Webinar

ULI Nashville Practicing Heat Resilience in a Hot Market Lessons from Developers
Date: December 01, 2022

00:00:02 --> 00:00:03: Hello welcome everyone.
00:00:04 --> 00:00:07: Thank you for joining us this afternoon. My name is
00:00:07 --> 00:00:11: John Vick with the Tennessee Department of Health. I'm one
00:00:11 --> 00:00:14: of the Co chairs of the UI Nashville Building Healthy
00:00:14 --> 00:00:15: Places Action Council.
00:00:17 --> 00:00:20: And hi, I'm Catherine Withers. I'm a planner with barge
00:00:20 --> 00:00:24: Design Solutions Co chair with John of the building Healthy
00:00:24 --> 00:00:28: Places Action Council. Thank you all for being here with
00:00:28 --> 00:00:31: us today. So I think many of you know that
00:00:31 --> 00:00:35: one of you I's mission priorities is to accelerate
decarbonization
00:00:35 --> 00:00:38: and reach net zero. UL I Nashville has focused its
00:00:39 --> 00:00:42: work on building to mitigate and adapt to extreme heat,
00:00:42 --> 00:00:46: which is the most common extreme weather event in
00:00:50 --> 00:00:53: Alright, so the building healthy Places Action Council was
heavily
00:00:53 --> 00:00:57: involved in a technical assistance panel hosted by UL I
00:00:57 --> 00:01:00: Nashville in 2021 on how to build for heat resilience.
00:01:00 --> 00:01:04: This considered the question of building structures and
communities to
00:01:04 --> 00:01:05: address increasing heat.
00:01:07 --> 00:01:10: You are I Nashville was also a member of the
00:01:10 --> 00:01:14: inaugural Uri Globals resilient land use cohort. That is a
00:01:14 --> 00:01:18: mouthful that I'm always afraid I'll stumble over every time,
00:01:18 --> 00:01:21: which explored how real estate and development can lead in
00:01:21 --> 00:01:26: adaptation to a changing climate. This summer, the resilient
land
00:01:26 --> 00:01:30: use cohort published a report on its findings, including
Nashville's
work on heat resilience. And many of you know you can find this on our website.

So it is building for heat resilience and the resilient land use cohort report. So it is is on the resilient Nashville web page of UL I Nashville, which you can find at nashville.uli.org and look for resilient Nashville

under the programs menu, but will send you a link after today's event so you don't have to hunt for it.

Alright, so before we introduce today's speakers, I do want to take a moment to thank you Ali Nashville sponsors as seen in the PowerPoint before the event and on the boards to my right. Yeah. And also special thanks to the Kreski Foundation, which is the underwriter for this program through a grant from the Randall Lewis Center for Sustainability and Real Estate at ULI Americas.

So today, we are pleased to hear from 2 practitioners who are building, planning and operating developments built for heat resilience. Our speakers are Aaron Hatcher, Vice president of sustainability for Amli Residential and Kimberly Pexton, Vice President of sustainability for JBG Smith.

Aaron Hatcher leads Amelia's ESG strategy which focuses on scalable initiatives, building certifications and reporting in supporting company wide sustainability efforts or role is highly collaborative and works with internal development, construction and operation teams across their nine US regions.

Prior to joining Emily in 2012, Aaron worked as a sustainability consultant and focused on new construction. And Kimberly Pexton, our other speaker, joined JBG Smith in 2019 to lead the strategy, development, coordination and execution of JBG Smith's sustainability initiatives across all their business units. She has over 20 years of experience in sustainability, climate change.
resilience, environmental policy, green building rating systems, regenerative design and supply chain management.

So we'll start by hearing from Erin and Kimberly about their experience and lessons learned in building for heat resilience.

Then we'll invite 2 local experts to join Aaron and Kimberly for conversation and questions from the audience. Joining us for that portion of the conversation are two members of our building healthy Places Action Council, Erica Weeks, associate principal and director of sustainability at Hastings Architecture and Doctor Kendra Abkhaz, Mentor and Asheville Chief Sustainability and Resilience Officer.

All right. Thank you for having me today. I'm excited to share with you a little bit about the SG journey. And Emily, we've been committed to sustainability for a long time, but we've had quite an evolution in the SG space and discussions around resilience. So I'm going to build that up to show you kind of where we are, how we're thinking about building resilience specifically around heat and preparing our buildings for the future.

We are actually part of a larger pension fund. Called prime property front, it's managed by Morgan Stanley.

We are in eight different markets. We just sold two Houston properties, but we are all in the US all we build and manage as apartment communities pretty large scale usually in the 300 unit kind of size everything from garden up to high rise. So suburban, urban, you name it, we're kind of doing that in any of these markets. We are actually part of a larger pension fund.
mentioned that because we work very closely with them on our ESG initiatives and I'll talk a little bit more about that later.

The other thing that I think is kind of in this conversation notable for Amily is we are long term investors. So whatever we build we are going to live with and it used to be that we would have maybe a 10 to 12 year old period. We are actually now holding our assets for much longer than that even to the point that we are redeveloping them, making some renovations and even seeing past the initial installation of all of our equipment. So that's kind of an operational. Change that's been different for us. That is certainly impacting also how we think about development and construction.

So for us, when we started thinking about sustainability, we really focused on getting LEED certification and so that commitment to lead silver or higher for all of our new developments started back in 2006. We now have because of that 65% of our portfolio is lead certified. So while that is a fantastic step in our sustainability journey, that does not in fact guarantee performance particularly when it comes to topics like heat resilience.

Um, so ask recognizing that and also seeing how interconnected that people and not just the people living in our building but the people living in our communities and where we're doing business is so interconnected with everything that we're doing on the sustainability side. The CESG conversation that is now so active in the real estate investment community is something we started to think about differently and internally we talk about this environmental, social and governance with this brand.

Of family impact because we're trying to change the conversation around it, right get get it to be more than
just lead and sustainability. We're thinking about the people in our buildings and the places that we're doing business in a little different way. But.

Broadened to a lot more topics, right, than just sustainability. So how does one organization prioritize how they're going to look at all of these different topics? So we put together an ESG survey and we had all of our stakeholders, we asked them to participate in this. So for us, the big stakeholder groups included our employees, our investment team. We even surveyed our residents on ESG. That was a fun survey to read about. Afterwards, let's learn, don't leave open comment boxes unless you want to read them. So.

And then we also engaged with some of the civic leaders in our communities to kind of get an idea where they sit on all of this as well. And then in this X axis, we added business important and because it's where can we actually make change in our business. Um, we wanted that to be vetted into us. So everything in that top corner is kind of was prioritized as high by all of the stakeholders and then further to the right is where we think right from a business standpoint, we can have a higher impact.

So what do you see happening here, people are #1 by all of the stakeholders, right? Our residents, our employees, we're thinking about health and safety. And then #2 that dot to the far right. But too low down is climate. Strategy. And we know exactly who ranked that high and that was our real estate investors. But that language really isn't kind of translating I think into our residents, right.

They don't use those kinds of terms, even our employees don't. So we've been kind of thinking about this in an interesting way. We're like. Well, green building is high, but climate risk, right? We got to start to close those gaps on some of
these topics and see how they really overlap. So this is kind of how we have helped.

Prioritize some of the SG topics, but getting specifically into climate resilience?

This is the way we have started to reposition the thinking on our developments. So we have discussions even at the very, very beginning of land purchase discussing some of the risks that we could see in the next 15-30 years. So we have taken, if any of you are familiar with TCF D, it's a reporting structure that we utilize for climate change and they kind of have these two different categories of risks. That they are recognizing for buildings and that's transition risk and that's really thinking about what kind of risk does this property have when it comes to a decarbonizing economy, right. So think of it as building ordinances and requirements that may be in the future for these buildings.

And then also physical risks. So this is kind of getting a little bit more into the, you know for us we're in South Florida, we have to think about hurricanes, right. What kind of cost is that going to be increasing, what about flooding, you know the location matters on all of these. So we start to have those discussions now very early in the development process and decide at that point if we're actually going to invest in any features that we think could lower some of those risk for either of those and.

And we kind of see the heat discussions, right, as falling a little bit into both of these categories. So I mentioned we go for lead certification and hire for all of our buildings and we've been doing that for a long time. So it's integrated into how we do business. So we're trying to take advantage of the discussions of resilience by just adding them into this existing process we have about sustainability and how we do it. So for us, that's been easy because we look at heat resilience as part of our overall energy efficiency strategy. So I note in here that we do energy modeling.
early and often. It's very integrated into the design process because we are just like everyone else and we get very tempted during the value engineering process to take advantage of some of those savings opportunities, but with being long home the whole withholding our properties for such a long term and. Because we have. A lot of environmental goals and we're getting questions from our investors on it. It really makes us stop and think about, OK. If we change out those window values to get that savings, how is that going to impact the performance of the building? How is that going to impact if the power goes out in these buildings and that passive survivability for all of our residents? We know we're going to get some of those questions from our investors. And we need to really think about where we're going to keep our dollars, what's going to be smartest to invest in today so that when we exit this building is still going to be very valuable to the community. So for us, when it comes to heat resilience, I mentioned we really integrate that into how we're thinking about energy efficiency and the building envelope. So we spend a lot of time looking at the windows and and the values associated there. And it kind of depends on what climate we're in, how far we take that and push it. And we're still developing in that area and deciding are we going to implement actual standards in these spaces or the discussions that we're having, the energy models we're doing, are we kind of moving. Directionally in the right place, enough that this is going to be, we're going to have buildings that will perform in the near future. The other thing we've been able to do to continue these discussions about ESG and resilience with our buildings is by actually having some governance structure. And I'll be honest, I didn't always see the value in steering committees and things like that. I'm like we have a role, we have a process, we can get
this done, but I have to say when we.

Put together an ESG steering committee and started to engage

the right people at our organization. The buy in was
different. Everyone now understands the importance of ESG because we

got the right people at the table. We have our

head of development, we have our head of constructions, we

have head of acquisitions, we have legal and risk management.

We have our sustainability team. We even have our HR

team involved on that right because I mentioned people.

Right, this is about.

People as much as planet, so for us.

That has really.

Helped us on the development side, right, because then they
get to hear kind of what's happening on the operations

side and struggles and creates these communication change changes where

we might not be hitting as high on the marks

that we think we are on the sustainability side because

we now have this communication chain.

And I thought it was also for this group might

be interesting to mention that we're also integrating these same

conversations like what we're having on developments when we're acquiring

buildings and we're doing that so that we know what

we're getting into and if we need to allocate any

CapEx for that, we will be kind of ahead on

it. We also know that we're getting better and better

questions from our investors on that. So we better do

our homework so that we're not not unprepared.

So here's you know I mentioned we're still kind of

early in this. We're figuring exactly like what what levers

to pull to make this happen. We know it's important.

We know we're kind of starting to integrate this into

our energy efficiency discussions and get our consultants involved internally.

This is happening, but we still think we've got a

lot of work to do and one of one of

the areas we're trying to improve is our communication and

reporting. You know I mentioned there was a big kind
of knowledge gap happening in a lot of this. I can even think of when I've had internal discussions with people, when they've said something to me like, well, you're building resilience isn't the same as mine, right? I'm concerned about what we do in an emergency event. I'm not concerned. About climate change and I'm going. No, no, no. We are all talking about the same thing, right? Like we need to be having these conversations together. So we're still working on that both internally and externally. So to be transparent about how our buildings are performing as well.

Is a big piece of that, right?

We also are starting to share a little bit more on pilot projects between our different regions. If you remember on the map, we have you know properties in Seattle and California which have very different code requirements than what's kind of happening in Atlanta and South Florida. So we do a lot of information sharing between these different regions too to kind of understand what's happening, what may be coming and some of our other regions and then just improvements that we can implement related to these.

Another I'll kind of skip down to Umm. I want to mention this integration of a resilience tool. So this is also new to us, not new to many of the real estate investment communities, but there's a lot of predictive analytics and reports. So either dashboards or you can do one time reports that are predicting, you know what the transition risk of a property will be over the next 15 years, what specifically physical risk, right, what can happen for that property. As well. And one of the biggest topics on that is heat resilience. And so it's just kind of been, I think, a harder topic because we're all used to talking about things like hurricanes, right? Florida's obvious, Florida's obvious.
It's like, OK, we know that and we have some strategies for it. But gosh, what about our Dallas properties? What about our Austin properties? I mean, we can have some major damage to our properties if we have a power outage and we're not prepared for it with people living in our buildings, right like it. It's these big discussions that I think we're just now kind of figuring out, OK, how do we have some tools in place to also be able to help us rank that. So we're actually using a tool from MSCI that's doing a climate value at risk, still getting to know that it's very early in the past month for us. So excited to see how and if that gets formally integrated in a process, but it's something that we're looking at. And then we also do a ton of internal standards and we're actually looking at and considering do we have a performance benchmark internally for our properties to meet. So we will see how all of that pans out. I've obviously got an ambitious workload ahead and a lot of people to pull in this direction, but that's kind of how we're starting to think about heat resilience in the context of ESG and and our overall strategy. So thank you so much for having me. Again, Kim Pexton from JBG Smith. For those of you who who don't know who GBG Smith is, we are a public real estate investment trust and we are based in the Washington DC metro area. 100% of our footprint is there. Our portfolio is as of today 58 different buildings, which is about. 17 million give or take square feet across about half office and half multifamily, a little smidge of retail thrown in there. We also are a developer and our development pipeline includes about 18 million square feet. So once fully realized our our portfolio will will double. We are very blessed to be in an area where we are 98 Percent Metro served. So the subway system in DC is called metro and and again 98% of our holdings are actually served by Metro. So that's just a really great transportation story. If 50% of our holdings sit in an area called National Landing Show of Hands if
any have any of you visited Washington DC know we're
National landing is the is the newly is the newly
branded Crystal City Potomac Yard and a little bit of
of Alexandria in there. If you still really didn't know
who who JBG Smith is, we've got this little thing
going on in Arlington County which is Amazon's HQ two
we are the merchant developer and exclusive developer for
Amazon HQ Two what you're looking at on the screen
here just to give you a little context.
Of where we're at you're you're seeing Reagan national
airports
and national landing is about four mile stretch end to
end with a square footage and density about the same
as Austin TX central business district. Again just to give
you some scale there the yellow buildings that you see
in this picture are attributed to to Amazon part of
their new HQ two and also leased.
Space. And then on the other end, you'll see Virginia
Tech's innovation campus.
So again, just giving giving some context there.
We have an incredible opportunity to not just be able
to influence the development and redevelopment of vertical
structures, but
we actually also own much of the horizontal development
and
national landing, which presents an amazing opportunity to
really.
Please make in a way that will be unmatched from
anywhere in the country. A few of those highlights for
folks is, is the pedestrian bridge that we're actually building
to connect folks from the National Landing neighborhood
directly to
the airport. There's only one place in the entire world
that has that kind of connectivity from a community to
an airport, so it's certainly something that.
Burlington County is very excited about and of course we're
excited about too. It really enhances what we think about
as like that 20 minute city and really being able
to kind of bring that added layer of not just
you know, cars, bikes, that intermodal experience and public
transportation,
but actually linking people to literally anywhere in the world.
Another really interesting piece because we own so much of the horizontal development, we're actually developing the 1st 5G capable Smart city in the country. This is certainly something that wouldn't have been made possible without owning that horizontal development and we really with partners such as AT&T, we are really seeing this as the opportunity to. To build and really think about connectivity as like the next utility, you wouldn't build buildings without water and power you, you wouldn't build buildings any longer without that connectivity capability. And with with that connectivity capability is where we see being able to impact Community resilience, building resilience and sustainability at a scale that really quite frankly at this juncture we haven't even imagined yet. We're you know we're laying that foundation and that groundwork for for for people to engage in smart homes like they they never have before to really experience this. You know boots on the ground and the places that they live work and play that connectivity. How to be more efficient with our natural resources with with smart grids, smart lighting. Use of of materials, waste management, connectivity and also looking at how can we connect the community in times of climate related or or other disasters that would provide places of respite and people and places where people can go and have sort of that backup communication and connectivity. So just pausing there for a second, that's a lot of you know sort of background and and build up if you will to really talk about from a case study perspective how we're looking at heat resilience kind of boots on the ground in very specific ways in this community and across to other areas of our portfolio. I think first and foremost you know we look at sustainability as the frontline for resilience everything that we're doing.
Everything that we have in our skill set, in our toolbox that is addressing sustainability really works for a building in a community to be more resilient. When you're reducing the amount of energy that you're using, you're reducing the amount of water that you're using. You're you're reducing stress overall on the demand and what has to be supplied to to the people. So I want to, I want to say that very specifically. So the next few slides we're going to look at some case studies. We're going to start at a larger scale and look at some nature based solutions and then look at some very specific kind of technology based related things that were actually doing as we're creating this you know 5G community and our sustainability and resilience sort of overlay with that. So our horizontal development from a nature base standpoint focuses. On green space and and really you know if you've visited this particular area of the city and not like other. Cities, you know, there's there's a lot of concrete. So we're actually intentionally addressing heat stress and heat island by developing 15 different parks and also bringing Richmond Highway, which is better known as route one from an elevated roadway or freeway down to St. Level where we're where it will be more of a Blvd. situation, it will will have trees. Planted provide a lot more shade, etcetera and so forth. With this we're removing 580 some 1000 square feet of concrete and and planting back with regenerative approaches that bring back biodiversity with over 104 different species of of local and native planting as well as those that attract pollinators etcetera and so forth. This benefit to the Community brings more green space and park space. Which benefits people's people's health and Wellness and and well-being and also connects to the other parks that sit just outside of national landing and then also connect to access
to downtown DC and being able to enjoy what DC
has to, has to offer. Imagine just, you know, sort
of thinking about this, removing that much square footage of
concrete and replacing that.
With plantings and shade et cetera and so forth, we’re
just at that stage that, you know, really trying to
understand what kind of what kind of dividends from a
heat island effect reduction are actually associated with this
particular move. So we’re excited to see this all come to
you fruition.
Again as we sort of you know kind of start
to scale down or you know you be very specific
about technologies. So our horizontal developments focusing
again on heat island effect, we have piloted a different.
Cool seal and other pavement coatings such as cool seal
to really understand how how that particular product at scale
could again achieve huge dividends with respect to reducing
the
heat island effect. In this particular application, we piloted deploying
about 600 gallons of cool seal on some parking.
Structures as well as some sidewalks and surface parking to
to really understand, you know basically to prove the, the
technology out, you know all the claims that you see
in the wordsmithing of of a brochure is that really,
is that really what you’re going to get? So we
installed this in 2018 and a year later.
Went back and actually did some heat analysis studies to
reveal that even a year later after that application, we
were still experiencing anywhere between a reduction of 10 and
12 degrees surface temperature reduction compared to the
the controls.
Again, imagine getting those kinds of results and then
deploying
them at scale with the local jurisdiction and the city
again is just another layer of that.
That heat island effects and and working to deploy various
strategies that that address heat stress in a community and
a neighborhood.
So um, moving and shifting a little bit to the
building level here, our new developments really focus on
window to wall ratio. I'm probably going to say Windows a lot in the next in the next two slides. But the thing and actually what I should have done here was was shown a couple of developments that had already gone through the county approval process. Prior to actually really working to focus on window to wall ratio and put those next to each other to really to really sort of visualize the the impact. But what you're looking at here are are two multifamily development projects in Arlington County. Obviously one is more of a high rise you know or mid rise situation and the other is more of a four over two 5 / 2 kind of configuration. But in conjunction with the development team, what we have been able to sort of challenge the architects or our partner architects on is. How close to the given window to wall ratio of 40% that is identified in in many minimum energy performance standards? What does that look? Like. You know I'm like if if you were to build in your mind without seeing pictures of course it's you know what do you what do you think of 40% window to wall ratio looks like well you know certainly had one of my team members actually come to me and say OK great well we'll do this 40%. Under the wall ratio. But you know what are we gonna do we're gonna break up the whole building and just have pin holes and I'm like that's really extreme so it's not quite that but but also full 100% glass isn't the solution either arguably you know passive survival passive survivability in those particular situations and and also to glare is it really good views etcetera and so forth it's that's not. Not necessarily the iteration or the the reality that that people really want to experience. So both of these particular buildings and we focused very heavily on staying very close to that forty. I think the higher rise, the high
rise is actually at more of a 41% window to wall ratio. But part of the win on this was building up the education. In our development teams to really understand that you can come up with a beautiful solution from a window to wall ratio perspective, have it be an attractive building, one that is saleable, one that is rentable that that residents would want to be in and and still remain very close to that window to wall ratio.

I will stress that in that exploration and looking at that, we look very specifically at the window to wall ratio in the concept that's as soon as soon as an architect is working on the massing, we are sure to communicate to those teams that this is what our expectation is. And and from there we're also using as Aaron had mentioned with energy modeling. We're following energy modeling from the time that massing is set. We ensure that our energy modeling partner is also building their energy model that base so that we can iterate through schematic design 50% D, 100% D, 50% CD's all the way through to a construction set of documents to ensure that.

We're we're meeting specific objectives. Umm.

Moving on to existing buildings, again did I say Windows. So in the process of of really understanding you know the impact that Windows have on operations because we have you know we have somewhere in the neighborhood of 45 different buildings, office buildings that that we operate, we do do technical studies with energy audits etcetera. And so forth. And those energy auditors will come to us with a menu of items that that identify opportunities for us to reduce heat gain in the building and ultimately reduce our our energy consumption time and time again.

What we found that was one of the number one items on the list actually even before you get into LED lighting for for a building is actually window film that's the number one suggestion that.
We always would receive for our existing, our existing buildings.

But what happens when you start to have a conversation with the leasing team about window film, they don't like it so much. So because of the look, you know a lot of times these window films you know come with a color of some sort. The belief is that it reduces the the, the visibility and just the the overall look of the building from the exterior is not desirable.

From from a leasing team perspective, so we had actually been approached with a particular product that has been used for years and years on windshields in cars in Japan. And this particular company was working with painting subcut specialty contractors to become certified installers of this particular product which is developed by nanotech. It's called it's now called drywall wired. It was called something different a handful of years ago. But the beauty of this particular product is that it acts exactly like window film. You apply it like a paint, rolling it on to you have to prep the window and whatnot and you roll it on and it dries clear and it has all of the same properties with respect to reducing solar heat gain, infrared, etcetera and so forth.

Um, we were able to to work with a local contractor to install and do a couple of pilots and then do very specific scientific readings on the before and after. So some of some of what you're seeing here for 1901, if you can see that Bell St. which is the building on on the left hand side, you're seeing some numbers in BTU's.

Um, for the coded and uncoded. Uh yes, a little bit staggering that this building still has some areas where it's single pane. Yikes. But the the readings we you see a significant drop in BTU's from the coding on that building. The building on the right hand side which is 2451 Crystal Dr. also you can see that significant drop in in BTU's from.

From the uncoded to the to the coded.

Um, ultimately bottom line, um, having our engineering staff
vault involved and our asset managers have brought this particular solution to a place where it is being integrated as part of our energy efficiency projects into into CapEx and is our number one strategy against heat stress that we're deploying across our existing office portfolio for the. Sort of engineers in the room and those folks who are very close to energy modeling. We we did model the performance of this particular this particular product and found that that a reduction of an EI of three which is amazing because there really are not many strategies that reduce. You know there are a lot of increments of UI that you can achieve by. By deploying various moves, but to see one that actually reduces UI by three is is pretty incredible. So I I think in closing with respect to all of this, again just stressing that JBG Smith, we really see that our sustainability efforts are the frontline when it comes to creating resilient buildings and we focus very specifically and are very intentional about heat stress in in our region and the ways that we can at scale deploy. Very specific solutions that are that are simple but certainly meaningful, not just for ourselves and our portfolio, but for the experience of anybody in this particular neighborhood. Well, everyone's getting situated here. Thank you both for. Explaining how you're thinking about heat resiliency and how you're working through existing buildings and new buildings through your portfolio. I think we have a few minutes for questions and we have some questions for you all, but does anyone in the audience have a burning question? Have you had to, you know, change the type of investors that you bring to the table? Like do you have to, are they coming along with you kind of in this journey of like sustainability or have you had to go out and find new? Investors that that care about that part of the business, I'm happy to to start Aaron, we actually I mean our investors at this juncture are are asking for this
and what what our plans are and how that manifests itself is. If you if you recall from Aaron's presentation she had she had a big graph, scatter graph. With and spoke of.

Of the survey for a materiality assessment. Of what, what ends up happening is that an investor is asking us for if we're familiar and we understand our climate change risks. So as part of that it is our obligation then to do an assessment across our entire portfolio to really understand our transitional physical and financial risk. Those are things that we've done to help us, you know kind of prioritize and and focus. Our efforts, our GVG Smiths are our number one hazard is actually heat stress. In our location. So that's why it's been you know such a an easy sort of integration there. So we were a public company. We had pretty much the same investors since the time that we went public. GBG Smith on paper is only five years old. We were the result of a spin merge back in 2017. And so we have the same investors we we do see that there is attraction in new capital markets with respect to the things that we're doing where people are paying attention and wanting to invest in JBG Smith. So it's sometimes it's hard to you know to kind of pull the two pools apart if you will, you know those investors who care about you know, ESG or not. Because at this juncture, what we're finding is that we don't have any of our investors who are not focused on this topic at the moment. There, in addition to asking us about our strategy, they're also saying, by the way, can you also report on all of your properties. So on an annual basis, we provide greenhouse gas for every property. We provide energy use for every property, water and even waste is included in that. So those are all a huge amount of information to give them and we certainly don't want our properties to be on the top of any of those lists and. We get questions if they do.
Fall on those lists. So I'm not going to say they're pushing us, but they are one of the biggest drivers for us.

I would say investors specifically, they do have their own checklists if you will, when they're, you know, advising their clients on what companies to invest in or if they're, you know, developing an ETF or or another product, investment.

Does this particular organization, you know, have a carbon neutrality plan or a net zero plan, etcetera and so forth?

So it's interesting to hear from the investor side. We look a lot too at what government or policy might be enforcing, especially as you work in the DC area, which is very green and you work in many West Coast places that are very green and Austin that's very green. So are you feeling a little bit more of the push and pull from the investors than sort of the government or policy or ordinance or or sort of depends where where you're located?

Probably it it depends, right? But. We we see both of those forces right as a reason to start tackling this and we actually have tried to figure out ways to engage with the local government in the cities we're in because we often just don't feel like multifamily has has often as has big of a presence in these conversations as maybe like the office developers. So we we tried as much as they will talk to us you know to to engage on that.

Level. So kind of having that information share, having the information share with our investors has kind of helped develop this strategy.

I'm gonna flip that question a little bit on its other side and say, is there anything that's happening in any of the markets that you're working in from a local government perspective that you feel serves as perhaps a disincentive or makes it more challenging to try to build for heat resilience? Yes, I'm excited. OK.

So I know that this is going to sound critical
and if anybody shares this with the City of Denver,
I will be very upset. No, I'm I they have
a fantastic plan in place. But as a developer in
a market where Colorado has state regulations around sustainability, Denver
has regulations around it and they are pushing for electrification
in a market that, you know, there's a lot of
heating needs on. And we've always done natural gas and
we've done that because otherwise it's expensive and we use
more energy.
Right. If we do all these things, we're also being
pushed to install level 2 EV chargers at a very
high percentage. That's new. We also now have building performance
standards where they are saying for multifamily buildings, you cannot exceed by 2030 the specific site, EI. So we're like
cool. So just to get this straight, you're going to
take natural gas away from us and we have to
add electricity for all of the EB stations and then
we have to lower our.
Electric use as well.
Right. That's not and and and we see the vision
right we're we're like we get it and we want
the EV stations too and we want that as and
and we see the transition of electric happening as well
right. And how that could truly lower our carbon footprint.
But right now they're grids really dirty and so we're
tracking our greenhouse gas footprint and saying but you making
us do that is actually going to hurt our reporting.
So it's just sort of.
It's not that we're actually directionally not all going in
the same like in the same direction. It's just kind of the pace of all of it happening. So I
wouldn't exactly call that a disincentive. I think it's more.
How do we?
Navigate all of these pieces coming together when you know
nobody has this figured out and nobody knows the exact
transition. But here's where I'm going to say what I
like about what's happening there for.
Us, even though we're kind of like, Oh my gosh, how are we going to figure this out?

What we're excited about though is they also the state of Colorado has regulations to transition the utility grid. So, so for us we're going.

OK. All right. So we still got to figure out how to use less energy while adding electrical demand, right. That's still going to be a big challenge in this.

But at least we know that the electric grid is going to be transitioning with us and you know, we kind of feel like that's, that's a fair fight where in some of our other cities they're wanting to transition to electric, but there is no plan.

For the grid.

So anyway, those are some of my developer and building owner.

Beefs, I think you know, looking at the question from Erica.

Your you know, DC is a really unique market. Arlington County was the the first county I believe in the country that actually started to use the lead green building rating system as an incentive for bonus density for developers.

And that would you know that was the early beginnings of their green building incentive program journey and then just over the river in in DC.

You have a very different situation where DC has been about mandates and laws, so you've got like the carrot and the stick happening sort of in the same geographical location.

Regardless, all of this has been you know a great catalyst for transformational change in the real estate space. So you know kind of putting that aside I think that you know some of the the the challenges and and things like that that we see sort of you know kind of jumping off of what Aaron was was speaking to is that from a utility perspective not enough jurisdictions are actually having conversations with the utilities as part of this.

Decarbonization and electrification mission.

Um, if anybody has seen the news, DC recently had
put out a ban on natural gas.

In new developments starting in 2026 and literally an hour before the vote from DC Board it was it was shut down and that's specifically because Pepco who's the electricity operator actually came in and said time out we don't have the ability to satisfy this. So that's sort of you know the and and I think you know without having those equities at the table as you're discussing. These things, that's where the channel challenges or disincentivize nation, you know sort of comes comes in is like the lack of understanding of each other's equities. What people can do enacting or mandating something without really understanding the 2nd and 3rd order effects and the partners that you need to bring along the way in that discussion and being together growing your orders in the same direction for the plant because we all want this you know. And, you know, getting there, you know, certainly will have its challenges.

You both talked about energy modeling and how you're using it as a tool. There are several people I know in the room very interested in maybe how we can support efforts of the owner of the developer with that using energy modeling. I'm curious to know also when you're doing your modeling through the design process, are you using that to look back then after the building's operating and doing some comparisons? Yeah.

So sorry about this. Yeah.

Um, so we, um, what we have done internally is actually use the energy modeling report to build education for our development teams to really understand what the heck they're looking at. Because the reality is that, you know, somebody slings the energy model report over the table and the development team is like, OK, great, that box is checked, right? So I was like, I'm like this is this isn't necessarily very useful. To anyone. So we worked with our energy modeling partners
to actually develop a strategy to illustrate within that
model report you know just one roll up table and
it's it's the table that you know looks at the
base case, the design case and looks at energy costs.
We we make sure that it's not just energy cost
you know we're looking very specifically at consumption. So
we have them to show both.
The energy cost savings as well as the energy consumption
savings, we also have our energy modelers take that
information and feed it into the Energy Star portfolio manager target
Finder tool to spit out that predicted performance. I think
even going through that particular process was really interesting
for our development teams because it was clear that the
assumption was.
We're designing a lead building and we're beating
the energy code by you know ten 1520% whatever it
is but it's still not something on the operational end
that would be close to being able to be certified
as an Energy Star building with those score of 75
or higher. So really.
Kind of taking.
Those key pieces like you, you don't necessarily need to
know everything about building science, right? But if you if
you.
Kind of take that the key critical path items within
that that model and really utilize it and leverage
it as a decision making tool that really has been
you know it's been a wonderful discovery within our
development
teams and really using that throughout that design process to
iterate and get ever you know ever deeper energy
savings. I love it. I've had you know development teams
now making.
Connections on well, hey, it's actually cheaper to put solar
on the building than to to look at triple pane
glazing on a building. Yeah, right. That's a great win.
You know, and it's and it's fundamentally it's education and
putting translating the information into something that's you
know becomes
a useful business tool.

Yeah, I think just to piggyback one you, you can

literally see some like aha moments with our development partners

when they're like, oh, I can also use this in

my decision making process, OK, can we run it with

this scenario happening, with this scenario happening, right, because because

I will certainly admit we were guilty of.

Does it meet lead right in the early days and

that was kind of good enough, right. So using that

as a tool has just been a game changer. I'm

still kind of getting some people on board with with

that, but to the question of do we ever compare?

It.

We did that a couple of years ago and I

realized who our good energy modelers are and who are

not good energy modelers are. Yeah, I mean that was

kind of interesting because I think it kind of pushed

us to ask better questions of of our energy modelers

and make sure that we're aligned that we are interested

in understanding the actual performance versus just getting the points.

I mean, we want the points to right because we

want the certification.

But like we need this to be a.

Tool for us.

Um, so. But yeah, they're not always right. As much

as we lean on them as a tool, they can

be corrupted. They can be, you know, intentionally, unintentionally or

right. So having kind of that expectation from the beginning

though with your team is is also important, right. So

you guys are like, oh, you're not going to be

one of those.

This is fun, right? Like our design teams are interested

then too, so.

That's that's where we, you know, where it became important

to use some kind of you know what what is

the going predictor for operational energy consumption.

That's why it

became important to sort of take what was coming out

of a predictive tool that doesn't include human behavior to
you know, to try to translate it into something that could be a better predictor of, you know, of that operations. Because there is a difference. You're, you're never going to be able to make that. Digital twin.

Before the building. The building actually is. Operating, yeah, exactly. Yeah.

Just handling this elevated highway and turning it into a Blvd. And one, that's amazing. But two, I wanted to hear more about how on Earth you guys made that actually happen, what sort of like pushback or community support you received?

Right, definitely this is something actually the nature based solutions that I talked about with respect to the parks and you know and and also looking at anything on that horizontal scale 100%.

Is being done in conjunction with Arlington County with neighborhood support and and also with the National Landing Business district as well. So it's a very collaborative collaborative planning process etcetera and so forth. So ultimately we're we're partnering with Arlington County really on the dollars and the investment on that because it is so critical.

To the sustainability and resilience of the community being able to sort of connect you know, cause that highway and it's you know, I call it a highway light because it's not like, you know, it's not like an Interstate, right. But it does have a very clear separation that runs, you know, down the middle of of national landing.

So bringing that down to Blvd. Blvd. Grade will actually be safer in the community as they're, you know, crossing, crossing streets.

And, you know, making it actually more more walkable. Does that answer your your question? Yeah. Um, so this is actually a great kind of transition and segue. So we've talked a lot about sustainability,
resilience, urban heat. It strikes me that equity is a huge part of this conversation as well. And so I was curious if either of you could comment on how equity is perhaps factored into our layered into development processes within each of your organizations? So we actually we're we're a big believer in from a social value perspective of incorporating you know equity as part of our our placemaking strategy. So we very specifically look to local business, local minority businesses etcetera and so forth should be a part of the of that you know police making strategy of.

You know that street level experience. Um, in addition to that, you know we are, you know we ensure that that we're... Developing places of respite and including services for the underserved, if that makes sense. So, you know, at the same time that we may be having to put in a, you know, a grocery store, we're also putting in, you know, medical facilities and clinics and things like that that can, you know, help serve the public in, in a way that has not traditionally been present.

So. Yeah. And I think 2 two things come to mind on that. One is the opportunities we have as a as a builder to just be building a healthier place for residents to live in. And then taking what we've been learning from the lead buildings, applying it on some of our non lead buildings and just getting that to be more of like an operational expectation has been has been something for us. And then we've also been trying to figure out. And you know the markets where there's a intention to transition to all electric. We have a lot of concerns about what that may look like for the utility bills for people and and kind of are trying to elevate that to be part of the discussion in all of this is like how do we address that because we don't again, we don't want to be transferring that
on to the residents and we do care.

About their bills, right, because even though, you know we a lot of times talk about split incentives in the building industry, but it really is kind of integrated in the cost of living at our properties, right. That's how the resident thinks about it. That's how they're going to think about renting with us too. So this is just another area you know, kind of in the social initiatives that we we think about is so easily integrated and directly connected with what we're doing.

Here there was definitely you know in looking at sort of that. That street level you know retail very large discussions with respect to restaurant tours and electrification for restaurant tours and what that means you know certainly technology is always developing right. And so we're we're now at a stage where there are commercial grade, there is commercial grade equipment that induction cooking and things like that that that can actually get the job done. There still are high premiums associated with that and so to the point of you know just inclusion.

There just are you know a local restaurant versus a chain just is not going to be able to bear that particular cost and so that's that's been a big. Concern and ultimately. Why DC you know had proposed this electrification which would have impacted retail as well and you know, put the kibosh on it, you know, stepped on the brakes on that to to do more research and consideration on that topic. OK, we've got one more question. Audience and then.

So I guess my question is like you all are working in unique markets with you know clientele and investors that have these certain, you know, higher standards. So do you have any advice for developers and people in maybe more rural areas or developing areas that don't have that buy in. How would you go about getting that buy
in because things cost more on the front end and
obviously you're you know, residents and.
Investors see the long-term benefits, So what would you recommend
for?
In an area where you may not have.
That buy in on the front end to justify the
upfront costs that have that longer ROI for resilience and
those things.
Yeah, I think.
Um.
Depending on our audience, you know, when we're having these
discussions because as much as I sit up there and
talk about it, we still have to, you know, get
that buy in, right. Because some of the some of
the teams that we are working with, they hear me
say that, they hear our CEO talk about this, right.
But they're also like at the end of the day,
I know my job is to get this done. We're
talking about on time, on budget, right, and have that
incentive. Well, sometimes we kind of switch.
That conversation to talk about quality and stop using words
about sustainability because building a better product means
it's more
valuable and taking that spin on things and you know
how you can then turn to sell the building or
rent right at a higher rent, that perception, a lot
of the sustainability features serve that purpose. So that's kind
of been an angle that we have taken before.
And.
And there's truth to it too, right? We do believe
that we're building better quality buildings and we're finding out
that to be true. So it's been a better engagement
point when we when we don't have that buy in
that we had hoped.
For.
Yeah, I think it's, I think it's an interesting discussion.
I mean we, we certainly, we don't necessarily develop in
suburban you know or or rural locations, but I've been
just a part of various groups specifically there was a
Group A handful of years ago talking about the green New Deal. And and it brought together a lot of different stakeholders in the room of both real estate development folks who were very much in that urban environment and then you know those from rural communities. And it was, it was really interesting to sort of hear the the dynamics. I think when I think about that, I think it's always best to go back to basics. Conserving energy is always going to be a great business case and a business strategy no matter the economic climate situation et cetera. So so you know that that buy in to help people understand how that energy conservation and really understanding you know the the simple technological like things as simple as if you have to replace a particular system don't replace in kind really consider that higher efficiency. Hear that? That may hold a premium for the efficiency, but you're already spending, you know, the money to replace the system. So it's it's like keeping that simple, you know we're talking about things here that arguably are are complex and have taken years of you know planning, engagement etcetera and so forth. But maybe that's like my basketball speak coming in like. Stick to the, stick to the to the basics you know. Thank our speakers Aaron Hatcher and Kimberly Pexton and our moderators Dr. Kendra Abkhaz and Erica weeks. And thanks to you all for attending this Member roundtable hosted by the building Healthy Places Action Committee and underwritten by the Kreski Foundation.