

## **Event Session**

## Pivotal Points: Capitalizing on Building Milestones for Environmental Gains

Date: October 19, 2023

00:00:00> 00:00:01:	Thank you, Kevin.
00:00:03> 00:00:06:	So as Kevin mentioned, I'm by the way, I'm an
00:00:06> 00:00:09:	AI member and I chair the Resilience Committee for ULI.
00:00:09> 00:00:12:	So I, I love this program together.
00:00:12> 00:00:15:	I was talking with Kevin and and Rebecca both about
00:00:15> 00:00:15:	it.
00:00:15> 00:00:16:	So I think we should be doing more of this
00:00:17> 00:00:17:	hopefully.
00:00:19> 00:00:23:	So the resilience committee with ULI, we we we we
00:00:23> 00:00:27:	started about two years ago and we we really focus
00:00:27> 00:00:31:	on trying to find ways to to bring about conversation
00:00:31> 00:00:35:	to create healthy and resilient community.
00:00:36> 00:00:40:	In those two years we hosted multiple conversations about developing
00:00:40> 00:00:42:	waterfront resilient waterfronts.
00:00:42> 00:00:45:	We hosted a bunch of place management organizations from across
00:00:46> 00:00:49:	the country to a workshop on how climate activity is
00:00:49> 00:00:51:	changing our approach to programming public space.
00:00:52> 00:00:56:	And we worked with community leaders to evaluate the feasibility
00:00:56> 00:00:59:	of equitably relocating neighbors in a flood clone area, a
00:00:59> 00:01:03:	flood prone area of Philadelphia neighbors to higher ground.
00:01:03> 00:01:07:	Today's conversation will build on that and specifically explore opportunity
00:01:07> 00:01:11:	for commercial and multi family owners to make strategic resilient
00:01:11> 00:01:15:	investments into their projects while improving the financial performance of
00:01:15> 00:01:16:	those assets.
00:01:17> 00:01:21:	I love the way that these three sessions today really,

00:01:21> 00:01:23:	really stack the conversation.
00:01:23> 00:01:24:	So there's three scales, right?
00:01:24> 00:01:27:	There's site, you know the individual projects, there's community and
00:01:27> 00:01:29:	then there's a regional perspective.
00:01:29> 00:01:32:	And we heard some of this in the first session
00:01:32> 00:01:37:	already and the three systems maybe of like stormwater management,
00:01:37> 00:01:40:	renewable energy and transportation infrastructure.
00:01:40> 00:01:42:	So I want, I want you to keep your ears
00:01:42> 00:01:44:	open for these connections throughout the conversations.
00:01:45> 00:01:49:	And equally important is these, these notions of impetus, financing
00:01:49> 00:01:51:	and partnerships, right?
00:01:51> 00:01:53:	How do these things get started, right?
00:01:53> 00:01:56:	Brazilian seems like such a big issue, you know, but
00:01:56> 00:01:58:	the fact that you can get it started with a
00:01:58> 00:02:01:	Big Mac, right, a conversation that leads to that is
00:02:01> 00:02:01:	pretty huge.
00:02:02> 00:02:03:	So save those coupons.
00:02:05> 00:02:08:	So in that context, I'm happy to introduce our second
00:02:08> 00:02:12:	panel for today, capitalizing on building milestones for environmental gains.
00:02:13> 00:02:16:	Our moderator, Lindsay Brugger, she's Vice President of Urban Resilience
00:02:16> 00:02:17:	for Urban Land Institute.
00:02:18> 00:02:21:	I work closely with Lindsay in my role both as
00:02:21> 00:02:25:	Resilience Chair and also resilient land use cohort.
00:02:26> 00:02:28:	So I'm pleased to to introduce her today.
00:02:28> 00:02:31:	Please help me welcome Lindsay Brugger who introduced our panelists
00:02:31> 00:02:32:	in the discussion.
00:02:32> 00:02:32:	Thank.
00:02:41> 00:02:42:	You very much.
00:02:58> 00:02:58:	Thank you David.
00:02:58> 00:03:00:	Appreciate that introduction.
00:03:01> 00:03:04:	So as David mentioned, we are shifting gears a little
00:03:04> 00:03:04:	bit.
00:03:04> 00:03:07:	We had a fantastic conversation to kick off the day
00:03:07> 00:03:10:	that was really at the sites kind of neighbourhood scale,
00:03:10> 00:03:12:	it was more public sector.
00:03:12> 00:03:15:	We're going to shift gears really looking at the asset
00:03:15> 00:03:18:	scale and thinking more about the role of the private

00:03:18> 00:03:19:	sector.
00:03:19> 00:03:22:	So you all heard a little bit about me from
00:03:22> 00:03:22:	David.
00:03:22> 00:03:25:	I'll add that Prior to joining ULIA couple years ago,
00:03:25> 00:03:29:	I managed resilience and adaptation and disaster assistance
	at AIA
00:03:29> 00:03:30:	National.
00:03:30> 00:03:33:	So I am particularly excited about this collaboration and love
00:03:33> 00:03:36:	seeing everybody here in this room and want to start
00:03:36> 00:03:38:	off by getting to know you a little bit.
00:03:39> 00:03:42:	So show of hands, where are all the architects in
00:03:42> 00:03:43:	the room?
00:03:44> 00:03:45:	I'm sure we have a bunch.
00:03:46> 00:03:46:	Excellent.
00:03:46> 00:03:46:	OK.
00:03:46> 00:03:48:	And I know we had some planners.
00:03:48> 00:03:50:	I was sitting with some planners earlier.
00:03:50> 00:03:51:	Great.
00:03:51> 00:03:52:	Few more hands.
00:03:52> 00:03:54:	Any engineers in the room?
00:03:54> 00:03:55:	Oh, yeah, Proud engineers.
00:03:55> 00:03:57:	Those hands went right up.
00:03:57> 00:03:59:	Great developers.
00:04:01> 00:04:02:	Good.
00:04:02> 00:04:03:	We got some Uli members here.
00:04:03> 00:04:03:	OK.
00:04:04> 00:04:05:	Any owners?
00:04:06> 00:04:07:	Couple.
00:04:08> 00:04:08:	OK.
00:04:09> 00:04:10:	Government folk.
00:04:11> 00:04:12:	Yeah, that's right.
00:04:12> 00:04:12:	Panel one.
00:04:12> 00:04:13:	There you go.
00:04:14> 00:04:16:	And then what about finance people?
00:04:16> 00:04:17:	I know we have at least one.
00:04:18> 00:04:19:	Yeah, there we are.
00:04:19> 00:04:19:	OK.
00:04:19> 00:04:22:	So my panelists, great.
00:04:22> 00:04:24:	So we are going to try to talk to a
00:04:24> 00:04:27:	lot of those perspectives today and to set the scene
00:04:27> 00:04:29:	for our resilient retrofit conversation.
00:04:30> 00:04:33:	I'm going to provide a little bit of background on

00:04:33> 00:04:35:	a report that ULI published about a year ago called
00:04:36> 00:04:37:	Resilient Retrofits.
00:04:37> 00:04:41:	So we're going to talk about how we prepare our
00:04:41> 00:04:45:	existing buildings to be ready for the changes in climate,
00:04:45> 00:04:48:	specifically physical climate risks.
00:04:48> 00:04:50:	So floods, heat, wildfire.
00:04:51> 00:04:54:	There's of course intersections with our climate mitigation goals, but
00:04:54> 00:04:58:	this conversation is predominantly going to be about climate adaptation.
00:04:59> 00:05:03:	And this report looks at the business case for these
00:05:03> 00:05:07:	resilient retrofits as well as a summary of design strategies,
00:05:07> 00:05:12:	policies and financing mechanisms to make these resilient retrofits a
00:05:12> 00:05:12:	reality.
00:05:13> 00:05:16:	So for my brief overview, I'm really going to focus
00:05:16> 00:05:18:	on the business case, sprinkling in a little bit of
00:05:18> 00:05:21:	the design elements and then teeing up our conversation today,
00:05:21> 00:05:25:	which will be predominantly about the financing mechanisms and the
00:05:25> 00:05:27:	challenges and benefits that are out there.
00:05:29> 00:05:32:	So why are we talking about existing buildings?
00:05:33> 00:05:36:	Well, believe it or not, most of our built environment
00:05:36> 00:05:37:	already exists.
00:05:38> 00:05:40:	This stat is from architecture 2030.
00:05:41> 00:05:45:	And according to that organization, 2/3 of the global building
00:05:45> 00:05:48:	stock already exists and will be with us again in
00:05:49> 00:05:49:	2040.
00:05:52> 00:05:54:	So that's a lot of buildings and that could be
00:05:54> 00:05:56:	a little bit daunting.
00:05:56> 00:05:59:	It's a big challenge but but the good news is
00:05:59> 00:06:04:	that all of these retrofits have significant economic opportunities and
00:06:04> 00:06:09:	one of those opportunities is enhanced marketability and access to
00:06:09> 00:06:10:	capital.
00:06:10> 00:06:14:	So that might look like reputational benefits or the ability
00:06:14> 00:06:17:	to attract and retain high value tenants.
00:06:17> 00:06:21:	It might be fasting, leasing and sale or even higher
00:06:21> 00:06:22:	rental and sale premiums.
00:06:23> 00:06:26:	And as we'll hear later, it might also be better
00:06:26> 00:06:27:	access to financing.

00:06:31> 00:06:34:	Resilient buildings might be cheaper to ensure.
00:06:34> 00:06:38:	Insurance is a big topic these days and we know
00:06:39> 00:06:43:	that insurers price risk, so less risk could mean a
00:06:43> 00:06:44:	lower price.
00:06:46> 00:06:48:	There's a hotel in South Florida that's all this.
00:06:48> 00:06:53:	They saved over \$500,000 on their policy just by protecting
00:06:53> 00:06:58:	their MEP equipment, using impact resistant windows, and adding backup
00:06:58> 00:07:01:	power and water supply to their facility.
00:07:05> 00:07:08:	Resilient buildings could avoid future costs.
00:07:09> 00:07:13:	We all know that disasters come with a very high
00:07:13> 00:07:16:	price tag, so you could say that it might be
00:07:16> 00:07:21:	actually cheaper to fortify your building now than to repair
00:07:21> 00:07:22:	or rebuild later.
00:07:24> 00:07:26:	FM Global big major insurer.
00:07:26> 00:07:28:	They're offering all sorts of discounts.
00:07:28> 00:07:30:	They have research to back this up.
00:07:30> 00:07:34:	They found that for every \$1.00 that a company spends
00:07:35> 00:07:39:	to protect their structure, they reduce their loss exposure by
00:07:39> 00:07:40:	about \$105.00.
00:07:42> 00:07:43:	That's a pretty great return.
00:07:46> 00:07:50:	And then we could also say that resilient buildings could
00:07:50> 00:07:51:	be cheaper to operate, right?
00:07:51> 00:07:54:	Materials are more durable, they last longer, they don't need
00:07:54> 00:07:55:	to be replaced quite as often.
00:07:56> 00:08:00:	And then particularly when we're thinking about extreme heat mitigation
00:08:00> 00:08:04:	measures, they have wonderful Co benefits, they help us lower
00:08:04> 00:08:07:	energy bills, and they support our net 0 ambitions.
00:08:07> 00:08:10:	That might be things like cool coatings for roofs or
00:08:10> 00:08:11:	facades.
00:08:12> 00:08:15:	Those are relatively affordable and they help to reduce indoor
00:08:16> 00:08:17:	heat gain and energy bills.
00:08:18> 00:08:22:	Even something as simple as shading really basic but can
00:08:22> 00:08:25:	help reduce our heat gain, lower energy bills.
00:08:28> 00:08:31:	So all that to say, the increased demand from investors
00:08:31> 00:08:34:	and end users is a big piece of this, and
00:08:34> 00:08:37:	that is coming from a lot of different places.
00:08:37> 00:08:40:	We're seeing increased consumer awareness, right?
00:08:40> 00:08:42:	MLS listings are listing physical climate risks.
00:08:42> 00:08:45:	We have all sorts of disclosure regulations coming out at

00:08:45> 00:08:47:	the city, state and federal levels.
00:08:48> 00:08:51:	And that's actually a good thing because when we build
00:08:51> 00:08:55:	more resilient buildings, everyone benefits, all right, We have a
00:08:55> 00:08:57:	more stable property environment.
00:08:57> 00:08:59:	We have safer buildings for our occupants.
00:09:00> 00:09:04:	You could argue there's more competitive markets for growth and
00:09:04> 00:09:07:	our local economies are more supportive and our cost to
00:09:07> 00:09:09:	our public, our taxpayers are also lower.
00:09:11> 00:09:15:	So here's some more good news from a design perspective.
00:09:16> 00:09:17:	We know how to do this.
00:09:19> 00:09:22:	Retrofit strategies exist for every major hazard type and when
00:09:22> 00:09:26:	we're thinking about how we retrofit our buildings and which
00:09:26> 00:09:30:	design strategies to select and implement, we should think about
00:09:30> 00:09:30:	three things.
00:09:31> 00:09:34:	First is we want to be comprehensive.
00:09:35> 00:09:38:	I can't think of a single building that only faces
00:09:38> 00:09:40:	one single hazard, right.
00:09:40> 00:09:42:	We are in a multi hazard kind of world and
00:09:42> 00:09:43:	we got to address it.
00:09:44> 00:09:47:	And fortunately there are synergies between many of these strategies.
00:09:49> 00:09:52:	And Speaking of synergies, we want to address adaptation and
00:09:52> 00:09:53:	mitigation.
00:09:53> 00:09:57:	Because while we know that disasters are increasing in frequency
00:09:57> 00:10:00:	and intensity, and we need to address that, we also
00:10:00> 00:10:03:	need to address the root cause and reduce our greenhouse
00:10:03> 00:10:04:	gas emissions.
00:10:04> 00:10:08:	And sometimes, as designers, that requires us to balance these
00:10:08> 00:10:10:	two objectives with our project goals.
00:10:11> 00:10:15:	And then finally, we want to have the big audacious
00:10:15> 00:10:17:	goal of being comprehensive.
00:10:18> 00:10:20:	We know that things like money can be a challenge
00:10:20> 00:10:23:	and so we may not be able to implement everything
00:10:23> 00:10:25:	all at once, but knowing where we need to get
00:10:25> 00:10:27:	to in the long run can help us be a
00:10:27> 00:10:29:	more effective in the short term.
00:10:32> 00:10:34:	So for my designers in the room, this all probably

00:10:34> 00:10:35:	looks really familiar.
00:10:35> 00:10:39:	Here's a few examples of what might need to happen
00:10:39> 00:10:40:	here in Philly.
00:10:41> 00:10:42:	These are pretty low hanging fruit.
00:10:42> 00:10:45:	These are some of the lower cost items that are
00:10:45> 00:10:48:	detailed in the report, recognizing that heat and flooding are
00:10:48> 00:10:50:	some of the major hazards here in Philadelphia.
00:10:54> 00:10:58:	And then today's conversation comes back to that sticky question
00:10:58> 00:11:00:	of where do we find the money.
00:11:00> 00:11:02:	I'll admit this part's harder.
00:11:02> 00:11:05:	It's not figured out quite as much as those design
00:11:05> 00:11:09:	strategies, but there are financing mechanisms out there and that's
00:11:09> 00:11:11:	going to be a big part of our conversation today.
00:11:13> 00:11:15:	So with that, I'd like to bring up our incredible
00:11:16> 00:11:16:	panelists.
00:11:16> 00:11:19:	I'll do a quick introduction once they take their seats.
00:11:27> 00:11:33:	All right.
00:11:34> 00:11:37:	So my very first applauder here, we have Greg Reeves,
00:11:37> 00:11:40:	CEO and Co Founder of Mosaic Development Partners.
00:11:41> 00:11:44:	Then we have Sheila Wallace, Senior Director and of originations
00:11:44> 00:11:46:	at Nubian Green Capital.
00:11:46> 00:11:47:	So she's going to tell us where all the money
00:11:47> 00:11:47:	comes from.
00:11:48> 00:11:52:	And then we have Alicia Schulach, Director of Commercial Programs
00:11:52> 00:11:55:	at Philadelphia Energy Authority, who's going to be kicking us
00:11:55> 00:11:57:	off with a little bit of an overview.
00:11:59> 00:12:01:	And I'm going to warn you all now, all of
00:12:01> 00:12:04:	my panelists are really excited about Q&A.
00:12:04> 00:12:06:	So we're going to be tossing it to you really
00:12:06> 00:12:06:	early.
00:12:06> 00:12:08:	So get your questions ready.
00:12:10> 00:12:10:	Thank you, Lindsay.
00:12:10> 00:12:11:	Really appreciate it.
00:12:12> 00:12:13:	I'm going to stand up for a second.
00:12:16> 00:12:18:	If you've been in a room with me when I've
00:12:18> 00:12:20:	been at the front of the room, you'll know that
00:12:20> 00:12:22:	the very first thing I do is take a picture
00:12:22> 00:12:23:	of the audience.

00:12:23> 00:12:24:	But you have to wave at me.
00:12:24> 00:12:27:	Hey, let's go.
00:12:27> 00:12:27:	Wave.
00:12:27> 00:12:28:	Don't stop.
00:12:29> 00:12:29:	Don't stop.
00:12:34> 00:12:34:	Thank you.
00:12:34> 00:12:38:	I'll see if any of them turn out OK.
00:12:39> 00:12:40:	You know what?
00:12:40> 00:12:42:	I'm just going to stand while I answer this first
00:12:42> 00:12:45:	question and then I'm going to sit Lisa Shulak, Philadelphia
00:12:45> 00:12:46:	Energy Authority.
00:12:47> 00:12:52:	I also am Chair of the Board of Greenbelt United,
00:12:52> 00:12:57:	but I'm here in my PEA capacity, so financing.
00:12:57> 00:13:00:	So just I just want to just restate a couple
00:13:00> 00:13:04:	of things that Lindsay just said, which is the first
00:13:04> 00:13:08:	panel was the amazing and wonderful and was really focused
00:13:08> 00:13:09:	on public projects.
00:13:10> 00:13:14:	We're here today to talk about privately owned property, which
00:13:14> 00:13:18:	could be both, you know, for profit as well as
00:13:18> 00:13:21:	nonprofit owners, but just not government owned.
00:13:21> 00:13:25:	So that's that's kind of the realm that we're talking
00:13:25> 00:13:25:	about.
00:13:27> 00:13:30:	One of the things I love about resiliency and by
00:13:30> 00:13:33:	the way that the report that Lindsay was had the
00:13:33> 00:13:35:	slides from is an amazing report.
00:13:35> 00:13:37:	I'm actually going to be looking at it a little
00:13:37> 00:13:39:	bit and looking at some of these pages today.
00:13:39> 00:13:41:	So if you didn't get that link I would recommend
00:13:41> 00:13:43:	that you you you take a look at it.
00:13:43> 00:13:47:	One of the things about resiliency is that it's so
00:13:47> 00:13:50:	I my background is more in the energy space and
00:13:50> 00:13:54:	storm water management and flooding and all that is much
00:13:54> 00:13:56:	newer topic for me.
00:13:56> 00:14:00:	But I love that they're so connected and when you
00:14:00> 00:14:05:	make a building more resilient to both heat you're you're
00:14:05> 00:14:09:	also able to do a lot of flood mitigation and
00:14:09> 00:14:11:	stormwater management.
00:14:11> 00:14:13:	So that's I think that's pretty cool.
00:14:13> 00:14:17:	So but what I'm going to start talking about today
00:14:17> 00:14:17:	is C pace.
00:14:18> 00:14:20:	So how many people have ever heard of C pace?

00:14:22> 00:14:23:	Fantastic.
00:14:25> 00:14:28:	How many people feel like they know a lot about
00:14:29> 00:14:29:	C Pace?
00:14:31> 00:14:33:	OK, Maria, you can go take a walk.
00:14:36> 00:14:39:	Other than that, I guess everybody else has to say
00:14:39> 00:14:41:	so it's a, it's a funding mechanism.
00:14:41> 00:14:46:	It stands for Commercial Property Assessed Clean Energy and it's
00:14:46> 00:14:50:	been around in various states for well over 10 years
00:14:50> 00:14:53:	but it has really been growing in popularity.
00:14:53> 00:15:00:	It became it was enacted enabled in Pennsylvania in 2018
00:15:00> 00:15:06:	in the first Finance C Pace project was in Philadelphia
00:15:06> 00:15:08:	in July 2020.
00:15:08> 00:15:11:	And the reason Maria raised her hand is because she
00:15:11> 00:15:15:	was she was a the key property owner representative at
00:15:15> 00:15:18:	the time and so she you might still have some
00:15:18> 00:15:21:	scars getting through that but we have completely made it.
00:15:21> 00:15:25:	It's a such an easy seamless process now that thanks
00:15:25> 00:15:28:	to Maria so it so it's a financing mechanism that
00:15:28> 00:15:32:	has public benefit and it was originally and the thing
00:15:32> 00:15:35:	that I love about this this session about retro, about
00:15:35> 00:15:39:	retrofitting existing buildings is it was created as a tool
00:15:39> 00:15:43:	that retrofit buildings to make them more energy efficient and
00:15:43> 00:15:46:	to be able to add renewable energy to them.
00:15:46> 00:15:48:	It has since become a tool that also can be
00:15:48> 00:15:50:	used for new construction.
00:15:50> 00:15:54:	But the idea is that it you're able, you're what
00:15:54> 00:15:57:	you do is you finance and then you can use
00:15:57> 00:16:00:	a you could pay for 100% of all the hard
00:16:00> 00:16:04:	and soft costs of anything related to a retrofit of
00:16:04> 00:16:09:	a building that in Pennsylvania that's real, that is either
00:16:09> 00:16:14:	improving its energy efficiency, its reduction in water use, its
00:16:14> 00:16:19:	resiliency in terms of stormwater management, flood risk mitigation and
00:16:19> 00:16:24:	and any other resilient measure that makes sense where your
00:16:24> 00:16:28:	building is located and also renewable energy.
00:16:28> 00:16:30:	So what it does is you what happens is the
00:16:31> 00:16:34:	sea pace an assessment gets it's an assessment is placed
00:16:34> 00:16:36:	on your property.
00:16:36> 00:16:39:	And the idea is that when you're investing in making
00:16:39> 00:16:43:	your building more resilient or more energy efficient, it has

00:16:43> 00:16:46:	long term benefit and and it's you know could be
00:16:46> 00:16:49:	20 to 25 to 30 years of benefit that you're
00:16:49> 00:16:51:	going to get out of an investment.
00:16:51> 00:16:54:	But many building owners don't know how long they're going
00:16:54> 00:16:56:	to own a building or even have a plan to
00:16:56> 00:16:58:	you know to to to sell the building at some
00:16:59> 00:16:59:	point.
00:16:59> 00:17:04:	So whoever is paying for that assessment is also benefiting
00:17:04> 00:17:06:	from the investment.
00:17:06> 00:17:09:	So that the assessment stays with the property for the
00:17:09> 00:17:12:	duration of as long as the assessment is on the
00:17:12> 00:17:12:	property.
00:17:12> 00:17:15:	So that's like the key that's that that's that's what
00:17:15> 00:17:19:	distinguishes C Pace from from most other funding really pretty
00:17:19> 00:17:21:	much all other funding mechanisms.
00:17:23> 00:17:27:	I'm just going to say one more thing and then
00:17:27> 00:17:31:	pass it back to to Lindsay, which is it's C
00:17:31> 00:17:36:	Pace is incredibly versatile, but it isn't for every building,
00:17:36> 00:17:39:	it isn't for every project.
00:17:39> 00:17:43:	In Pennsylvania, we've had 25 projects funded by C Pace
00:17:43> 00:17:46:	thus far in in three years, 15 of them in
00:17:46> 00:17:50:	been in Philadelphia, nine of them have been with Sheila's
00:17:50> 00:17:54:	company, Naveen Green Capital and more and more and nine
00:17:54> 00:17:54:	in Philly.
00:17:54> 00:17:56:	And I think you have more in the other parts
00:17:56> 00:17:57:	of the state too.
00:17:58> 00:18:03:	And there's and my role is in Philadelphia.
00:18:03> 00:18:05:	I'm the program administrator.
00:18:05> 00:18:07:	So I am here to do market education and to
00:18:07> 00:18:12:	help property owners and interested stakeholders learn more about C
00:18:12> 00:18:15:	Pace and to walk you through the process if you're
00:18:15> 00:18:17:	interested in in using C PACE financing.
00:18:17> 00:18:20:	And then I send you off to Sheila or 29
00:18:21> 00:18:25:	of her competitors in in Pennsylvania to actually get the
00:18:25> 00:18:27:	C PACE financing.
00:18:29> 00:18:31:	Thanks for that CPACE overview, Lisa.
00:18:32> 00:18:34:	So let's move it over to Sheila since you teed
00:18:34> 00:18:34:	it up so well.
00:18:34> 00:18:37:	Sheila, can you talk a little bit about as a
00:18:37> 00:18:41:	capital provider, why Nuveen Green Capital is interested in

	CPACE?
00:18:42> 00:18:43:	Yes, no problem.
00:18:43> 00:18:45:	So Sheila Wallace UV and Green Capital.
00:18:46> 00:18:50:	First off, the company that I work for was purchased
00:18:50> 00:18:52:	by Nuveen 2 years ago.
00:18:52> 00:18:55:	Started out as Greenworks Lending and then two Co founders
00:18:55> 00:18:58:	actually worked at the Connecticut Green Bank.
00:18:58> 00:19:01:	Realized that the C pace mechanism was really a great
00:19:01> 00:19:05:	tool to help encourage energy efficiency and so they started
00:19:05> 00:19:07:	this company to start financing it.
00:19:07> 00:19:13:	They financed a whole bunch of properties and put together
00:19:13> 00:19:19:	pools of of these bonds and ended up selling them
00:19:19> 00:19:19:	to nuvi.
00:19:20> 00:19:25:	Nuvi loved it because all these bonds had an E1
00:19:25> 00:19:28:	rating, which is the S&P.
00:19:28> 00:19:32:	Standard and Poor's comes up with the ratings and they
00:19:32> 00:19:36:	have an environmental one that goes from E1 to E4
00:19:36> 00:19:38:	and they were all rated E1.
00:19:39> 00:19:44:	TIAA, which owns Nuveen, has a goal for to hit
00:19:44> 00:19:47:	net 0 carbon emissions by 2050.
00:19:47> 00:19:51:	So they're pretty committed to trying to get more energy
00:19:52> 00:19:56:	efficient investments within their general account.
00:19:57> 00:19:59:	It's not that easy though I will say and I'm
00:20:00> 00:20:02:	sure Greg is going to definitely expand on it.
00:20:04> 00:20:09:	The Co founders started Greenworks lending acquired by Nuveen with
00:20:09> 00:20:13:	the hopes of developing more products outside of CPS.
00:20:14> 00:20:16:	It's was extremely challenging.
00:20:16> 00:20:20:	We even had like a we had a solar team
00:20:20> 00:20:23:	dedicated to solar, solar projects.
00:20:23> 00:20:26:	And it just was not penciling out, right.
00:20:27> 00:20:30:	What's great about CPS is it is a public private
00:20:30> 00:20:33:	partnership where it gets paid back as a tax.
00:20:33> 00:20:35:	And so it is a little more credit secured.
00:20:35> 00:20:38:	So it does help with a little bit of the
00:20:38> 00:20:38:	pricing.
00:20:38> 00:20:41:	And there's a little bit of arbitrage when you add
00:20:42> 00:20:44:	CPS to a senior lender in a capital stack.
00:20:45> 00:20:46:	That's always the case though.
00:20:46> 00:20:49:	So that's why I mean they would use it all
00:20:49> 00:20:50:	the time if that was the case.

00:20:51> 00:20:54:	The walk different ways that each he atwart would be that we have it
00:20:51> 00:20:54. 00:20:54> 00:20:57:	There's different ways that can be structured that makes it more beneficial like the longer useful life that will help
00:20:54> 00:20:57:	make it more beneficial depends on the asset type.
00:21:01> 00:21:04:	You know if you have a 30 year term and
00:21:04> 00:21:07:	you're working on a multi family project, it could be
00:21:07> 00:21:08:	beneficial.
00:21:08> 00:21:11:	It might not because all lenders provide 30 year terms,
00:21:11> 00:21:14:	but if you're working on a hotel or an office
00:21:14> 00:21:17:	or retail project and they're all doing a 25 year
00:21:17> 00:21:21:	term by helping lengthen that term, it lowers the per
00:21:21> 00:21:25:	year payment which is really important today and it's really
00:21:25> 00:21:27:	high interest rate environment.
00:21:27> 00:21:31:	I'm, I'm digressing so, but what I wanted to say
00:21:31> 00:21:35:	is there's a lot of investment out there looking to
00:21:35> 00:21:38:	have impact in the environmental and resilient space.
00:21:40> 00:21:44:	Whether or not they're willing to pay more or or
00:21:44> 00:21:49:	receive a lower net return is to be determined and
00:21:49> 00:21:52:	still trying to figure it out.
00:21:52> 00:21:55:	But if you have, you know apples, apples and one
00:21:55> 00:21:59:	of them is an E1 rating, by all means everyone
00:21:59> 00:22:02:	out there is going to want this E1 rating.
00:22:02> 00:22:05:	There are some projects that we worked on here in
00:22:05> 00:22:09:	Philly like the Wells Fargo building where the investor was
00:22:09> 00:22:13:	actually from UK and the investor's compensation was actually tied
00:22:13> 00:22:15:	to the energy efficiency of the building.
00:22:15> 00:22:19:	And so they really pushed the developer to get those
00:22:19> 00:22:21:	improvements made.
00:22:21> 00:22:23:	So there's money out there.
00:22:24> 00:22:25:	It's challenging.
00:22:25> 00:22:28:	So the public private partnership does really help.
00:22:29> 00:22:32:	There still needs to be incentives to get done, but
00:22:32> 00:22:37:	there's, you know, the IRA and other government supported
	outlets
00:22:37> 00:22:41:	that might hopefully push people in this direction.
00:22:41> 00:22:45:	And I know this is resilience and I I want
00:22:45> 00:22:48:	to also mention for me it gets a little Gray
00:22:48> 00:22:52:	but with resilience versus energy efficiency.
00:22:52> 00:22:57:	But I do know the climate risk and insulation.
00:22:57> 00:23:01:	All that definitely is duplicated or qualifies as energy efficiency
00:23:02> 00:23:04:	and it all kind of ties together.
00:23:05> 00:23:07:	But I'm still learning that piece too.
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00:23:07> 00:23:08:	How that differs?
00:23:09> 00:23:13:	Thanks Sheila and for background and Lisa and Sheila can
00:23:13> 00:23:16:	tell you both more, the Resilience piece of C paste
00:23:16> 00:23:18:	in Philadelphia is is much newer.
00:23:18> 00:23:20:	I don't know if either of you want to.
00:23:20> 00:23:20:	Yeah, it just.
00:23:21> 00:23:21:	It just.
00:23:22> 00:23:23:	Yeah, sure.
00:23:23> 00:23:27:	So I I mentioned that C paste was originally enacted
00:23:27> 00:23:30:	in 2018 in our first the project was in 2020.
00:23:30> 00:23:34:	In 2022 the legislation was amended to not only add
00:23:34> 00:23:40:	multi family properties as a newly eligible property type but
00:23:40> 00:23:45:	also added resiliency and indoor air quality as newly eligible
00:23:45> 00:23:48:	measures that can be financed with CPA.
00:23:48> 00:23:53:	So we haven't actually had a project yet use like
00:23:53> 00:23:58:	a measure that would be counted as resilient, but not
00:23:58> 00:24:01:	in the energy category.
00:24:01> 00:24:03:	So, so far all of our projects have been for
00:24:03> 00:24:06:	energy efficiency or renewable energy.
00:24:06> 00:24:10:	But we're really looking forward to seeing some stormwater management
00:24:10> 00:24:13:	projects use see pace and I can talk about that
00:24:13> 00:24:14:	a little bit more later.
00:24:15> 00:24:16:	Thank you.
00:24:16> 00:24:19:	So zooming out of the financing piece, Greg, as our
00:24:19> 00:24:22:	resident developer here, could you talk a little bit about
00:24:22> 00:24:25:	how you're creating more resilient buildings and any benefits or
00:24:25> 00:24:27:	challenges you've experienced?
00:24:27> 00:24:29:	We'll talk about the challenges definitely.
00:24:31> 00:24:34:	So we do use C Pace and we reach out
00:24:34> 00:24:38:	to you frequently for programs and projects that C Pace
00:24:39> 00:24:42:	is great for those who how many people have used
00:24:42> 00:24:44:	it in the room.
00:24:44> 00:24:47:	Well, Maria also works with Mosaic.
00:24:47> 00:24:50:	She's my colleague at Mosaic and our Senior VP of
00:24:50> 00:24:50:	Development.
00:24:50> 00:24:54:	So that's far Mosaic is you see PACE in this
00:24:54> 00:24:58:	room and we do it primarily on a number of
00:24:58> 00:24:58:	fronts.
00:24:59> 00:25:00:	We're hoping to be able to use it at the
00:25:00> 00:25:02:	Navy Yard, but we've also used it in projects, particularly

00:25:02> 00:25:05:	when we're driving equity in neighbourhoods that have struggled.
00:25:05> 00:25:08:	And see PACE has been a tool that we've been
00:25:08> 00:25:11:	able to use to replace equity in many cases, because
00:25:11> 00:25:15:	the cost of equity often makes these projects undoable.
00:25:15> 00:25:18:	When you look at it's hard for me to look
00:25:18> 00:25:24:	at development conceptually, whether we're looking at resiliency, stormwater management,
00:25:24> 00:25:27:	we talked about it in our pre discussion or in
00:25:27> 00:25:31:	any other terms without bringing up in at least our
00:25:31> 00:25:34:	mindset issues of poverty and race and how the effect
00:25:34> 00:25:37:	of what you build has on poverty and race.
00:25:38> 00:25:41:	And and for us we're equitable builders.
00:25:41> 00:25:43:	We've been that way since 2008.
00:25:43> 00:25:44:	That's why we started our company.
00:25:44> 00:25:47:	So I believe we have quite a bit of expertise
00:25:47> 00:25:48:	in this space.
00:25:48> 00:25:50:	We work in seven of the tough neighbor, seven of
00:25:50> 00:25:54:	the toughest neighborhoods in Philadelphia, seven of the 10 toughest
00:25:54> 00:25:55:	neighborhoods in Philadelphia.
00:25:55> 00:25:58:	We love being in the neighborhoods, but we also understand
00:25:58> 00:26:01:	the true complexities of trying to develop and invest in
00:26:01> 00:26:02:	those neighborhoods.
00:26:02> 00:26:06:	And when what I worry about are we're kind of
00:26:07> 00:26:13:	bringing first world demands and technologies into spaces where we
00:26:13> 00:26:16:	can't get it done, We can't.
00:26:16> 00:26:22:	Where we add layers of requirements onto communities, particularly communities
00:26:22> 00:26:26:	of color where we're unable to put financing together.
00:26:26> 00:26:30:	That makes really great things happen because of those consequences.
00:26:30> 00:26:33:	And we talked about the difference between public and private
00:26:33> 00:26:33:	investment.
00:26:34> 00:26:37:	The problem is, is that people that put these requirements
00:26:37> 00:26:38:	on are public investment people.
00:26:38> 00:26:41:	They they view the world differently than the private market.
00:26:41> 00:26:42:	They're not the same.
00:26:43> 00:26:45:	We work a lot with public investment and we have
00:26:45> 00:26:47:	a lot of public investment strategies.
00:26:47> 00:26:48:	But I think it's important to note in the last
00:26:48> 00:26:51:	discussion that when you're talking about all of these

	wonderful
00:26:51> 00:26:53:	things that you're doing, you're using public money to do
00:26:53> 00:26:53:	it.
00:26:54> 00:26:56:	The private market doesn't work anything like that.
00:26:56> 00:26:58:	So what we have to think about is how do
00:26:58> 00:27:02:	we complement in the private market with public investment to
00:27:02> 00:27:04:	really get the outcomes that we're seeking.
00:27:04> 00:27:07:	And so because what we also know is that government
00:27:07> 00:27:10:	doesn't provide the bulk of the funding to change communities,
00:27:10> 00:27:12:	right, They provide a catalyst for change.
00:27:12> 00:27:15:	They do or they don't, but they could And the
00:27:15> 00:27:18:	key is do you provide a catalyst that actually spurs
00:27:18> 00:27:19:	future investment.
00:27:19> 00:27:22:	And so when we talk about high performing buildings or
00:27:22> 00:27:25:	buildings that we're working on, a number of lead certified
00:27:25> 00:27:28:	buildings all all on I would say the East Coast
00:27:28> 00:27:32:	frankly and but different levels of resiliency depending upon where
00:27:32> 00:27:34:	we are particularly at the Navy Yard.
00:27:34> 00:27:36:	For those that know that that community there's a lot
00:27:36> 00:27:39:	of issues that we deal with coming out of the
00:27:39> 00:27:41:	ground and we're right by the river.
00:27:41> 00:27:44:	So the the conditions that we face there, because of
00:27:44> 00:27:47:	the market the way it is, we're able to absorb
00:27:48> 00:27:53:	resiliency strategies in ways that communities in Charleswood could not
00:27:53> 00:27:56:	or in Frankfurt or in Strawberry Mansion or in you
00:27:56> 00:28:00:	name the neighborhood Olney where we also work or in
00:28:00> 00:28:02:	Germantown where we work.
00:28:02> 00:28:05:	So we're realistic about how this all comes to play,
00:28:05> 00:28:08:	but what we're trying to do is drive equity and
00:28:08> 00:28:10:	wealth in our building and performance.
00:28:11> 00:28:13:	I know that didn't answer your question, but I'm saying
00:28:13> 00:28:14:	it anyway.
00:28:14> 00:28:18:	So, so, so, so from a resilience standpoint though, we're
00:28:18> 00:28:22:	doing everything that we can that fits within the capital
00:28:22> 00:28:26:	stack to drive the best possible building for all people,
00:28:26> 00:28:28:	no matter what income level they sit.
00:28:29> 00:28:31:	And so we have a big belief that whatever building
00:28:31> 00:28:34:	we build, the same level of quality goes to anyone
00:28:34> 00:28:37:	who's in that building, the same performance of the building.

00:28:38> 00:28:41:	We don't develop programs for people that are poor.
00:28:41> 00:28:44:	That's different than people who have excess income.
00:28:44> 00:28:47:	We build the same level and the same approach in
00:28:47> 00:28:49:	terms of how we drive that.
00:28:49> 00:28:51:	And what that does is it puts more of a
00:28:51> 00:28:53:	burden on our ability to meet some of these other
00:28:53> 00:28:53:	ideals.
00:28:54> 00:28:57:	Triple pane windows, that's something somebody called that low hanging
00:28:57> 00:28:57:	fruit.
00:28:57> 00:29:00:	That is not low hanging fruit in my world it's
00:29:00> 00:29:00:	not.
00:29:01> 00:29:03:	And so it's it's little things like that.
00:29:03> 00:29:06:	But I think at some level, you know, we'd love
00:29:06> 00:29:09:	to have real dialogue about how this can come together
00:29:09> 00:29:13:	and we could use public investment to drive better private
00:29:13> 00:29:17:	strategies on highly performing buildings that serve all communities and
00:29:17> 00:29:21:	in our in our interest, particularly low income communities and
00:29:21> 00:29:22:	communities of color.
00:29:24> 00:29:26:	So I warned you all that we'd be coming to
00:29:26> 00:29:28:	you nice and quick because we figured you were pretty
00:29:28> 00:29:29:	chatty earlier.
00:29:29> 00:29:32:	So does anyone have a question now before I dive
00:29:32> 00:29:33:	into others for the panelists?
00:29:37> 00:29:38:	OK, keep thinking.
00:29:39> 00:29:39:	Raise your hand if you do.
00:29:40> 00:29:41:	Otherwise I'm just going to steal the show.
00:29:42> 00:29:47:	So Lisa, you talked earlier about how the resilience measures
00:29:47> 00:29:48:	is somewhat new.
00:29:48> 00:29:51:	Could you talk more about that amendment in the specific
00:29:51> 00:29:54:	design strategies that are eligible for C PACE financing under
00:29:54> 00:29:55:	that amendment?
00:29:59> 00:30:00:	Of course, happy to.
00:30:01> 00:30:03:	I kind of committed to do that, so I should.
00:30:05> 00:30:11:	So, yes, resilience was added to the Pennsylvania statute in
00:30:11> 00:30:15:	2022 and it is one of the broadest, I would
00:30:15> 00:30:21:	say, around the country in terms of different CPACE statutes.
00:30:21> 00:30:24:	We there are other states that are starting to bring
00:30:24> 00:30:28:	resilience on as part of their eligible measures.
00:30:29> 00:30:32:	We also added indoor air quality as I mentioned before

00:30:32> 00:30:35:	and there isn't another state that I'm aware of that
00:30:35> 00:30:37:	explicitly talks about indoor air quality.
00:30:37> 00:30:44:	So from a resiliency standpoint raise your hand if you're
00:30:44> 00:30:46:	from Pennsylvania.
00:30:47> 00:30:49:	I assume the vast majority of you are right or
00:30:49> 00:30:52:	I mean live currently live in Pennsylvania, OK, not originally
00:30:52> 00:30:52:	from OK.
00:30:53> 00:30:57:	So we all know what the politics are in Pennsylvania,
00:30:57> 00:31:02:	We're fossil state, yet CPACE is really a bipartisan issue.
00:31:02> 00:31:06:	When we were able to, the original statute was passed
00:31:06> 00:31:09:	and then it was amended with a Republican majority both
00:31:10> 00:31:11:	in the House and the Senate.
00:31:12> 00:31:15:	And one of the ways we were able to do
00:31:15> 00:31:18:	that was to never mention the words climate change or
00:31:19> 00:31:20:	greenhouse gases.
00:31:20> 00:31:24:	It was simply a way to make buildings more efficient
00:31:25> 00:31:28:	as a public benefit and and and and protect and
00:31:29> 00:31:34:	to protect against natural disasters that the resiliency
	language is
00:31:34> 00:31:38:	about protection from natural disasters.
00:31:39> 00:31:42:	We don't really care what causes those natural disasters.
00:31:42> 00:31:44:	We just know that we want to be protected from
00:31:44> 00:31:44:	them.
00:31:44> 00:31:49:	So in our in Philadelphia, I believe that the, OK,
00:31:49> 00:31:53:	let me back up and say as I mentioned earlier,
00:31:53> 00:31:57:	anything you do to your building to make it more
00:31:57> 00:31:59:	energy efficient is both.
00:32:00> 00:32:03:	And as Lindsay said before, it's both a mitigation strategy
00:32:03> 00:32:06:	and an adaptation strategy because you make it more efficient,
00:32:06> 00:32:09:	you're putting less greenhouse gases in the atmosphere.
00:32:09> 00:32:14:	You're also reducing what's called heat island effect, which is
00:32:14> 00:32:17:	like how hot it is in a particular in a
00:32:17> 00:32:21:	in a very small area, a small neighborhood, and you're
00:32:21> 00:32:26:	making that building more resilient to when there is a
00:32:26> 00:32:29:	an an electricity or a utility outage.
00:32:29> 00:32:32:	If it's more efficient, it will be able to sustain
00:32:32> 00:32:35:	livable temperatures for a longer period of time.
00:32:35> 00:32:39:	If there's if there's less heat exchange from inside to
00:32:39> 00:32:40:	outside, vice vice versa.
00:32:40> 00:32:44:	So all of the energy improvements you can make are
00:32:40> 00:32:44:	also going to help with resiliency including of course adding
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00:32:49> 00:32:54:	renewable energy and adding storage absolutely adds to the resilience
00:32:54> 00:32:56:	of resilience of your building.
00:32:57> 00:33:00:	I think in Philly flooding is the most light is
00:33:00> 00:33:03:	is the even though Lindsay you said there's there's not
00:33:03> 00:33:06:	a single building that doesn't have more than one risk
00:33:06> 00:33:07:	factor.
00:33:07> 00:33:11:	I think in Philly flooding is probably and and heat.
00:33:11> 00:33:15:	So there's your two flooding that isn't covered by energy
00:33:15> 00:33:18:	is the most likely thing that we that we face.
00:33:18> 00:33:24:	And somebody earlier today mentioned Hurricane Ida which
00.00.10 9 00.00.24.	had devastating
00:33:24> 00:33:27:	flooding consequences here in Philly.
00:33:28> 00:33:31:	And so we had worked very closely with the Philadelphia
00:33:31> 00:33:35:	Water Department when we were putting together the program guidelines
00:33:35> 00:33:38:	to implement how do we, how do we actually make
00:33:38> 00:33:40:	resiliency happen.
00:33:40> 00:33:43:	And we in order to use C PACE to fund
00:33:44> 00:33:49:	a stormwater project, you have to meet all of the
00:33:49> 00:33:52:	PWD requirements and then more.
00:33:52> 00:33:56:	So you have to meet the minimum plus just like
00:33:56> 00:33:57:	we do with energy.
00:33:57> 00:34:01:	And if you're investing in energy efficiency, you have to
00:34:01> 00:34:05:	meet our Building Energy Code, which is right now IECC
00:34:05> 00:34:05:	2018.
00:34:06> 00:34:08:	And yet you have to beat it by no particular
00:34:08> 00:34:08:	amount.
00:34:08> 00:34:09:	You just have to beat it.
00:34:09> 00:34:12:	And the same with the the water regulations.
00:34:12> 00:34:15:	You just have to do better than what PWD requires.
00:34:16> 00:34:17:	That answer your question?
00:34:17> 00:34:18:	That's great.
00:34:18> 00:34:18:	Thank you.
00:34:18> 00:34:22:	And so the report that Lisa so generously endorsed that
00:34:22> 00:34:25:	I shared earlier, there are matrices in there for all
00:34:25> 00:34:29:	of the major hazard types, including a flooding and heat.
00:34:29> 00:34:32:	And Lisa, if I'm correct in quoting you, you said
00:34:32> 00:34:35:	earlier that nearly everything on those lists qualifies for CPS.
00:34:35> 00:34:36:	That's correct.
00:34:36> 00:34:37:	Awesome.
00:34:37> 00:34:38:	So there's your shortcut.
00:34:39> 00:34:40:	All right.

00:34:41> 00:34:43:	So unless there's a question, I'll go to Sheila.
00:34:46> 00:34:46:	OK.
00:34:46> 00:34:49:	Sheila, can you talk a little bit about what kinds
00:34:49> 00:34:52:	of projects that you're seeing use C Pace funding and
00:34:52> 00:34:55:	what role C PACE plays in the capital stack?
00:34:57> 00:34:58:	Yeah, sure.
00:34:58> 00:35:02:	I might have touched on it earlier, but so we
00:35:02> 00:35:03:	see a lot.
00:35:03> 00:35:03:	OK.
00:35:04> 00:35:05:	So we'll back up a little bit.
00:35:05> 00:35:09:	Historically, C pace was first utilized just for retrofits.
00:35:09> 00:35:13:	So a building now is existing needs to replace really
00:35:13> 00:35:17:	old HVAC systems or coolers, boilers, whatever like new roof
00:35:18> 00:35:21:	you would come and finance that would see face.
00:35:22> 00:35:26:	Since then it evolved to now utilize new construction.
00:35:26> 00:35:30:	A lot of the legislative bodies recognize that it was
00:35:30> 00:35:34:	just not only great tools encourage clean energy also kind
00:35:34> 00:35:37:	of helps with job growth and potential development.
00:35:39> 00:35:44:	So, so now new construction, mid construction, post
	construction you
00:35:44> 00:35:49:	can basically finance anytime there up until two years post
00:35:49> 00:35:54:	CFO here in Pennsylvania, different states have different lengths of
00:35:54> 00:35:57:	time you can finance post construction.
00:35:59> 00:36:03:	So it's being used a lot for projects that sometimes
00:36:03> 00:36:05:	encounter issues.
00:36:05> 00:36:08:	And actually one that we we explored at a recent
00:36:08> 00:36:12:	panel was a developer who actually had a storm water
00:36:12> 00:36:16:	management issue and it had a \$1.7 million cost overrun.
00:36:17> 00:36:20:	And the bank had a right committed to lending this
00:36:20> 00:36:20:	money.
00:36:20> 00:36:23:	And this was a big chunk that they were not.
00:36:23> 00:36:28:	It was a smaller project, 20 some million to have
00:36:28> 00:36:28:	a 1.7.
00:36:28> 00:36:31:	Yeah, it was.
00:36:31> 00:36:33:	Yeah, it was very painful for the developer.
00:36:33> 00:36:38:	But fortunately, the bank was open to different ideas, which
00:36:38> 00:36:40:	includes Cpace at the time.
00:36:40> 00:36:44:	We actually could not do resiliency, but we're able to
00:36:44> 00:36:48:	finance the energy efficiency and use that to help with
00:36:48> 00:36:49:	that cost overrun.
00:36:51> 00:36:55:	And so in today's economic environment, you're seeing tons

	of
00:36:55> 00:36:59:	cost overruns because interest rates are so high and to
00:36:59> 00:37:04:	carry the project through completion and stabilization, you're
	bound to
00:37:04> 00:37:07:	have an over or like not enough or deficiency in
00:37:07> 00:37:09:	that reserve account, right.
00:37:10> 00:37:13:	And so we're also seeing C pays utilize to help
00:37:13> 00:37:18:	these projects even though it's it's not directly related to
00:37:18> 00:37:23:	resiliency, it does qualify for these items in an environment
00:37:23> 00:37:28:	where a borrower can't refinance because they went into the
00:37:28> 00:37:33:	project with three percent, 4% interest rates and today it's
00:37:33> 00:37:38:	8% and they're trying to refinance out and the construction
00:37:38> 00:37:42:	loans 30 million and that they go to other lenders
00:37:42> 00:37:46:	and the lenders say the Max that we'll give you
00:37:46> 00:37:47:	is 25,000,000.
00:37:48> 00:37:52:	So C pace is helpful in that situation too.
00:37:52> 00:37:56:	But most of all, it's helpful for ground and construction
00:37:57> 00:38:02:	where potentially there's there's only so much a senior lender
00:38:02> 00:38:06:	can do and they need a little bit more capital
00:38:06> 00:38:09:	to fill up that full stack to get the project
00:38:09> 00:38:10:	going.
00:38:11> 00:38:13:	And so it's helping those instances.
00:38:13> 00:38:14:	Yeah, I see a question.
00:38:15> 00:38:15:	Awesome.
00:38:15> 00:38:16:	Yeah.
00:38:24> 00:38:25:	Is C pace A?
00:38:25> 00:38:28:	Floating rate like other construction loans or is it fixed
00:38:29> 00:38:32:	and if so, what's the difference between it and market?
00:38:32> 00:38:33:	Rate, Yeah, great question.
00:38:35> 00:38:38:	So it's a fixed rate long term loan and that's
00:38:38> 00:38:40:	why it can be helpful.
00:38:40> 00:38:44:	So pretend, OK, so we're priced 360 to 400 /
00:38:44> 00:38:50:	10 year treasury which means we were really attractive four
00:38:50> 00:38:51:	months ago.
00:38:51> 00:38:55:	But the interest, the 10 year treasury went up over
00:38:55> 00:38:58:	1% just in a couple months.
00:38:58> 00:39:01:	And so we are now a little less attractive in
00:39:01> 00:39:03:	comparison to senior debt.
00:39:04> 00:39:06:	But what's nice is we know what the rate's going
00:39:06> 00:39:07:	to be on the exit.
00:39:07> 00:39:11:	And so if we're able to have that payment set
00:39:11> 00:39:14:	for year one and the senior lender is doing some

00.20.44 > 00.20.49.	arbitrary avit atraga rate to figure out how much thay
00:39:14> 00:39:18:	arbitrary exit stress rate to figure out how much they
00:39:18> 00:39:22:	could finance if they put us in there there, there
00:39:22> 00:39:26:	might be a chance where every dollar we finance, they
00:39:26> 00:39:30:	might have to cut some proceeds, but not dollar for
00:39:30> 00:39:30:	dollar.
00:39:31> 00:39:35:	And so it helps get a little more in leverage
00:39:35> 00:39:38:	and reduce the equity need for a developer.
00:39:39> 00:39:39:	Yeah.
00:39:39> 00:39:42:	If I can, the leverage piece is really important, yes.
00:39:42> 00:39:45:	So if you're have a project that's 50% leveraged and
00:39:46> 00:39:49:	the lender won't go beyond that and and and the
00:39:49> 00:39:52:	deal could really accept 60% or 65%, you don't want
00:39:52> 00:39:55:	to replace that with equity, right.
00:39:55> 00:39:56:	You want to look for additional debt.
00:39:56> 00:39:59:	So even debt that might be a little bit higher,
00:39:59> 00:40:02:	but it's fixed over the term, it's still more attractive.
00:40:02> 00:40:05:	So that's where we certainly have looked to you all
00:40:05> 00:40:07:	to come in and say, all right, the leverage isn't
00:40:07> 00:40:10:	enough, the equity is too high for the project to
00:40:10> 00:40:10:	work.
00:40:10> 00:40:12:	C Pace now becomes that tool that comes in and
00:40:12> 00:40:15:	helps make that really happen in a meaningful way.
00:40:18> 00:40:20:	I'm coming with a a mic.
00:40:24> 00:40:27:	So I do a lot of like LEAD certifications and
00:40:27> 00:40:30:	WELL certifications and there's a lot of overlap between
	LEAD
00:40:30> 00:40:33:	and WELL which is really great when you can leverage
00:40:33> 00:40:36:	that because then you don't have to do the work
00:40:36> 00:40:37:	twice.
00:40:37> 00:40:40:	Lindsay, I think I also saw that your CPHC you
00:40:40> 00:40:44:	mentioned you know building energy envelope efficiencies and that is
00:40:44> 00:40:47:	excellent for reducing energy costs etcetera.
00:40:48> 00:40:50:	So does C Pace have a sort of rubric for
00:40:50> 00:40:53:	like, OK, this building is LEED Gold or LEED Platinum,
00:40:53> 00:40:57:	This, this building's going after, well, this building is certified
00:40:57> 00:40:58:	Passive House.
00:40:58> 00:41:02:	And is there some sort of, you know, way that
00:41:02> 00:41:05:	you like, let's say I'm talking to a client and
00:41:05> 00:41:09:	I have a building that's LEED Gold and well, gold
00:41:09> 00:41:12:	and the client's like, OK, well, can we apply C
00:41:12> 00:41:12:	Pace?
UU.41.12 UU.41.12.	

00:41:12> 00:41:14:	Like, is there a way to say that?
00:41:14> 00:41:16:	Oh yeah, because it's lead gold and, well, gold C
00:41:16> 00:41:18:	Pace will be a lot easier to get.
00:41:25> 00:41:25:	Great question.
00:41:25> 00:41:26:	Thank you.
00:41:26> 00:41:31:	So for C pace in Pennsylvania and in most jurisdictions
00:41:31> 00:41:36:	a, a survey needs to be created that's submitted to
00:41:36> 00:41:42:	us as the program administrator that shows that whatever it
00:41:42> 00:41:47:	is that you want to finance is it meets the
00:41:47> 00:41:48:	our requirements.
00:41:48> 00:41:52:	So if you're going after energy efficiency we and it's
00:41:52> 00:41:56:	and it's new construction and kind of the cases that
00:41:56> 00:42:00:	you were just talking about we it usually we we
00:42:00> 00:42:04:	most people are submitting a whole building energy model and
00:42:04> 00:42:09:	if you're getting lead certification you already have created one.
00:42:09> 00:42:11:	So that's really easy to submit.
00:42:12> 00:42:16:	And then we and then our engineer actually contracted through
00:42:16> 00:42:21:	right now through practical energy solutions reviews it make sure
00:42:21> 00:42:25:	it, it, it, it the energy, the, the model of
00:42:25> 00:42:28:	the energy use is going to be above code which
00:42:28> 00:42:32:	I mentioned earlier is IECC 2018 in Philadelphia.
00:42:33> 00:42:39:	And for stormwater management, other resiliency measures, it has to
00:42:39> 00:42:44:	be better than what's required either by the water department
00:42:45> 00:42:46:	or by building code.
00:42:47> 00:42:51:	And in the case of indoor air quality, we have
00:42:51> 00:42:56:	a number of different modeled certifications that we that we've
00:42:56> 00:43:01:	agreed to look at including well including reset air a
00:43:01> 00:43:02:	few other things.
00:43:02> 00:43:06:	And so it's it's better than what is required
00:43:06> 00:43:10:	and it you just have to provide a survey that
00:43:10> 00:43:14:	that that proves that for an existing building or for
00:43:15> 00:43:19:	you know so if you're if you're upgrading you know
00:43:19> 00:43:24:	certain measures then it's you don't need a whole building
00:43:24> 00:43:25:	energy model.
00:43:25> 00:43:28:	You just need to show how the what you're replacing
00:43:28> 00:43:31:	is is better than what exists or let's say
00:43:31> 00:43:35:	with stormwater management or or even like hardening a building

00:43:35> 00:43:38:	to to to flood risk maybe you're you're moving it
00:43:38> 00:43:41:	you're replacing and moving equipment from the lower let
	you
00:43:41> 00:43:44:	know from the basement to a higher level and and
00:43:44> 00:43:48:	maybe you're going to replace that equipment at the same
00:43:48> 00:43:48:	time.
00:43:48> 00:43:50:	So all you know all of those costs are included
00:43:50> 00:43:51:	in.
00:43:51> 00:43:54:	So it depends on whether it's new construction and whether
00:43:54> 00:43:57:	a whole energy model, a whole building model is required
00:43:57> 00:43:59:	or if it's a in this year we're talking about
00:43:59> 00:44:00:	retrofits today.
00:44:00> 00:44:02:	So it's probably going to be a much simpler kind
00:44:02> 00:44:04:	of process to get approval.
00:44:05> 00:44:06:	I have a.
00:44:06> 00:44:07:	Question of my own if that's OK.
00:44:08> 00:44:11:	Lindsay, you you mentioned I think at the top and
00:44:11> 00:44:13:	I might get the statistic wrong, but I think it
00:44:13> 00:44:16:	was something like 2/3 of our built environment that we'll
00:44:17> 00:44:18:	need in the future is already built.
00:44:19> 00:44:22:	And and you sort of preface the conversation to saying
00:44:22> 00:44:25:	that it's it's, there's no way that we'll be able
00:44:25> 00:44:28:	to kind of finance all of the enhancements or improvements
00:44:28> 00:44:29:	all at once.
00:44:29> 00:44:32:	But over the life cycle of the building, there's strategic
00:44:32> 00:44:35:	points where that might happen really for any of the
00:44:35> 00:44:36:	panelists.
00:44:36> 00:44:39:	Can you kind of elaborate what are those strategic points
00:44:39> 00:44:42:	within a building's life cycle that it makes the most
00:44:42> 00:44:45:	sense to make these types of resilient investments?
00:44:51> 00:44:54:	Well, we do retrofits and grand up developments.
00:44:54> 00:44:57:	So for for a hotel, for example, a PIP is
00:44:57> 00:44:59:	7 years, right?
00:44:59> 00:45:02:	So if you look at hotel operations, if you're in
00:45:02> 00:45:06:	that space, every seven years, you're basically turning over hotel
00:45:06> 00:45:08:	and you may want to look in that cycle as
00:45:08> 00:45:13:	to whether or not there's some real opportunities for significant
00:45:13> 00:45:15:	upgrades and resiliency at the Navy Yard.
00:45:16> 00:45:18:	The way we're looking at a 15 year cycle, we're
00:45:18> 00:45:21:	building a neighborhood that's lead for ND for the entire
00:45:21> 00:45:21:	neighborhood.

00:45:22> 00:45:24:	Every building that we're building is lead silver or above.
00:45:25> 00:45:28:	All of our buildings are dealing with significant resiliency.
00:45:28> 00:45:30:	The cost of doing that is exorbitant, but we've committed
00:45:30> 00:45:31:	to it.
00:45:31> 00:45:35:	We're going to do it anyway, but alternatively we're working
00:45:35> 00:45:37:	in Olney with Zion Baptist Church.
00:45:38> 00:45:40:	I don't know if you, you know the church certainly
00:45:40> 00:45:44:	well recognized in the city of Philadelphia for many, many
00:45:44> 00:45:44:	years.
00:45:45> 00:45:48:	We're helping them retrofit a building, their annex building.
00:45:48> 00:45:52:	We're doing it at 2A LEED certification, very difficult to
00:45:52> 00:45:56:	achieve given the community that it's in the neighborhood, the
00:45:56> 00:45:59:	rents that are able to pay for the cost of
00:45:59> 00:46:00:	doing that work.
00:46:00> 00:46:04:	And so again, as you move into different neighborhoods, the
00:46:04> 00:46:06:	goals shift with the goals are the same, but the
00:46:06> 00:46:09:	reality shift and the way that you have to deal
00:46:09> 00:46:11:	with them becomes far more complicated.
00:46:11> 00:46:14:	So, so it's really a mix in terms of how
00:46:14> 00:46:18:	you're trying to make this work because ultimately our ultimate
00:46:18> 00:46:22:	goal is to create buildings that are activated, that meet
00:46:22> 00:46:26:	the needs of the community right, first, right that that
00:46:26> 00:46:29:	are solving problems in neighborhoods.
00:46:29> 00:46:32:	And we do that with the mindset are we doing
00:46:32> 00:46:35:	it at the highest possible quality, but we have to
00:46:35> 00:46:39:	also make choices on what matters most and then sometime
00:46:39> 00:46:44:	some cases certain lead requirements or lead objectives get sacrificed.
00:46:44> 00:46:46:	And that's just the realities of what we have to
00:46:46> 00:46:46:	deal with.
00:46:47> 00:46:48:	I'll add to that.
00:46:48> 00:46:49:	Go ahead.
00:46:49> 00:46:51:	I was just going to say in the timing of
00:46:51> 00:46:53:	that, in many cases deals with when you have to,
00:46:53> 00:46:56:	when you're in a financing situation with respect to that.
00:46:56> 00:46:57:	Yeah.
00:46:57> 00:46:58:	And so a few examples.
00:46:58> 00:47:03:	We're seeing many cities across the country institute building performance
00:47:03> 00:47:04:	standards, right.
00:47:04> 00:47:08:	And so that is going to, from a regulation standpoint,

00:47:08> 00:47:11:	incite some level of retrofit often from an energy efficiency
00:47:12> 00:47:12:	standpoint.
00:47:12> 00:47:15:	But that is another opportunity to layer in some of
00:47:15> 00:47:18:	these resilience and climate adaptation measures.
00:47:18> 00:47:21:	Because if you're going to be opening up the wall
00:47:21> 00:47:24:	anyway, consider what else you can do.
00:47:24> 00:47:27:	Like in the in the Pacific Northwest, which I know
00:47:27> 00:47:29:	is not at all where we are right now, when
00:47:29> 00:47:33:	they're looking to add insulation, they're also looking at potential
00:47:33> 00:47:37:	seismic upgrades, right, because you're in the wall anyway.
00:47:37> 00:47:39:	So think about what you're doing so that you can
00:47:39> 00:47:42:	begin to minimize the long term costs and consider does
00:47:42> 00:47:45:	it make sense in investing a little bit more now
00:47:45> 00:47:47:	so you don't have to do it all over again
00:47:47> 00:47:47:	later?
00:47:48> 00:47:50:	The other thing that I'm going to show you at
00:47:50> 00:47:52:	the close of this panel is in addition to the
00:47:52> 00:47:55:	report that Uli did, the American Institute of Architects has
00:47:55> 00:47:59:	a Resilience and Adaptation certificate series on there, our online
00:47:59> 00:48:00:	learning platform AIAU.
00:48:00> 00:48:04:	And one of those classes is on conducting vulnerability assessments
00:48:04> 00:48:05:	at the building scale.
00:48:05> 00:48:07:	So this is something that all you architects could do.
00:48:07> 00:48:10:	It's potential service that you could offer.
00:48:10> 00:48:13:	But one of the ways that you might go through
00:48:13> 00:48:17:	and do that vulnerability analysis on an existing building is
00:48:17> 00:48:19:	after a disaster, right?
00:48:19> 00:48:22:	Because you want to understand what is failing in the
00:48:22> 00:48:25:	building that needs to be repaired and what are other
00:48:25> 00:48:29:	opportunities to enhance its resilience again, while you're already undergoing
00:48:29> 00:48:32:	construction, while you already have financing in place.
00:48:33> 00:48:37:	And then the last opportunity might be when you're thinking
00:48:37> 00:48:41:	about repositioning the building or selling the building, thinking about
00:48:41> 00:48:44:	your your your next buyer and what they might want
00:48:44> 00:48:47:	to get out of the building and how you can
00:48:47> 00:48:50:	potentially make it more attractive given the fact that our
00:48:50> 00:48:54:	investors are more and more concerned about physical climate risk.

00:48:55> 00:48:56:	So, great question.
00:48:56> 00:48:57:	Thank you, Kevin.
00:48:58> 00:49:01:	I just want to add one more potential time when
00:49:01> 00:49:04:	it is from heavy as I mentioned I come at
00:49:04> 00:49:08:	this more from an energy perspective is end of life
00:49:08> 00:49:12:	of equipment is and that's you know from a public
00:49:12> 00:49:16:	policy standpoint and just from in general it is the
00:49:16> 00:49:20:	biggest challenge is is getting to property owners to to
00:49:20> 00:49:24:	get them to to plan before the end of life.
00:49:24> 00:49:26:	So it isn't an emergency replacement when your boiler is
00:49:26> 00:49:29:	out in the middle of January, but in August they've
00:49:29> 00:49:31:	actually planned for it and they they know what they're
00:49:31> 00:49:31:	
	going to, you know, they know what they're going to
00:49:34> 00:49:36:	replace it with and not necessarily the cheapest off the
00:49:36> 00:49:37:	shelf thing.
00:49:37> 00:49:41:	So that's and that's not necessarily relevant to resiliency per
00:49:41> 00:49:44:	SE but it's it's just another place where we we
00:49:44> 00:49:45:	need to to look I was.
00:49:47> 00:49:51:	I was going to say C pays financing related.
00:49:52> 00:49:56:	It's challenging to do it mid like mid financing because
00:49:56> 00:50:00:	we have to get approval from the lender to use
00:50:00> 00:50:03:	C pays and so it usually only works when it
00:50:03> 00:50:06:	is at the end of the use of life and
00:50:06> 00:50:09:	they have no other option and then the lender might
00:50:09> 00:50:12:	say OK fine you can do this.
00:50:12> 00:50:15:	Otherwise you really need to plan to do it for
00:50:15> 00:50:19:	like a large renovation or when you're refinancing and
	considering
00:50:19> 00:50:23:	all that because it does get a little challenging sometimes
00:50:23> 00:50:27:	to put see pace in there without the full stack
00:50:27> 00:50:28:	consideration.
00:50:28> 00:50:29:	Yeah.
00:50:29> 00:50:32:	Or really the change of ownership, you know that's that's
00:50:32> 00:50:33:	a pretty important trigger.
00:50:33> 00:50:36:	When I think of it now that I'm thinking about
00:50:36> 00:50:38:	it, that would be more likely when I would look
00:50:38> 00:50:41:	at replacing these systems because I'm thinking about what the
00:50:41> 00:50:42:	new program is coming in.
00:50:42> 00:50:46:	The existing owner may be incremental because that's what
	their
00:50:46> 00:50:49:	capital stack will allow them to be right in, in
00:50:49> 00:50:49:	reality.

00:50:49> 00:50:52:	But if you have a change of ownership with new
00:50:52> 00:50:52: 00:50:52> 00:50:54:	equity coming in, a new lender, a new lender profile,
00:50:55> 00:50:57:	a new investor profile, it's actually a great time to
00:50:57> 00:51:00:	look at all of the building footprint to determine what
00:51:00> 00:51:02:	the best approach is moving forward.
00:51:06> 00:51:06:	All right.
00:51:06> 00:51:09:	I'm just going to say one more thing that isn't
00:51:09> 00:51:13:	an answer to any question, but this, this, this came
00:51:13> 00:51:16:	out, came out in your report which is, you know,
00:51:16> 00:51:20:	so we're seeing, you know, post pandemic work from home
00:51:20> 00:51:23:	off, you know, the office sector is really been hit
00:51:23> 00:51:23:	hard.
00:51:23> 00:51:23: 00:51:24> 00:51:26:	
00:51:26> 00:51:29:	So which what office buildings are doing?
00:51:30> 00:51:30:	Well, the ones that are amenity rich, but you know what else?
00:51:30> 00:51:33:	
00:51:33> 00:51:37:	The ones that are not in a flood zone or
	you know likely to get flooded again because they were
00:51:37> 00:51:38:	during Hurricane Ida.
00:51:39> 00:51:43:	So just that that buildings that are in, you know,
00:51:43> 00:51:48:	that have some resiliency risk are going to lose market
00:51:48> 00:51:51:	value, are going to lose tenants.
00:51:51> 00:51:55:	So that's just like another motivating factor, I think, for
00:51:55> 00:51:56:	some property owners.
00:52:06> 00:52:06:	Thank you.
00:52:06> 00:52:08:	I, I don't really have a a proper question formulated
00:52:08> 00:52:10:	here, but Greg this is going to be directed at
00:52:10> 00:52:11:	you here.
00:52:11> 00:52:14:	So share a vision with me, right.
00:52:14> 00:52:16:	You're in, you're in seven of the top 10 toughest
00:52:17> 00:52:19:	communities as you're saying and and we will all want
00:52:19> 00:52:22:	those communities to to whatever happens in that community, we
00:52:23> 00:52:24:	want it to be the best, right.
00:52:24> 00:52:28:	We want that housing to be waterproof, flood proofed, elevated,
00:52:28> 00:52:29:	mechanicals protected, right.
00:52:30> 00:52:31:	Just aesthetically beautiful.
00:52:32> 00:52:34:	How, how do we make that happen?
00:52:34> 00:52:36:	I mean obviously that that there's gap funding.
00:52:36> 00:52:39:	What you're saying is you can't make that investment
	because
00:52:39> 00:52:40:	you can't recoup that investment, right.
00:52:41> 00:52:44:	What when you say, you know, kind of the public

00:52:44> 00:52:48:	programming, public investment needs to complement private what is it?
00:52:48> 00:52:49:	Can you give me examples?
00:52:49> 00:52:50:	What can we do?
00:52:50> 00:52:52:	How drastic is that cost differential?
00:52:52> 00:52:53:	What's out there?
00:52:54> 00:52:55:	How can the city make that happen?
00:52:55> 00:52:57:	I mean we we nibble, right?
00:52:57> 00:52:57:	The city nibbles, right.
00:52:57> 00:53:00:	We give you a storm water credit on your bill
00:53:00> 00:53:02:	right when you manage storm water or we allow you
00:53:03> 00:53:05:	to do density bonuses when you when you add a
00:53:05> 00:53:08:	green roof, which probably is not, you know, affordable,
	maybe
00:53:08> 00:53:11:	in, in, in, in some of these communities, you're
00:53:11> 00:53:12:	saying what can be done?
00:53:12> 00:53:13:	How can we do it?
00:53:13> 00:53:14:	How drastic is it?
00:53:14> 00:53:15:	How much noise is around it?
00:53:16> 00:53:18:	Like how can we help bridge that gap?
00:53:18> 00:53:21:	We want those communities to be the showpieces, right?
00:53:21> 00:53:22:	Yeah.
00:53:22> 00:53:25:	And I I guess particularly look I'm, I'm on the
00:53:25> 00:53:26:	private side.
00:53:26> 00:53:30:	So to be fair, I am not a government employee
00:53:30> 00:53:33:	nor have I ever played one in TV so and
00:53:33> 00:53:38:	but we work so closely with government funding and government
00:53:38> 00:53:40:	support and not for profits.
00:53:40> 00:53:43:	We work in West Philly, Southwest Philly, and we're working
00:53:43> 00:53:46:	with all of these neighbourhoods that have the same needs
00:53:46> 00:53:47:	that any other neighbourhood has.
00:53:47> 00:53:50:	And we always run into this gap.
00:53:50> 00:53:54:	But then on the private side, I also know that
00:53:54> 00:53:57:	that dollars run like water.
00:53:57> 00:53:59:	They follow the path of police resistance.
00:54:00> 00:54:03:	And on the private side, the more resistance you put
00:54:03> 00:54:06:	up or the more barriers that you place, the less
00:54:06> 00:54:08:	the money will flow in that direction.
00:54:08> 00:54:11:	So I think the answer is twofold.
00:54:11> 00:54:14:	One is we need to provide, we need to recognize
00:54:14> 00:54:17:	that there are socio economic conditions that created the
	poverty

00:54:17> 00:54:22:	situations that exist in our communities, particularly communities of color.
00:54:22> 00:54:26:	We need to recognize that without additional wealth in those
00:54:26> 00:54:29:	neighborhoods that even those small fixes will not last, right.
00:54:29> 00:54:30:	They won't last.
00:54:30> 00:54:33:	That's you might feel good that you planted a tree
00:54:33> 00:54:35:	or that you did something nice or that I I
00:54:35> 00:54:37:	heard somebody talk about aquaponics.
00:54:37> 00:54:41:	We're doing something at Cheney University with that group
	as
00:54:41> 00:54:41:	well.
00:54:41> 00:54:42:	Those are great things.
00:54:42> 00:54:45:	They might be close to proof of concept, but they're
00:54:45> 00:54:46:	truly not.
00:54:46> 00:54:49:	They're not fundamentally changing the neighborhoods that as long as
00:54:49> 00:54:52:	l've been in Philadelphia, we've been hovering around 25% true
00:54:52> 00:54:53:	poverty rate.
00:54:53> 00:54:57:	Until we get real about fixing poverty in these neighborhoods,
00:54:57> 00:55:00:	everything else that we talk about is incremental.
00:55:00> 00:55:03:	And so for us, what we're focused on is how
00:55:03> 00:55:06:	we building neighbourhoods back up to build incomes, particularly of
00:55:06> 00:55:08:	people of colour who don't have access to it.
00:55:08> 00:55:11:	And that how do we infuse that first dollar to
00:55:11> 00:55:15:	provide stabilized buildings that can now perform at a higher
00:55:15> 00:55:19:	level That's always going to be at a discounted rate.
00:55:19> 00:55:21:	Like we're always going to be in a place we
00:55:21> 00:55:23:	we could never afford to build the building that's the
00:55:24> 00:55:27:	right building for communities of color that can't fundamentally afford
00:55:27> 00:55:28:	it over a period of time.
00:55:29> 00:55:31:	That's where the government's role plays in.
00:55:31> 00:55:34:	Now the question is, can the government be that on
00:55:34> 00:55:34:	every project?
00:55:34> 00:55:35:	Absolutely not.
00:55:35> 00:55:38:	They can barely hold on to their current budgets, right?
00:55:38> 00:55:42:	Without the federal government having the condition that we had
00:55:42> 00:55:45:	because of COVID, the government wouldn't have been washed with
00:55:45> 00:55:46:	cash at all.
00:55:46> 00:55:49:	They would be at a deficit right now dealing with

00:55:49> 00:55:49:	pensions.
00:55:50> 00:55:52:	And so the reality is, is that you need the
00:55:52> 00:55:54:	private sector to have an incentive to invest in these
00:55:54> 00:55:55:	neighborhoods.
00:55:55> 00:55:57:	But it's got to be an incentive.
00:55:57> 00:55:59:	It can't be punitive because they won't invest.
00:55:59> 00:56:01:	They'll just take their money and go somewhere else.
00:56:01> 00:56:05:	So until we start looking holistically, for example, we want
00:56:05> 00:56:08:	to be punitive on developers because we believe they have
00:56:09> 00:56:12:	money and they do or they have access to significant
00:56:12> 00:56:15:	capital, just the punitive approach doesn't work.
00:56:15> 00:56:18:	I mean, they'll go somewhere that's less punitive because that's
00:56:18> 00:56:18:	how money flows.
00:56:19> 00:56:21:	So if we can figure out ways to share the
00:56:21> 00:56:26:	resilience strategy with both government and the cities, I've always
00:56:26> 00:56:30:	said, well, why aren't we more holistic with resilience Together?
00:56:30> 00:56:33:	We have a city of 1.6 million people, and it's
00:56:33> 00:56:35:	1.5 to 1.7, however we look at it.
00:56:36> 00:56:39:	But the city was built for 2.2 million people, right?
00:56:39> 00:56:42:	So we're providing services for a city that we can't
00:56:42> 00:56:44:	even pay for a bulk of what the city is
00:56:44> 00:56:45:	today.
00:56:45> 00:56:46:	Why don't we shrink it?
00:56:47> 00:56:50:	Why don't we stop allowing people to build and take
00:56:50> 00:56:53:	redevelopment land, the RDA land, let's green it.
00:56:53> 00:56:56:	I mean, isn't 50% of the city is impervious?
00:56:56> 00:56:57:	Let's start looking at that.
00:56:57> 00:57:00:	So we don't put the burden on new developments because
00:57:00> 00:57:02:	they're bringing new money and let's fix the stuff that
00:57:02> 00:57:06:	exists in neighborhoods today that are making these neighborhoods high.
00:57:07> 00:57:10:	So let's let's really be holistic about all of
00:57:10> 00:57:14:	these approaches and share in the burden of fixing our
00:57:14> 00:57:15:	neighborhoods.
00:57:16> 00:57:19:	And so until we get real that the private sector
00:57:19> 00:57:21:	is not going to do the role of government no
00:57:21> 00:57:25:	matter what confines you put on them, it's not going
00:57:25> 00:57:25:	to happen.
00:57:26> 00:57:28:	And until we put incentives in place that help make
00:57:28> 00:57:31:	it happen, we're not going to be able to fundamentally

00:57:31> 00:57:31:	fix it in my view.
00:57:32> 00:57:35:	And our incentives should be around wealth building for these
00:57:35> 00:57:38:	communities so eventually they can be self sustainable and and
00:57:38> 00:57:41:	help create the standards that really work and are fair
00:57:41> 00:57:42:	for these neighbourhoods.
00:57:44> 00:57:46:	Thank you for that question and thank you all for
00:57:46> 00:57:47:	joining the conversation.
00:57:47> 00:57:49:	I think we need to to wind down.
00:57:49> 00:57:52:	I want to say thank you to our panelists and
00:57:52> 00:57:54:	I want to share those last two resources that I
00:57:54> 00:57:55:	very briefly mentioned.
00:57:57> 00:57:57:	There we go.
00:57:58> 00:58:03:	So one is the report that I mentioned earlier, knowledge.uli.org/resilient
00:58:03> 00:58:04:	Retrofits.
00:58:04> 00:58:05:	So please check that out.
00:58:05> 00:58:09:	We already have an endorsement from 1 panelist and then
00:58:09> 00:58:11:	we had to bring in some AIA resources too.
00:58:11> 00:58:13:	I I still have a lot of love for AIA
00:58:13> 00:58:16:	conducting vulnerability assessments.
00:58:16> 00:58:19:	That's course 5 in the Resilience and Adaptation online series
00:58:19> 00:58:22:	that helps you understand the vulnerabilities of your existing building,
00:58:23> 00:58:25:	whether or not it should be retrofitted, right?
00:58:25> 00:58:27:	Because we do need to think of site selection as
00:58:27> 00:58:28:	an adaptation strategy.
00:58:29> 00:58:31:	And then if you are going to move forward, what
00:58:31> 00:58:33:	makes the most sense given your objectives?
00:58:33> 00:58:37:	And then finally, if the wonderful strategies in the report
00:58:37> 00:58:41:	aren't enough, there is a video Existing buildings Hazard Mitigation
00:58:41> 00:58:44:	Retrofits that also goes through a bunch of strategies.
00:58:44> 00:58:46:	So if you prefer to read to learn or prefer
00:58:46> 00:58:48:	to listen to learn, we got you covered.
00:58:49> 00:58:50:	So thank you again everyone.

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