Hello, everyone. Good afternoon or good morning. We look forward to starting this webinar shortly as folks trickle in. We'll just give it a moment or two and then we'll get going.

Hi, everyone. Thank you for joining today's UI webinar on working toward net zero best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.

Hello everyone and welcome to today's webinar on you realize work regarding working toward net zero, specifically best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.

Hello everyone and welcome to today's webinar on you realize work regarding working toward net zero, specifically best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.

Hello everyone and welcome to today's webinar on you realize work regarding working toward net zero, specifically best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.

Hello everyone and welcome to today's webinar on you realize work regarding working toward net zero, specifically best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.

Hello everyone and welcome to today's webinar on you realize work regarding working toward net zero, specifically best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.

Hello everyone and welcome to today's webinar on you realize work regarding working toward net zero, specifically best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.

Hello everyone and welcome to today's webinar on you realize work regarding working toward net zero, specifically best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.

Hello everyone and welcome to today's webinar on you realize work regarding working toward net zero, specifically best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.

Hello everyone and welcome to today's webinar on you realize work regarding working toward net zero, specifically best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.

Hello everyone and welcome to today's webinar on you realize work regarding working toward net zero, specifically best practices and examples to engage tenants and sustainability. We'll just give it one more minute before we get started, so settle in.
strategies.

For tenant engagement, specifically addressing topics on Green Leasing data collection and beyond. So our panelists today will speak to their own organizations, experiences and leadership on the topic around sustainability and tenant engagements. A few administrative notes before we move into introductions. This webinar will be recorded and will be sharing both the recording and slides on Dualize Knowledge Finder website. After the webinar, any questions you have, please insert them into the Q&A box and will respond during them during the Q&A portion of this webinar.

And then just have the heads up, we do have a tenant engagement primer coming for all of our UI members and beyond on the knowledge Binder website. And as soon as that's available, we'll be posting a link in the chat and as well. So let's move on to the next slide. First, some introductions. When each of our panelists speaks a bit, they'll be able to give more full introductions of themselves. But I'll start with some quick introductions of of who's with us today. My name is Marta chance. I'm your moderator. I'm the senior vice president of utilized greenprint Center for building performance, which is part of utilized research centers and initiatives. We focus on climate mitigation, making that business case for green buildings by tying carbon reductions to increases in asset value. And we cover topics ranging from city and real estate climate policy to sustainable tenant fit outs to net zero and everything in between. And in addition to our research work you will like, green print includes a worldwide community of practice of leading real estate owners and developers committed to advancing sustainability of their own portfolios in the broader global real estate industry. And three of those green print real estate member companies are represented by our
We have Karen Marus, who's the head of ESG at Clarion Partners. We have and. Unpack the vice president and director of ESG + R at TA Realty and Ben Meyers, the vice president of sustainability at Boston Properties. So today we'll start with the overall strategy around real estate decarbonization and tenants from each of our speakers. And then we'll flow into a discussion on examples and other details and deep dives out of things that could make this challenging, of course with solutions that these leaders have found in our working toward. So with that, I will pass it to Karen to start us off. Great. Thanks so much for having me today. Excited to dive into this topic. Just a little bit about Clarion partners and we can go to the next slide. Clarion Partners is a real estate investment manager. We're headquartered in the US and we also operate in Europe. We've been in business for about 40 years and have approximately 80 billion assets under management. A majority of that is our industrial portfolio and that's really where I'll focus for today's purposes. And. We and we'll just go to the next slide please, Ben. Thank you. In fall of last year, we did announce our alignment with the ULI Green Print Net 0 by 2050 goal. This goal does focus on scope one and two emissions, which primarily means our landlord controlled emissions, but we certainly see the need and the case for including tenant emissions as part of our overall process. So we are continuing to collect data on tenant emissions and work with our tenants. To help them meet their goals and meet you know what we think will eventually be asked of us as well? Engagement activities vary and will spend a lot of time...
talking about that today. But you know we do issue Green Lease language. We have been recognized as a Green Lease leader. We partner on ESG initiatives with our tenants and again we'll spend quite a bit of time talking about that today. We issue SG surveys to property managers and or tenants where it's appropriate. We work with our properties to plan. To do business planning and make recommendations around sustainability initiatives that can be implemented using the data we collect, we pilot technologies and then we also offer, you know, educational messaging and other events at our assets. Our net zero program consists of seven key strategies. And you know, all of these really do require the collaboration of our tenants, our property managers and our broader communities to be able to help us achieve these. They're focused in carbon measurement, which you know, it focuses a lot on data management and data collection, so just even having enough data. To be able to analyze and use and make decisions to improve performance, energy efficiency and conservation on site renewables and we're looking into some off-site strategies as well. We're looking into how to incorporate. Energy efficiency and net 0 targets into our new development and major renovation program moving towards electrification or you know obviously kind of reducing the reliance on fossil fuels and then of course engagement as its own category, but really it's kind of interwoven throughout each of our key areas of our net zero road map. So with that I will pass it back, I will pass it on to Ann to talk about her program at TA Realty. Thank you, Karen.

Hi, everyone. Good afternoon. My name is Ann Peck. I am the vice president of Marta, said. I'm vice president, head of ESG&RATTA reality TV. Reality is a real estate investment manager. We are headquartered in Boston. We also have offices in Dallas, at Newport Beach and and a small
office in Florida. We've been around since 1982 and we're actually celebrating our 40th anniversary this year. So with that 40 years of experience, we have acquired, invested and more managed 37 billion in assets under management and commercial real estate for our value add for strategies and strategic separate accounts. So our assets are located all across the major metropolitan areas in the US also known as the Smile. A lot of times people refer to it. We currently manage about 14 billion.

Assets under management and majority of those assets are industrial and multifamily. We have a little bit of office and grocery anchored retail, but most of what I'm going to talk about today reflects about our multi, multi family and our triple net that triple net industrial buildings that are hard to kind of get connections to. With that, if you want to flip slides, then.

So our I started at TA last September just under a year ago and we started with initially creating a target, a net zero target. We didn't. I do. I still don't have a good handle on all of our utility information and our our KPI's, but with knowing that we have to set a target and then try to achieve it. To start with we set a target of 25% reduction in greenhouse gas emissions and energy. Consumption over the next 10 years, these targets are actually in line with the the 2050 Net zero goal. But I need to get a better handle on what we're doing and what we're producing before we can really strengthen those targets which is the plan. Hopefully within the next year we can strengthen those. But in order to do this we we really need that that scope three and tenants engagement we need to figure out how we can. Talk to tenants better and get them to participate as much as we want to participate in trying to reduce energy, greenhouse gas emissions and save water. We these are all examples of.

Ideas and and actually initiatives that we have implemented
year and we can go into this further in a little bit if Ben wants to introduce himself. Well, everybody, it's great to see so many people listening live and concurrent. At the moment, I'm I'm Ben Meyers. I lead sustainability for Boston properties. Been the company for 10 years.

And and my team is focused on healthy, high performance workspaces while mitigating the externalities associated with energy emissions, water waste, and and climate change. We have a team that's focused on really three things, implementation of our program reporting and stakeholder engagement. And our stakeholders include customers, investors, the communities where we operate in our own employees, our customers, which we like to say our clients, also our tenants. We we tend to say clients more BXP are a primary stakeholder that is absolutely essential in meeting our sustainability goals. We have 193 properties.

About 54 million square feet, the way we run our program across over half of our square feet. Total square footage is LEED certified at the highest gold and platinum levels and we have Green Leasing adopted throughout our portfolio. I'm going to cover off a few of the key initiatives and themes related to tenant engagement at Boston Properties.

Properties. Let's let's go. Let's move on to the next slide. So first I'd like to go over the framework of our SG program includes 3 pillars, Climate action, resilience and social good. And on climate action, we have a long history dating back to 2008 of benchmarking and measuring energy and water performance. Across the portfolio. We've cut our scope one and two emissions over 80% since since 2008. Green building development and management is also super important to the company. We have a green building.
Standard and environmental management system that sets targets and priorities for all of our new development projects and TI work.

Renewable energy and on-site development off-site procurement is a big piece of what my team manages it.

Boston properties and carbon neutrality. We have a science based emissions reduction target that 1 1/2 degree level and we have also a commitment to carbon neutral operations by 2025 that we're moving towards and on target to hit.

A resilience. We're spending a lot of time on climate risk awareness, doing modeling and disclosure aligned with the task force on climate related financial disclosure of the TCFD and a variety of activities related to risk management and climate change they were engaged in and we work across the organization on social good. Our teams primarily focused on healthy buildings and high performance buildings, which is even more important in the post-pandemic era. But we also work closely with our Diversity Inclusion Committee, Co-chairs, community involvement groups and initiatives.

In our employee programs and benefits administered by our human resources department.

So a few things I want to touch on. I know we're going to do a deeper dive here in the Q&A and discussion today, but I think these are the the most important elements of our tenant engagement program at the moment that are helping us move the needle towards carbon neutral operations. First is green leasing. We've been a Green Lease leader since 2015, have worked closely with IT and DOE and better buildings on our green leasing adoption. We've integrated Green lease clauses into our master lease form and again adopted that across our entire portfolio and that helps us collect. Better data that helps us pass through costs made to
improve energy efficiency and that's really important for the implementation of our program on energy and carbon management support. Our teams are meeting regularly with our tenants to discuss energy performance as fully integrated real estate investment. We have this touch point with the tenants. We're in front of them, we're engaging them. So part of my job is working with our property management teams to make sure we're addressing proactively the sustainability needs of our clients.

We pilot, we're piloting right now an extension of real time energy management to our tenants. So we're adding more meters and buildings. And I think this is going to be a big movement from for the industry where once we were focused on whole building interval data for energy and carbon management moving towards more granular sub metering of tenant spaces in real time management and then providing access to that data to tenants. So big opportunity there for our company and I think a lot of real estate companies we have a growing focus from tenants on green power. It used to be that we would market our green power to tenants. Now they're asking us about where their energy comes from, and we procure about $120 million, give or take, of energy every year. So how we buy that energy is a very important component of our tenant engagement and communicating on to tenants where their energy comes from. Renewable energy on site, we have 13 projects totaling 8 megawatts. It's not Prologis scale, but it's very respectable. Projects which don't have as high yield but are very impactful from a visibility perspective. Our tenants directly off take the energy and generally receive a lower cost of power where they're receiving the energy directly. So it's at the
lighter for them, it lowers their utility bills, they're able
to show off and showcase their own commitments to sustainabilty
at their property. With the the solar PV installations, it's
becoming increasingly important to our clients and we're integrating renewable
energy on the on the vast majority of our new
development projects.
Green building partnerships have also been an important part of
our tenant engagement. We're going to talk about a project
we're doing right now with Wellington, a net zero conversion
and a bit more detail. But I'll just say that
the highest performance, greenest projects we've delivered have been for
great clients like Akamai, Google, Microsoft, that Texas Salesforce. These
projects have really defined, I think green building state-of-the-art when
they were placed in service. Now those, those goal posts keep moving and we're looking forward to continuing to deliver
these high performance.
Buildings for our great clients. And we're shifting from what I think was once like an Evergreen lead certification, LEED Platinum certification that would stand for that building sustainability to
more of a performance based paradigm. Where a building's greenness is sustainability is going to be judged not by a certificate that it earned several years ago, but how it performed the last month, the last 12 months. And so this shift to performance based certifications really underscores the need for tenant.
Engagement and tenant participation, you can't get a core shell platinum certification, say this is a green building. You have to demonstrate the building's performing with the tenants engaged towards net zero. And so this is a really exciting and also a challenge, a challenging moment for the real estate community to bring tenants into the day-to-day operations of buildings.
So I'm, I'm thrilled that we're here talking about this
important subject and look forward to more discussion.
Perfect. Thanks, Ben.
We we were thinking that one of the first topics
we would dig into is that net 0 project that
you had mentioned that that conversion with Wellington. Do you
want to speak to that a little bit then about
how Boston Properties is working with with the tenant to
make that happen?
I'm happy to. So we own a 20 year old
office building in Needham, MA, which is right outside of
of 128. And we have this great client, Wellington. We
built the first Boston's first green skyscraper for them over
10 years ago at Atlantic Wharf, who came to us
looking for a satellite office space in the Needham area.
And we happen to have this property and we brought
them three options, a green option, a deep green option
and a net zero option for renovating and retrofitting.
The building and and when we went through the components
of Net Zero which included electrification of the building so
eliminating natural gas fired morning warm up systems on the
rooftop air handling units and better heat recovery
and solar on site and re insulating the walls and
roof up to an R30 level. They they love that
and so we're we're in the process of building that
out for them the building which is about 106,000 feet
gross will have.
1.4 megawatts of on site solar which will exceed the
energy consumption for the building on an annual basis. So
we're producing all of the energy on site. We've built
a much tighter envelope for the building with the insulation
I was talking about and we've upgraded all the ventilation
systems with heat recovery, which is about 95% efficient with
the Super block technology. And so the the catch phrase
was
build tight, ventilate right, energized.
The sunlight and that's precisely what we're doing at 140
Kendrick to achieve net zero on site, not with Rex
or offsets or off-site procurement, but on site, which is
a real challenge and and and sets I think.
A standard that that we're going to be very proud
of for net zero certification, which we will, we will achieve through the lead 0 program. I will just mention the tenant engagement piece was critical. Wellington is absolutely a partner in getting this project done. They're absorbing some of the premium costs. They've agreed to very low plug load densities in their space, very low lighting densities. For example, they want to add a kitchen. To the the project, we need to talk a lot about what that kitchen would do to the energy model. We're trying to get to like a UI of 30 at an existing building that's 20 years old. So that's a respectable site UI for the Boston area and our climate zone. And so when something like a kitchen comes up, you have to work with that tenant on an all electric kitchen design or eliminating a kitchen because of what it will do. The energy model, of course we want them to have the kitchen if that's what they want. So we're going with an all electric system. And so all of the, all the things they agreed to around data transparency, performance standards for their space lighting and plug load is integrated into the lease. So it's very much a commitment from us to do the solar, to do the insulating, to do all the heat recovery and mechanical improvements. But it's also a commitment from them to design and operate their space to hit targets that allow us to achieve net zero. So absolutely a partnership could not have happened without them and I think that's the new era, right where, where tenants are connecting the dots between the statements they're making about ESG being core to their business, fundamentally their business, and the real estate decisions they make, which represent their values. Awesome. Thanks, Ben. I think that that ties into a broader green lease discussion. So Karen or and do either of you want to chime in around the green leases
that you're working on with your tenants and not just
the lease creation but also the follow through to ensure
that those clauses are actually followed.

I can go quickly. Thank Karen can talk about
it. So like I said, I started here in just
under a year ago and one of the first things
we tried to do is implement Greenlease language into our
standard use contract that was.

It took a lot more work than it should have
because trying to do anything when you're not vertically
integrated
is a lot harder. But trying to explain to tenants,
some tenants just didn't understand what it meant and
crossed
out automatically. But being able to sit down and
actually have a conversation as to why this is important
and what we're asking of them, which is not necessarily
a big lift, sharing information, sharing data, understanding
back and forth, sharing.

It's it's very important and explaining how easy it is
and how effortless it really is on their part was
a huge part of it. So creating the the template
for the language implementing that in a handful of leases,
the hardest part now is trying to collect that information
after we've agreed to share. So I don't know if
Karen, if you want to talk a little bit more
about that part.

Yeah, I mean I I tend to agree we similar
to some of the specific lease clause language that that
Ben talked about at the beginning in his intro. You
know we have a lot of that same language in
our standard lease forms and we also kind of set
try to make it nuance based on asset type as
well industrial different than office different the multifamily.

You know and and we have been recognized as Green
Lease leader gold and that's very exciting and I think
there continues to be work to be done in this
space. One is making sure that we're really working towards
not letting that language get cut out during lease
negotiations,
which is always kind of a, you know a a
conversation piece and there's a variety of reasons things like
that happen. You know something as simple that we think
of as simple as data sharing.
Isn't that simple to in some industries, some of our,
you know, warehouse tenants?
Have a lot of privacy and confidentiality concerns around
their
data. If you know their neighbor next door finds out
how much energy they're using, maybe it could provide some
insights into the way there's their operations work inside the
building and and so there are some privacy issues that
we try to be really conscious of and just try
to really work with them and and with some of
our kind of larger scale tenants we try to work
with their head of sustainability or their head of ESG
to really.
Kind of work through data needs or other programs.
So that's one of the challenges, but I also think
you know, Marty you were mentioning and Anne was
mentioning
actually doing the data collection. It requires a lot of
follow-ups. So tracking what leases have, which Green
Lease language
clauses in it is, is a challenge.
Making sure that we're acting on those. So every year
making sure that we're reaching out to collect data or
when we have special projects really reading through those
leases
and making sure that we can do that cost share
with our tenants. Those things require a lot of manpower
and time and it requires a tremendous amount of
coordination
between our asset managers in a lot of cases our
third party property managers and then of course the tenants.
So you know I think there's also.
The first step is getting that language built into the
standard lease language and then making sure that that you
track that. This. The next step is really making sure
that you follow through the asset managers and property
managers
understand you know what, what needs to be done when
according to that lease language. And and you know we
we continue to work through that with our tenants as
One theme that I'm hearing throughout here is the importance of property management to reach the tenants and ensure that tenants are supporting net zero goals or that decarbonization goal at a property level or a portfolio level. So can any of you speak to how you work with your property management teams to facilitate this?

Karen, it looks like you want to start perhaps?

Well, I guess I can start quickly. Say I think we're all slightly different and I both utilize third party property managers for the most part. Clarion Partners also does some in-house property management in some specific cases, you know we work really closely with our property managers as liaison. So you know we issue ESG surveys that have become over the past year or so have become. Quite sophisticated. So we actually try to offer back some performance information through those CESG surveys, make sure property managers understand compliance regulation and then at the same time ask them to acknowledge the performance and the compliance regulations while we collect the data that we need in order to analyze, we get property managers and suggestions on. ESG initiatives that they can incorporate into their business plans each year. So we kind of we're actually going through it now as we approach budget season. But we undergo a tremendous effort to analyze the data that our team has in a scalable way because we still have about 1400 assets and try to give back, give that feedback back to our asset managers and our property managers to help incorporate energy efficiency measures or other measures into their into their budgets. And then the other thing too that we do when we do use our third party property managers, again I
really try I and the rest of the our SG team, our extended EG team really try to connect with the sustainability teams at our property management firms and partner with them. I think that gets us a long way because for some of those larger ones where we have many assets we work on together, you can kind of. You know, tackle many buildings with like one or two conversations or tap into their Energy Star, whatever platforms that they're using and and be able to work together that way. And that's tremendously easier than reaching out to, you know, individual property managers at each building. So that's been a successful program as well.

I would just add to that. So, so like Karen said we started with a lot of surveys of our property managers and similar to Karen we we have a large industrial portfolio. So triple net leases property managers, they're kind of hands off a lot of the times because they're they're not dealing with the tenant as often as you would in an office building or multifamily. So educating property managers on things they could be doing to better their own.

Property was actually part of the educational process. So telling them, asking them, have you ever created a disaster recovery plan? Do you have one for your property? As far as a climate event to is going to occur, what are you going to do? What is the response? Having asked that question, we actually had some responses from property managers saying I never even thought of that, I should have one so. Just kind of bringing some of the questions to the forefront which. Us on the panel and a lot of people here in the audience think of every day. It's not necessarily top of mind.
For.
The property team. So things like that were very helpful. One other thing to mention was you know again education, right? So asking all of our property managers to have annual events, have an Earth Day event every year, talk about something having to do with sustainability and emphasize what's going on at the property to educate people as to what? They're doing or what's going on around them and then becomes more realistic and more tangible to individual people.

Again, like Karen said, one of our our property managers is, you know, manages several properties and what they chose to do to help us was to help us create a quarterly newsletter that has just random tips and tricks on how to save water, how to save energy, things like that. Every quarter it's going to be a different topic, but the idea is to share this with every single tenant so people can take it home and they can do it at their house, they can do it in their office, they can do it where they live.

Everything is kind of tied together, so if they're trying to help here, then maybe at our at our properties, maybe they'll try to help their own properties so it's just.

Kind of all about educating everyone on what they can possibly do.

Often invent anything from your side on on property management and their role.

Yeah. So alignment is really important and being a fully integrated company where we have construction development and property management and leasing all under one umbrella is is definitely helpful, but it doesn't happen naturally that you have property managers that buy into your goals that you may be setting.

So surveys sort of helped us get off the starting line, but I realized that the relationship building and trust building was really necessary in the in the in person
Face to face meetings, we do 2 summits with all of our senior property managers every year at least we try to bundle some of the West Coast together, so not having to go Seattle, LA and San Francisco, reduce the carbon emissions from flights, but we do we really try to get in and I'm here in Boston where we have the largest chunk of our our portfolio and I came up in construction management. I was in at Boston Properties for two years in construction management, working closely with property management. Executing projects. So really learning the attitudes and perspectives and sometimes the baggage that property management brings to these discussions is super helpful for me and in communicating back to them why we're doing some of the things we're doing and and so the alignment occurs also through our Sustainability Committee. So we have a standing sustainability committee of 35 of our senior property management decision makers across the entire company where we share best practices and set goals and and the alignment again happens through buy in so. And we set our goals, our science based emissions reduction target, our carbon neutral operations target and the two carbon reduction targets we've already hit, including energy and waste goals. All of those were formulated and created with property management at the table. So they they don't feel like these goals are being foisted upon them from a central authority that's issuing surveys. They've very much set the goals and the intentionality behind those goals comes from our property management engineering teams. So I think that's been super important also I should emphasize. A tone from the top is very important. Our CEO, Owen Thomas, who's behind the net zero imperative with
print and Doug Lindy, who’s effectively our President and CEO have been hugely supportive of sustainability initiatives. And I think property management likes the recognition they get from, you know, celebrating their successes. And so when we do something well, we really try to raise it up. When we are not doing as well, we try to drive more competition. Between regions and assets, and if we fail at celebration and competition, we move on to shame. And and sometimes shame is a powerful motivator, but we try not to go there. All right. So one thing that I'm going to move to the next aspect of, of tenant engagement and that's around building a relationship with tenants. And and then you spoke to this a little bit with some of your premier buildings with Salesforce and Wellington and others and Karen and and we want to hear from you too in terms of how are, how are your firms establishing relationships with these tenants to facilitate that engagement and persistent collaboration? Go ahead. Karen, I guess I can start. You know, I think a few things. One, we already have relationships with our tenants, right? So part of my role is tapping into those relationships with, you know, our asset managers have relationships, other team members have existing relationships with our tenants. So I'm relatively new to Clarion partners. I've been here about a year and have really been kind of stepping in to meet those tenants as well, especially when they do have. Shared goals again. We find it to be efficient when we can work with kind of a sustainability leader within that tenant organization if they, if we have you know, many shared properties. But typically, you know, we are working with tenants on
kind of that their specific assets they occupy, what goals
in progress right now.
Is we are working on piloting shadow meters. So we're
working on piloting kind of whole building meters at our
industrial assets right now. And one of our tenants during
this process said, hey, I'm actually looking to meter.
You know my building equipment get much more granular
data
so that I can better manage my energy and you
know help me meet my energy efficiency goals as well.
So we were actually able to connect them with, with
our metering company that we're working with and there's,
there's
a, there's a nice kind of synergy there, right. So
we already kind of have, we have our goals, we
just need whole building data, but they also have their
goals which will support, they support each other.
And you know, that's just one example of many. We,
we partner with ten and two ask about renewables, building
certifications, Wellness certifications. There's kind of a wide
variety of
asks that we get. We really just try to work
with them to meet their their needs and requests too.
And then you know on the flip side as well,
we also have tenants that we have some tenants that
can be more resistant. With those we try to see
just what makes sense and where we can.
Continue to push our strategy and our goals without.
You know without.
Damaging that relationship or or frustrating those tenants.
That makes sense. You want to just do the right
amount, right?
And it's a balance, yeah.
Thank you, Karen. So and from the multifamily side you
said you you got some industrial and multifamily at TA
Realty. Can you speak to to the residents and how,
how those relationships are coming along?
Yes. So I can, I can tell you Greenlease language
is not in a multifamily lease at this time. There's
it's really hard to.
Need legal requirements to not go step beyond what, what
our boundaries are with that, but just educating people. And like I, I was talking about we had a bunch of events, so having an annual Earth Day event explaining to everyone why we're having it, what it's benefiting and provide some educational piece whether it was, you know. Talking about bees, how much? How? Adding bees to a CBD area can actually improve the biodiversity you're increasing pollination at around your area and these are in shortage. So it's it's actually a great attribute to add that to your property and explaining why. So educating everyone at these events and through Flyers and through social media even it it just kind of helps make what we're doing more tangible. To residents and that's kind of when when it affects them and they can make an actual difference, I think it's it's just more powerful and it's more accepting, but it is it's still hard to track utility data in certain areas and and for multifamily assets where they get their own bill and they don't have to share until everything and regulations require benchmarking across the entire US that's going to be a problem, but. And we're trying to manage it by just talking to them and and bringing out. And honestly, there are so many people. I think the one good thing about our current climate change situation is that everyone is aware of what's going on, whether they accept it as climate change or something else. Everyone knows that, you know, the third storms that we're all in a drought essentially right now, right? Everyone can. Put this in and take this climate issue and actually feel that it's important and someone has to do something. So I think. Everyone is very interested in anything having to do with ESG and sustainability and climate change and giving residents and a way to actually make a difference is very important. I like that a lot can be empowering residents to, you know, have that responsibility and then collaborate. That makes
a lot of sense.

Ben, from your side of things that at Boston Properties, what are you, what else are you seeing on that, on that relationship side of things with tenants to facilitate decarbonization and moving toward net zero? So one of the interesting things that came out of the pandemic was that a focus on indoor air quality that resulted in our installation of 500 real time indoor air quality monitoring devices across our portfolio.

And I think it's a interesting because we can see just how effective ventilation is in a Class A office building. So we own operate prime office buildings and typically HVAC systems are over designed frankly for, for particularly today's occupancy, but even very high density occupancy. So I'm interested in how we can use now this IQ data to do more occupancy based setbacks of tenant spaces. I mean if we're maintaining CO2 concentration of 450 parts per million from the supply to the return is, is that a signal that we can turn down some fans, is there a way to use occupancy sensing and monitoring to work more closely with tenants on better demand control ventilation strategies? So I think there's that really is the technology first that helps drive that engagement, but the tenants have to buy in to some of those operational changes. So we're working on that. Another area I think is really interesting is with overtime. HVAC, we were running buildings just on a time clock through the weekend in some cases for law firms and we we started a partnership with Janaya where tenants can control whether or not they they have the overtime HVAC available. And that seems to me like a much more intelligent way to manage overtime HVAC than just setting a schedule and always having overtime HVAC and buildings which is particularly an issue in New York City where you just see longer runtime and as we know local law 97 doesn't care. If you want your building 12 hours or or 10 hours or 14 hours or 10 hours, it's a it's one carbon cap for office building, so managing overtime runtime
is particularly important in the age of building performance standards like local law 97. So I think other things like Occupancy sensors and lighting, I think it's really, it's, it's been a huge driver of energy savings and buildings. There's no secret there. And I will say like cynically as an engineer and I have a civil engineering background and civil environmental. The best solution to tenant behavior modification is often designing the tenant out of the solution. So the more we can leverage technology to not rely on tenant behavior, the better. And I think that extends from like this issue of that data collection, right? Needing to communicate with a tenant to have them turn over data to a pulse meter output on their energy meter that you can just collect it silently with their consent. Once Will will I think reduce some of these obstructions like that's too private. For you to have, I think that's just obstructionist behavior from a lot of tenants with the exception of some government contractors that may have highly secretive work. I think that's been used as a way to escape having to turn over the information. But if you we enable the turnover seamlessly with pulse meters, then I think it just happens and it occurs and and landlords can collect the data. So I don't, I don't say that. I'd say continue on the effort to modify behavior, but where that fails, seek technology technological solutions that remove humans from the equation. Yeah, go ahead. Yeah and I want to like piggyback on something Ben said which I know wasn't necessarily the overall point of what he he wanted to speak through. But we've also you know we're really focused in this conversation on kind of energy efficiency and net zero. But we've seen changes in our tenant asks in other ways as well in the industrial warehouse space. We are also getting a lot of Wellness asks as well and that even includes very simple things like HVAC systems.
In industrial warehouses, which wasn't always a common request in that space, but we're seeing it come more and more as those tenants are also in this huge competition for talent these days like every other company. And you know I think it's it's interesting because we also work with our tenants on those Wellness needs, on social needs, right like what the out we get asked for outdoor space we've been asked for. Basketball courts, all kinds of stuff in in that industrial warehouse space. And you know, I don't necessarily see that at odds with our energy efficiency goals. I actually see it as just kind of, to Ben's point, like we need to now work with that and and rethink how we build our buildings and our piece of control of those buildings or what systems we can help our tenants implement to mitigate the evolving needs of the occupants inside those buildings. Because you know it. For many reasons the weather is changing and you know those occupants do have do have the opportunity and right to be comfortable and and protected in their spaces as well. So I think that there's. Many changing needs that we're seeing from our tenants and it and it's not zero, but it's also Wellness and other things that need to find ways to work together. Absolutely. It it is that bigger picture these days, right? With sustainability, it's not just net zero, it's not just decarbonization. There's a a broader appreciation and understanding of of what that means today for our occupants. We talked about a couple of different technologies and I think a number of the questions in the Q&A have leaned in on that panelists as as your fellow speakers are speaking, feel free to jump into the Q&A. There are more questions than we will be able to address this hour. But in the meantime, I I do want to talk and hear from you all a little bit more on some innovative technologies you've been using, whether that's
around metering and renewables and otherwise if you are willing
to share some details.
So, so Karen touched on shadow metering a little bit,
I think.
Karen touched on shadow metering a little bit, as well, but that's something that we've been looking into
for a while or I've been personally looking into it
for a few years now but still hadn't found the
right solution. It it it does come down to what
type of meter and who you're getting the information or
who's controlling the meter, if they own the meter, if
it's a standard meter, but just trying to find it
from tenants that do not want to share their.
Energy Star account with us trying to find the information
from just putting a meter on the front end of
the house and trying to track the information so we
know what's going in and what's going on. That's probably
one of the the.
Top of mind things I'm working on right now, but
also not just for electricity, also water and gas and
trying to be able to control, not control it, but
to understand the use of it. So we can then
the next steps would then be to work with the
tenants and see if there's anything we could potentially split
as an incentive to reduce their use and save both
of our costs, so.
That's probably, it's not very high tech, it's literally just
putting a meter on, but that's kind of where I'm
at right now.
It's foundational. Go ahead, Karen.
Yeah and where I'll just say you know with the
meters I I also saw a lot of questions pop
up on that. We're currently running a 40 building a
40 asset pilot of the metering solution and.
You know, it's, it's, it's, it's still ongoing. We aren't
done with that pilot yet, we hope to add.
Quite a few more assets into that program in towards
the end of this year and and going into 2023.
And it's it's all very new and it's complicated, right.
You know, there's all kinds of considerations. Again have to
work with our tenants closely. Can they do a shutdown
of their electric for us to install the meters? We, you know, it requires audits prior, so it’s. Umm. It you know it's a complex process like all of these things are. We’re also kind of doing a a scaled up lighting retrofit program right now we’re doing that. We currently have about 60 assets undergoing that program again with many more planned for the end of this year and next year. So what we really focus on or what my team really focuses on is which projects or technologies can we employ. That scale because of just the sheer size of the portfolio, you know, that's where we can make. It's difficult for, for the SG team to go one by one, but then in our business plans. In our business planning and budgeting process each year during the budget cycle, we also recommend other types of technologies to our asset managers and our property managers. We prevent the vendors so that they have kind of a curated vendor list to make it as easy as possible for individual assets to deploy those measures as well. And I think you know the kind of that prop tech space is somewhere we're continuously trying to evolve. And and we have to balance you know for for Clarion specifically we really do have to balance scale with. And the solution, the solution that can meet that scale. Just because of just because. Of the volume we need to work at. That makes a lot of sense. Then you talked a little bit about renewables and we got some questions in the chat about that too. So how, how are you engaging with renewable energy on site or off site with tenants? What's your strategy there? And then after this I want to ask everyone about regulations, so prepare yourself. Right. So on site we've had a couple tenants actually I think 3IN in recent history that have had renewable energy on site development as a condition of their renewal or you know first generation lease at a new property.
So we're integrating commercially reasonable efforts to add solar on site into some of our lease forms. And we do pass through all the savings associated with those projects to the tenants and their operating budgets. And so they've had, I think very positive response to those projects. Even companies like Akamai who've done tremendous things in renewable energy will stand beside, you know, rather small rooftop solar array and be extremely proud that it's on their building. So I can't like overstate the importance of tangibility. Visibility and sustainability, particularly in the era of greenwash paranoia having on site solar is a very tangible thing. I mean, you can do all the VPA's off site in the world and it's not as representative as an on site demonstration like solar PV and we're able to get real scale on garages so we can offset 20 to 50% of the buildings energy use through a garage installation. In surface parking arrays where we have suburban office parks in particular and we have more surface parking, we can offset the entirety of the buildings use with surface parking solar. So I'm really excited about garages and surface parking because you aren't developing Greenfield sites, right. So it's it's it has that added benefit of of already developing developed land and and not disrupting new land. On the green power front, we do a variety of green power procurement. We try to source green power from specific generating assets. So we have a story. So while it's not always possible to source it at scale in markets like Massachusetts for a variety of reasons, we try to have generating assets. And right now our largest procurement is with a wind farm in West TX. So we talk about the origin of the Recs and we give them we transfer the Recs to them if we
can. And there's still some legal questions about that. Iron
Mountains developed a.
A green power pass that I would have people take
a look at that allows you to transfer the environmental
attributes of renewable energy, preferably additionality,
source renewable energy onto
clients and I think there'll be a lot more of
that. I I really do think of us as in
the service business and green power, when you are the
power procurement authority, the fiduciary is going to
become an
expectation of more and more clients. We're certainly picking
up
the phone and talking with more of our.
Clients about green power every, every year, every month
and
we do, we think that there's a real appetite for
locally sourced green generation. So where we can do that
on site, we absolutely try. And like I said, we've
done 13 projects totaling 8 megawatts. We have another 5
megawatts in the pipeline actually waiting on an
interconnection service
agreement to come through from Eversource. Hopefully
today, the
projects are still very hard to interconnect and I'm not
going to say it's not without.
Challenges, but I do think that the Inflation Reduction Act
is going to have very positive impact. We're already seeing
the impact in our the deals we're negotiating where this
this step up of the ITC to 30% and the
ability for solar to qualify under the PTC versus ITC
has a real economic impact on solar PV development
economics.
So, so we are we are going to continue to
do more on site and we expect that the.
10 year extension under the Inflation Reduction Act is going
to help us do a lot more solar development.
Speaking of regulation and policy, a couple of things. Thank
you Ben. A couple of things on the a couple
of questions on the topic of regulations whether it's New
York local law 97 benchmarking ordinances or other building
performance
standards continue to to come up in the in the
questions and just an overall discussions around the
importance of engaging with tenants to.

Comply and and succeed in those topics, so.

Who, who can speak to that? Just what your strategy is to to get tenants on board as you work to comply with regulations?

I'll just say we're looking at the legal aspects of each one independently and local law needs 97, which is a a fine. There's still question marks around how that can be passed through, if it can be passed through.

I think what we're looking at now is certainly on new development, trying to make sure that all of our buildings are compliant or there's a pathway to compliance through electrification on site to avoid any of these fines and penalties.

The question really is like is there a new lease, is there new lease language for these performance standards that allocates back to tenants in the building their fair share of these costs to comply with potential penalties down the road. And I, I don't we don't have that fully baked at the moment. We're working on it and there's a lot of thoughts out there on how that should be papered, but I don't want to speak prematurely on the the legal language.

Yeah, I mean I think for us too, we, we are obviously working on it. I think it's a case by case, especially in in those places where there is kind of a GH, a greenhouse gas or carbon limit for each asset.

And I think you know the other place that Ben also mentioned where we're focused on regulation is in our new development side. So you know in in some places in the country there was requirements around a certain amount of renewable energy.

I personally, because of my role, love the love that I love them. It makes it my job. I mean you know, it just takes away any case making required if you ever needed it.

But you know, as a firm though, we are also trying to be proactive about that. So in places like
California where there is, you know, requirements around new development,
we're trying to be proactive about meeting and exceeding those
requirements where we can and trying to be proactive about kind of looking down the pipeline to see where we think regulation will continue to evolve. We work with our consultants to help us determine where we think regulation will evolve.
And where we need to start piloting newer programs that can support when the regulation does hit, you know, truly we see that as kind of a risk mitigation effort as well. So I guess I'll say the regulation piece is. It it, you know, helps us achieve our goals in some ways and also pushes us forward in some ways that maybe we wouldn't have gotten to on our own. So I think it's it's good stuff. All right. And any closing thoughts on regulations?
Just in less than a minute, you know, it's obviously something that's serious in New York, in DC and Boston, Boston, Verto 2.0 and and the fines that are going to come are going to be real. So we are currently trying to get a handle on. All of those regulations and and modeling all of our assets on a decarbonization path to show us where we really need to start focusing and trying to use that path, that same path across the entire US because it may not be today, it may not be next year, but sooner or later everywhere is going to have some kind of a regulation. So trying to evaluate where we need to start focusing and then start engaging tenants. So first, first working on the problem and then trying to.
Figure out how to. That makes sense. OK. Well, we are at time clearly tenant engagement working toward net zero and sustainability. It's a very detailed, very thorough, very complicated topic and I just want to thank our our three speakers today for talking through their strategies to address it and show some leadership and innovation on that front. Ben and Karen, thank you
so much for joining us. Thank you to everyone for joining today's webinar. And as a reminder, the slides and the recording will be posted on utilized knowledge Binder website shortly after the webinar completes. We'll also Follow up with an e-mail survey as well as a link to utilize forthcoming tenant engagement resources and thank you again everyone. Have a great day. Thank you. Thank you.

This video transcript has been machine-generated, so it may not be accurate. It is for personal use only. Reproduction or use without written permission is prohibited. If you have a correction or for permission inquiries, please contact [email protected].