and much more detail. Deep dives into the three case studies that we discussed today can be found in the CPACE For Resiliency Toolkit. This is again live and available at the link there or you can just Google it. And I think with that, I think we can move to the next slide. There's my contact information if you want to learn more about the financial allies broadly or if you are looking to connect with the right people within the Better Buildings

community, I'm always happy to discuss all things financing or anything else, frankly. And with that, I think will move into questions.

So the first question, actually, was a really good one to start with. Let me pull it up here. So this question is for any of the panelists who would like to take it on. But the question is, what are the qualifiers or decision-making metrics that you used to identify projects that would be a good fit for Commercial PACE versus other financing mechanisms. So what makes a good project a good fit for Commercial PACE?

Will Clark: Joe, this is will. I think there are a lot of things that go into that. Typically one of the things that I talked about with the seismic is you are looking at multisystem upgrades. So you are looking at things that have an immediate payoff like LED lighting or improving the functioning of the building envelope. But then you are also looking at improvements that can be longer-term and may take a little bit more to pay off where you might be using CPACE to replace an eight-track system but it's going to be a more efficient system than just something you grab off the shelf under more conventional financing. A lot of other things that go into that, of course, but something that has variability in its payback is probably the first place to start.

Joe Indvik: Great. Any other folks want to chime in on that one?

Michele Pitale: Joe, I think – this is Michele. I think the real application for PACE is to eliminate value engineering. It's a different way of approaching building improvements in that you no longer are looking at is what is the absolute total cost and how much capital do I need to expend for this? But you start doing an analysis of how much energy utility savings will I be having and what is going to be the effect upon my operating expenses. The other place that this comes into is in large cap stacks where I think it just is a natural replacement for some of the mezzanine debt and I think it's going to very quickly be a part of all cap stacks throughout the country.

Andrew Zech: Yeah, this is Andrew. And I agree with both Michele and will. I think you guys hit the nail on the head. One other thing to add is that at its foundation, PACE acts as a credit enhancement. So it is giving a lender like any of the three of us on the phone today, confidence of repayment that is greater than if we were lending to an individual building owner. And so one of the places where it really has a massive above market value is for building owners

who might own a small portfolio of buildings or even several dozen buildings, but they are not a publicly traded REIT. They are not a Fortune 500 company. They don't necessarily have easy access to bonding capacity. Those types of groups, this Fortune 500's and REIT's have access to very attractive capital in huge quantities and their cost of equity is not that high. The 85% of all of the rest of commercial building is really a natural fit for PACE because we can be lending at really attractive rates and terms to the rest of the country.

Joe Indvik: Great. Excellent answers all around. I have a question, so talking about opportunities for PACE there, also a question about the limitations of Commercial PACE. So one person asked, what are the factors that might constrain the amount of financing available for any given project? Is it based on the tax assessment value of the property? And you may want to touch on things like loan-to-value ratios or savings to investment ratios and things of that nature in your response. So any of you folks want to tackle that one?

Andrew Zech: Sure. Happy to dive into that one. So we think of it as having three major constraints on a project financed amount. The first is we are typically capped at lending either 20% of the buildings as complete value for new construction or a rehab project or where ___ up to 35% of a building's value for an existing retrofit. So that's criteria number one is that we can only lend out to a certain percentage of the building's value.

Criteria number two is that we need to actually ensure that the case project matches with the state or local PACE programs requirements for technology. In some places, those requirements are pretty broad, so for example, in Ohio as long as measures are exceeding energy codes, they are PACE eligible. In other states, there are more specific requirements. So for example in Connecticut, you need to prove that the savings from the measures actually outweigh the cost of the financing over the life of the term. It's called SIR savings to investment ratio. So we always need to make sure we are operating within the bounds of the PACE program. So that could be a second limitation.

And then the third limitation is a little bit harder to quantify but it's the limitation put in place by the existing mortgage or lien holders on the building. So one of the things that will do that we need to do in most states for every project is to gain explicit consent for the CPACE financing from the mortgage lender. And they are starting to become far more educated about CPACE and far more comfortable with it as an industry. But their comfort always has its

limits. If there is only 20% equity in a building and we say we want to lend 20% of the building's value through CPACE and push the overall leverage on the property up to 100%, most mortgage lenders are going to say whoa, whoa, whoa. You can't do that. That doesn't leave any comfort for any of us. And they'd be right. And so they need to look at the owner and at the building and the leverage that's on the property and see where they are comfortable. And so that creates a natural third constraint that we always work through on every project.

Joe Indvik: Great. Excellent. Well, we have one person here who wants to dive a little further into that question of your third limitation of working with existing or buildings with existing mortgages. So are there any – for anybody on the panel or you, Andrew. Are there any best practices out there, templates, for working with mortgage lenders to get them sort of comfortable with PACE.

Will Clark: Joe, I think we all have a little bit of our own experience and knowledge that we bring to that. However, generally speaking, what we are looking to do is explain what CPACE is, how our funds are tied to specific improvements in the building and how the lender can feel comfortable that this isn't some surprise, this is being sprung on them. And I think that's a really important difference between RPACE, Residential PACE and Commercial PACE where Commercial PACE, capital providers, all operate under ___ that we need to engage with lenders, with the senior lenders and have them acknowledge the assessment.

The things that we do are provide a general summary of the project. We provide a good breakdown of costs and anticipated savings. We work to describe without overwhelming somebody with information, what those specific improvements will lead to and how they will improve the value and extend the use of life of the building. Obviously, it helps if you've got a good relationship with your lender, if there's an introduction that can be made. It also helps if you are not over levering if you have a project and you are not seen to be taking cash out which I think is a really important distinction of CPACE versus other types of financing where everything we do has to be tied to a specific improvement and so the bank knows that the money is actually going to be remaining within the four walls of their collateral.

Michele Pitale: This question is somewhat timely for me since I was late signing into this webinar because I was on the phone with a lender discussing this exact issue. I don't think there's a template approach to this. PACE is relatively new and it requires education

and complicated discussions with lenders as to what their concerns are. The lender I just got off the phone with, we were discussing how the installation of impact windows might affect insurance premiums and reduce operating expenses as well as raising collateral value. And I think it's such a new product, PACE, that I think there just needs to be a broad education throughout the mortgage industry to understand how PACE helps everyone by improving the collateral value of the building and paying a lot of times for deferred maintenance that really helps the mortgage lender's position.

Joe Indvik: Great, thank you both. And Andrew, I'm actually going to quote you to yourself. I had a conversation with Andrew a couple years ago where he said if you've done one PACE deal, you've done one PACE deal. And I think that still holds true today in that many deals look very different. Policies and programs very heavily from place to place and I quoted you endlessly on that and I don't think you knew that, Andrew, ever since you said that. And I think that kind of –

[Crosstalk]

Andrew Zech: *[Inaudible]*

[Laughter]

Joe Indvik: Okay. But I think that does emphasize the importance of the resources like the toolkit and also like the PACENation and others are doing to kind of standardize our understanding of how this toolkit works. Standardize even things like terminology and process can be very helpful in building comfort around the model and obviously showing successful case studies is important as well. So really good question.

I have a quick question regarding size meant in particular. So Michele and Will, you both touched on seismic. I know you've looked at some seismic projects, but do you see that as being kind of a niche market where every once in a while, PACE will be applicable to seismic or do you see a world where we can get to a point where a good chunk of seismic projects are being done with PACE? Are you looking at this as a new line of business or a couple of once off projects?

Michele Pitale: Will, you want to go first?

Will Clark: Sure, I'll take that. I think it is a – yes, I think it's a line of business. Some of the challenges talk about it can be very hard to identify the specific energy savings components of these projects and so you are really balancing something that has to be done as a public good, whether it's a hospital or apartments or office buildings versus something that is decidedly not exciting and may or may not have a significant effect on energy efficiency or on the net operating income of the building. Having said that, I do think that CPACE, particularly seismic in conjunction with other improvements, CPACE is uniquely positioned to provide that kind of capital because seismic improvements typically can be very expensive. As a result, you want to minimize the overall impact to NOI over the course of the ___ for as long as you can. And as CPACE as a 20 to 30-year term, it's something that I think matches pretty well with that desire.

Michele Pitale: Yeah, I don't see it as a niche market in that there's always going to be room to upgrade properties and pick more expensive technical ____ advanced product. And this is going to allow owners to always have that option and financing available.

Joe Indvik: Great, thank you both. We have only one minute remaining here, so I want to address one final question which is, someone asked if you interested in becoming a financial ally in Better Buildings or interested in getting involved with the folks on the phone today and our broader network of 43 financial allies, how should you do that? And the short answer is shoot me an email. I coordinate the Financial Allies program within the Better Buildings Challenge. As you see from our call today, we have the great pleasure of all getting to sort of sit around and think about how to grow the energy efficiency and renewable energy financing market. We get to work with each other through all the financial allies as well as the Department of Energy to develop tools and resources to that end. So the Navigator and the toolkit that I mentioned both kind of emerged organically out of our conversations in the Financial Allies program. So if you are a financing company or generally interested in finance and learning more about this stuff, I recommend you reach out to me and I'd be more than happy to connect you to the right people.

And with that, we are right at 2:00 PM and so I think we're going to wrap everything up. I want to say a big thank you to all of our presenters. This was really informative for me and I think for everyone else as well. And appreciate you being part of it. So I think we'll ended there. Thanks, everyone.

Michele Pitale: Thank you.

[End of Audio]