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: There's different ways that can be structured that makes it
00:20:54 --> 00:20:57: more beneficial like the longer useful life that will help
00:20:58 --> 00:21:00: 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.

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
00:32:44 --> 00:32:49: also going to help with resiliency including of course adding

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 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

00:39:14 --> 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?

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 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 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 --> 00:49:34: 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 --> 00:50:54: 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.
00:51:24 --> 00:51:26: So which what office buildings are doing?
00:51:26 --> 00:51:29: Well, the ones that are amenity rich, but you know
00:51:30 --> 00:51:30: what else?
00:51:31 --> 00:51:33: The ones that are not in a flood zone or
00:51:33 --> 00:51:37: 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 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:	I'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 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.

have a correction or for permission inquiries, please contact .