

## Webinar

## **ULI Global Sustainability Outlook 2025**

Date: February 07, 2025

00:02:19 --> 00:02:21:

00:02:21 --> 00:02:23:

00:00:03 --> 00:00:04: Welcome everyone. 00:00:05 --> 00:00:06: We're going to start in a few minutes. 00:00:16 --> 00:00:18: Welcome to our attendees. 00:00:18 --> 00:00:22: This is the ULI Global Sustainability Outlook 2025. 00:00:22 --> 00:00:24: We're going to get started in a couple minutes. 00:00:24 --> 00:00:26: We're waiting for folks to join. 00:00:44 --> 00:00:46: Welcome to those just joining us. 00:00:46 --> 00:00:49: This is Uli's Global Sustainability Outlook webinar. 00:00:49 --> 00:00:52: We will be joining in just a few minutes time just waiting for folks to join the webinar. 00:00:52 --> 00:00:55: 00:01:05 --> 00:01:06: Welcome everyone. 00:01:06 --> 00:01:07: Thanks for joining us. 00:01:07 --> 00:01:09: We'll get started in just a minute or so. 00:01:10 --> 00:01:14: Our attendee number is slowly creeping up. 00:01:14 --> 00:01:15: Thank you for joining us. 00:01:15 --> 00:01:17: We're excited to see everyone. 00:01:29 --> 00:01:30: Welcome. 00:01:30 --> 00:01:32: We'll get started in about 30 seconds. 00:01:55 --> 00:01:56: OK. 00:01:56 --> 00:01:58: Welcome to all of those who have joined us. 00:01:58 --> 00:02:01: It looks like we still have some attendees joining the 00:02:01 --> 00:02:04: Zoom today, but I'll go ahead and get started. 00:02:04 --> 00:02:06: It's about two after the hour. 00:02:06 --> 00:02:11: You have joined the ULI Global Sustainability Outlook 2025. 00:02:11 --> 00:02:12: How do we move forward? 00:02:12 --> 00:02:16: Webinar based on the article that was published earlier in 00:02:16 --> 00:02:17: January.

I am a senior Director on our D Carb team

My name is Kara Kokernak.

00:02:23> 00:02:27:	in the Center for Sustainability and I'm going to be
00:02:27> 00:02:29:	hosting you through this discussion today.
00:02:30> 00:02:32:	First thing I want to talk about is what is
00:02:32> 00:02:34:	our global sustainability outlook.
00:02:35> 00:02:38:	So a global sustainability outlook is a report or article
00:02:38> 00:02:42:	that utilize the Center for Sustainability produces each year.
00:02:42> 00:02:45:	Now we're on our 4th or 5th and we interview
00:02:45> 00:02:50:	you and I, member experts globally to inform the outlook
00:02:50> 00:02:51:	for the coming year.
00:02:51> 00:02:56:	So we talked to our sustainability focused product councils in
00:02:56> 00:03:00:	the Americas, in the EU and in Asia Pacific.
00:03:00> 00:03:02:	We talked to them about general ideas.
00:03:02> 00:03:06:	We don't really set an agenda or set specific topics,
00:03:06> 00:03:10:	but we ask them what sustainability topics and issues are
00:03:10> 00:03:13:	on the rise, why do they matter, and what actions
00:03:13> 00:03:17:	should should the industry or their own organizations pursue moving
00:03:17> 00:03:18:	forward?
00:03:19> 00:03:23:	So all of those conversations occurred towards the end of
00:03:23> 00:03:24:	2024.
00:03:24> 00:03:27:	We look at all of our notes, we pull out
00:03:27> 00:03:31:	all the ideas and fantastic innovations that we talk about
00:03:31> 00:03:34:	on those calls, and we come up with our five
00:03:34> 00:03:38:	topics, and you can find all of these at uli.org
00:03:38> 00:03:39:	#sustainability Outlook.
00:03:39> 00:03:43:	We've got our reports from 2021 all the way through
00:03:43> 00:03:46:	2024, and this year we pivoted a little bit.
00:03:46> 00:03:50:	We focused on producing an article on urban land Online,
00:03:50> 00:03:51:	so please visit those links.
00:03:51> 00:03:53:	We will also have someone drop that in the chat
00:03:53> 00:03:54:	for you all.
00:03:56> 00:03:57:	So let's jump in here.
00:03:57> 00:04:01:	I want to introduce our fantastic panel and get started
00:04:01> 00:04:04:	on reviewing those big topics and why they are important
00:04:04> 00:04:07:	to the industry and how we move forward on that.
00:04:07> 00:04:10:	We started out here with a quote from one of
00:04:10> 00:04:13:	our participants in one of those round tables.
00:04:13> 00:04:16:	And that we don't want to distract from what's important
00:04:16> 00:04:19:	right now, prioritizing resilience and reduced carbon emissions.
00:04:19> 00:04:22:	And that really is a big focus of our discussion
00:04:22> 00:04:24:	moving forward is what to prioritize.
00:04:26> 00:04:29:	We're going to go quickly through these introductions, those

that 00:04:29 --> 00:04:31: overview of the key focus points and then AQ and 00:04:31 --> 00:04:31: Α. 00:04:32 --> 00:04:34: But this is the the best part of my job 00:04:34 --> 00:04:35: today. 00:04:35 --> 00:04:38: And that is doing a quick introduction of our great 00:04:38 --> 00:04:41: panellists who are all part of that discussion in late 00:04:41 --> 00:04:41: 2024. 00:04:42 --> 00:04:43: So I'm going to pass this over to them if 00:04:43 --> 00:04:46: you want to come off mute and just introduce yourself 00:04:46 --> 00:04:48: really quickly before we dive into the topics. 00:04:48 --> 00:04:53: So we have Sonia Khanna, investment partner from Galway Sustainability 00:04:53 --> 00:04:54: Capital. 00:04:54 --> 00:04:55: Do you want to say hi quickly, Sonia? 00:04:56 --> 00:04:57: Hi everyone. 00:04:57 --> 00:05:00: I'm an investment partner at Galway Sustainable Capital. 00:05:00 --> 00:05:04: I run the green building sector for Galway. 00:05:04 --> 00:05:08: We are a specialty finance company that is focused on 00:05:08 --> 00:05:14: making investments that that promote environmental and social sustainability. 00:05:16 --> 00:05:16: Welcome. 00:05:16 --> 00:05:18: Thanks for joining us today, Mark. 00:05:19 --> 00:05:20: Thanks, Kara. 00:05:20 --> 00:05:21: I'm Mark Basin. 00:05:21 --> 00:05:24: I'm a Senior Vice President with Basis Investment Group here 00:05:24 --> 00:05:25: in New York City. 00:05:25 --> 00:05:27: We're a real estate investment manager and lender. 00:05:28 --> 00:05:30: I'm also an adjunct associate professor of finance at the 00:05:30 --> 00:05:33: NYU Stern School Business, where I teach two classes, a 00:05:33 --> 00:05:36: real estate capital markets class and a real estate finance 00:05:36 --> 00:05:37: and investments class. 00:05:37 --> 00:05:40: I'm the vice Chair of programs for the ULI Sustainable 00:05:40 --> 00:05:44: Development Council, member of the ULI New York Housing Council, and was a member of the 2018 cohort in the 00:05:44 --> 00:05:46:

**00:05:47 --> 00:05:48:** ULI Health Leaders.

**00:05:48 --> 00:05:49:** Pro program.

**00:05:50 --> 00:05:51:** Fantastic, Mark.

**00:05:51 --> 00:05:52:** Thanks for joining us today.

**00:05:52 --> 00:05:53:** And Antonio.

00:05:55 --> 00:05:55: Hi.

00:05:55> 00:05:56:	Hi everyone.
00:05:56> 00:06:00:	This is Antonio Marotta and I lead the Italian practice
00:06:00> 00:06:04:	Catalyst where we work across a wide range of new
00:06:04> 00:06:09:	developments and operational assets in basically all the
	asset classes
00:06:09> 00:06:10:	across the market.
00:06:11> 00:06:14:	And I'm focused of course in SGN sustainability.
00:06:15> 00:06:18:	And yeah, probably we will touch all the points that
00:06:18> 00:06:21:	we, that we used to see on a day-to-day basis.
00:06:22> 00:06:26:	And I also hold a PhD in sustainable development where
00:06:26> 00:06:30:	I forecasted the greenhouse gas emission forecast.
00:06:30> 00:06:33:	So well, it will be 1 of the key topics.
00:06:33> 00:06:34:	So I leave it back to you.
00:06:36> 00:06:36:	Thanks.
00:06:36> 00:06:38:	Antonio gave us a little bit of a sneak peek
00:06:38> 00:06:39:	into what's coming ahead.
00:06:39> 00:06:40:	I love that.
00:06:41> 00:06:45:	So let's move on to our top five sustainability issues
00:06:45> 00:06:45:	in 2025.
00:06:46> 00:06:48:	And I want to be clear as we list these
00:06:48> 00:06:51:	five issues or topics, this is not meant to show
00:06:51> 00:06:55:	the entire landscape of what's coming ahead in 2025, but
00:06:55> 00:06:58:	these are the top five items we talked about in
00:06:58> 00:07:01:	those discussions and that we pulled out.
00:07:01> 00:07:03:	There are certainly other topics.
00:07:03> 00:07:06:	There are certainly other events that will occur that will
00:07:06> 00:07:09:	push what we're doing in 2025, but these are based
00:07:09> 00:07:11:	on those conversations.
00:07:11> 00:07:13:	So we'll go through these one by one.
00:07:13> 00:07:16:	We've got simplifying goals and prioritizing decarbonization.
00:07:16> 00:07:19:	We talked about that a little bit already and #2
00:07:19> 00:07:22:	was emphasizing the impact of building materials.
00:07:22> 00:07:25:	So what goes into our buildings, how we transport those
00:07:25> 00:07:30:	building materials, where we're finding them, where we're reusing them
00:07:30> 00:07:33:	#3 is focusing on occupiers, demand, health and well-being.
00:07:33> 00:07:36:	Something that we work on ULI quite a bit is
00:07:36> 00:07:40:	the connection and collaboration between the building owner and operator
00:07:40> 00:07:42:	and the building user and or occupier.
00:07:42> 00:07:45:	So that's a big topic we want to focus on
00:07:45> 00:07:49:	in 2025 #4 is sourcing and storing green power.
00:07:49> 00:07:50:	That was a little bit of a highlight we just

00:07:50 --> 00:07:50: heard. 00:07:51 --> 00:07:54: And then #5 investing in resilience. 00:07:54 --> 00:07:56: And we'll dive into a little bit about what that 00:07:56 --> 00:08:00: means and the nuances of investing in resilience, in particular 00:08:00 --> 00:08:01: in climate change coming up. 00:08:03 --> 00:08:06: So first, we're going to jump into that first one, 00:08:06 --> 00:08:08: simplifying goals and prioritizing decarbonization. 00:08:08 --> 00:08:12: As Daniel Chang, one of our participants with Europe ESG 00:08:12 --> 00:08:16: at Heinz, said, actionability and practical solutions are key. 00:08:16 --> 00:08:19: What do we do in in in a world where 00:08:19 --> 00:08:23: there are so many options and so many different strategies, 00:08:23 --> 00:08:27: so much different prop tech, different ideas, different ways to 00:08:27 --> 00:08:32: to hit net zero, different goals to set different requirements 00:08:32 --> 00:08:36: coming in different voluntary that you're being sent day by 00:08:36 --> 00:08:36: day. 00:08:36 --> 00:08:40: How do you simplify that, simplify that and really prioritize 00:08:40 --> 00:08:43: what works best for your organization and what works best 00:08:43 --> 00:08:46: for really increasing impact in the industry. 00:08:46 --> 00:08:49: So before we ask our panel to give their side 00:08:49 --> 00:08:52: of things, we do have something really quick we want 00:08:52 --> 00:08:55: to try today, and that is a quick poll of 00:08:55 --> 00:08:56: our our participants. 00:08:57 --> 00:08:59: So if you are at a computer or you have 00:08:59 --> 00:09:02: your cell phone or other device on you, you can 00:09:02 --> 00:09:06: join slido.com at that particular number or you can take 00:09:06 --> 00:09:10: a quick picture of that QR code and start answering 00:09:10 --> 00:09:11: this particular question. 00:09:12 --> 00:09:15: And what is the biggest priority for your company? 00:09:15 --> 00:09:17: Is it measuring energy use intensity? 00:09:18 --> 00:09:22: Is it growing ESG teams? 00:09:22 --> 00:09:23: Is it reducing material costs? 00:09:23 --> 00:09:25: It looks like we've got some folks already answering and 00:09:26 --> 00:09:28: obviously we don't know what this is going to result 00:09:28 --> 00:09:28: in. 00:09:28 --> 00:09:30: So it might change our conversation, you know, based on 00:09:30 --> 00:09:32: on what you all are thinking. 00:09:34 --> 00:09:36: I'm going to give it a just like a minute 00:09:36 --> 00:09:37: 00:09:37 --> 00:09:40: We're at, you know, almost 10 after after the hour. 00:09:43 --> 00:09:44: This is great. 00:09:47 --> 00:09:51: Not a complete surprise, but very interesting seeing these

numbers 00:09:51 --> 00:09:52: come through. How about as folks are still voting and let me 00:09:55 --> 00:09:57: 00:09:57 --> 00:09:58: see how many folks are in their voting. 00:09:58 --> 00:10:01: We have about 5859 people voting. 00:10:01 --> 00:10:03: So we'll give it a little bit of time here. 00:10:03 --> 00:10:04: And now it's up to 61. 00:10:05 --> 00:10:10: Thank you all for for entertaining this new, new idea 00:10:10 --> 00:10:12: we had to our panel. 00:10:12 --> 00:10:15: Let's talk a little bit about simplifying goals and prioritization 00:10:15 --> 00:10:18: and what what you all's biggest priority is for your 00:10:18 --> 00:10:21: company and what you think about moving forward. 00:10:23 --> 00:10:26: Sarah, I can start on this despite at the US 00:10:26 --> 00:10:29: federal level, despite there being changes at the US federal 00:10:29 --> 00:10:32: level, notably the US being taken out of the 2015 00:10:33 --> 00:10:36: Paris Agreement for the second time, first time occurring in 00:10:36 --> 00:10:37: 2017. 00:10:37 --> 00:10:41: The good news for sustainability champions is that sustainability or 00:10:41 --> 00:10:45: climate change sustainability, governor governance and leadership will continue to 00:10:45 --> 00:10:48: occur at the sub national level, at the state, city 00:10:48 --> 00:10:49: and local municipality levels. 00:10:50 --> 00:10:53: So for example, Local Law 97 passed in 2019 as 00:10:53 --> 00:10:56: part of the Climate Mobilization Act is likely going to 00:10:56 --> 00:10:59: stay intact and that was a groundbreaking event. 00:10:59 --> 00:11:03: Since 2019, fifty cities have enacted building performance standards laws 00:11:03 --> 00:11:06: or will be enacting or in the process of enacting 00:11:06 --> 00:11:09: building performance standard standards laws. 00:11:10 --> 00:11:13: These other cities include Denver with it with it's energized 00:11:14 --> 00:11:18: Denver program and the building performance standards laws in cities 00:11:18 --> 00:11:20: such as Washington DC and and Seattle, WA. So it will continue at the at the sub national 00:11:21 --> 00:11:24:

00:11:28 --> 00:11:32: private partnerships in addition to corporate initiatives, which are certainly
 00:11:32 --> 00:11:35: something that we should promote and embrace.
 00:11:35 --> 00:11:39: The combination of financial incentives and sub national climate policy
 00:11:40 --> 00:11:44: regulations taken together in what we've seen in studies

Also related to that is the important role of public

level.

00:11:24 --> 00:11:24:

00:11:25 --> 00:11:28:

provides 00:11:44 --> 00:11:47: the greatest greenhouse gas reduction benefit. 00:11:49 --> 00:11:51: And then my second point will be on AI, artificial 00:11:51 --> 00:11:52: intelligence. 00:11:52 --> 00:11:54: This includes generative AI or Gen. 00:11:54 --> 00:11:56: Al in those large language models. 00:11:56 --> 00:11:59: Of course, this is a huge trend in business. 00:11:59 --> 00:12:02: Generally what we find there are many use cases, positive 00:12:02 --> 00:12:05: use cases along the real estate life cycle. 00:12:05 --> 00:12:08: Many of these use cases tend to be high ROI, 00:12:08 --> 00:12:09: low friction. 00:12:09 --> 00:12:12: But some examples will be for in the pre development 00:12:12 --> 00:12:16: phase estimating the sustainability or ESG impact, in the construction 00:12:16 --> 00:12:20: phase minimizing waste and construction delays, and then in 00:12:20 --> 00:12:24: commissioning phase ensuring that sustainability goals are met. 00:12:25 --> 00:12:28: I'd like to stop there and let some other panelists 00:12:28 --> 00:12:28: contribute. 00:12:28 --> 00:12:30: I do some other comments I can make later. 00:12:30 --> 00:12:31: Thanks, Mark. 00:12:31 --> 00:12:34: And you know really quickly before we go into Antonio 00:12:34 --> 00:12:36: Antonia is that AI was really close to being one 00:12:36 --> 00:12:38: of the five topics. 00:12:38 --> 00:12:40: We talked about that in quite a bit of the 00:12:40 --> 00:12:44: conversations and and we kind of ended that discussion in 00:12:44 --> 00:12:47: in sort of folding that into some of the other 00:12:47 --> 00:12:48: big topics. 00:12:48 --> 00:12:49: I appreciate you bringing that up. 00:12:49 --> 00:12:51: Thank you, Antonio or or Sonia. 00:12:52 --> 00:12:54: Yeah, I'm happy to go. 00:12:54 --> 00:12:59: So it's very interesting the link because we are developing 00:12:59 --> 00:13:04: a platform internally called OB and we're actually addressing those 00:13:04 --> 00:13:05: topics. 00:13:05 --> 00:13:08: So we would like to first of all track the 00:13:08 --> 00:13:12: KPI's that we set and secondly to, you know, manipulate 00:13:12 --> 00:13:14: the data in the correct way. 00:13:14 --> 00:13:17: So both in terms of, you know, data validation that 00:13:17 --> 00:13:20: we have and in terms of, you know, automatic meter

So you know, so to the through the to the

reading.

00:13:20 --> 00:13:20:

00:13:20 --> 00:13:23:

00:13:23> 00:13:27:	At we would like to automate all this process
00:13:27> 00:13:31:	Al, we would like to automate all this process.
00:13:27> 00:13:31:	Now I'd like to briefly mention also the since then,
	the only one in the panel from Europe, I would
00:13:35> 00:13:38:	like to to quickly make a comparison.
00:13:39> 00:13:42:	So here we have some, some regulations that are, you
00:13:42> 00:13:46:	know, maybe you already heard about them, the SFDR, the
00:13:46> 00:13:48:	Sustainable Finance Disclosure Regulation.
00:13:49> 00:13:52:	So what what's happening in that part is that we
00:13:52> 00:13:55:	are categorizing the funds.
00:13:56> 00:13:59:	At the moment, we have 3 type of funds that
00:13:59> 00:14:03:	are Article 98 and six that are green, light green
00:14:04> 00:14:07:	and without a commitment with sustainability.
00:14:08> 00:14:11:	And this is going to change in the SFDR 2
00:14:11> 00:14:15:	point O where we're going to see, you know, different
00:14:15> 00:14:17:	commitments with sustainability.
00:14:17> 00:14:20:	So there is a sustainable, proper sustainable fund that is
00:14:20> 00:14:21:	the first product.
00:14:22> 00:14:24:	Then the second one is a transitioning product.
00:14:24> 00:14:27:	The third one is only an ESG collection and then
00:14:27> 00:14:30:	the last one where there is no ESG collection.
00:14:30> 00:14:34:	So it's interesting to see how different continents are also
00:14:34> 00:14:36:	approaching, you know, the same topic again.
00:14:42> 00:14:43:	Yeah, no, I was going to.
00:14:43> 00:14:46:	You know, go back to this survey that Cara put
00:14:46> 00:14:50:	up and just talking about measuring energy use intensity for,
00:14:50> 00:14:53:	you know, in the US, you know, often Europe is
00:14:53> 00:14:54:	a little bit ahead of us.
00:14:54> 00:14:58:	But in the USA, lot of this comes down to,
00:14:58> 00:15:02:	you know, the very basic idea of measuring and tracking
00:15:02> 00:15:02:	data.
00:15:03> 00:15:06:	I'd say a lot of real estate owners in the
00:15:06> 00:15:10:	US still need to begin by doing that in order
00:15:10> 00:15:13:	to proceed along this path of decarbonization.
00:15:13> 00:15:17:	So when we work with our portfolio companies and our
00:15:17> 00:15:20:	real estate partners, what we first do is have them
00:15:20> 00:15:24:	track energy usage, water usage, waste production, and then
00110120	we
00:15:24> 00:15:28:	can start looking for those low hanging fruits in terms
00:15:28> 00:15:30:	of ways to decarbonize those buildings.
00:15:32> 00:15:36:	For example, we recently invested in a portfolio of multifamily
00:15:36> 00:15:40:	buildings in Washington, DC and began tracking these
	metrics like

00:15:40> 00:15:41:	I described.
00:15:42> 00:15:46:	And now we're looking at decarbonization measures, one of which
00:15:46> 00:15:50:	an obvious one would be adding rooftop solar, but there
00:15:50> 00:15:53:	are other there are other products out there and many
00:15:53> 00:15:56:	of them using AI as was just discussed.
00:15:57> 00:16:01:	One of them in particular is putting water sensors on
00:16:01> 00:16:05:	each toilet and each faucet in in a building, in
00:16:05> 00:16:07:	an apartment building.
00:16:07> 00:16:11:	And that way, when there is excess usage or leakage,
00:16:11> 00:16:15:	a property manager can be informed immediately.
00:16:15> 00:16:18:	These sensors all report into a centralized system.
00:16:18> 00:16:21:	It can report that to a property manager immediately and
00:16:21> 00:16:24:	they can go ahead and do what's necessary to fix
00:16:24> 00:16:26:	that problem and not have to wait till the end
00:16:26> 00:16:29:	of the month when a water bill is actually received.
00:16:30> 00:16:33:	And, you know, based on the cost that we've seen
00:16:33> 00:16:36:	for this, the amount of cost for installing all of
00:16:36> 00:16:40:	those sensors would be paid back within one year based
00:16:40> 00:16:44:	on the projected water savings from those from those sensors.
00:16:44> 00:16:47:	So this can be really something that cut that leads
00:16:47> 00:16:51:	to, you know, expense savings, which I'm sure all real
00:16:51> 00:16:55:	estate investors are interested in, while also promoting, you know,
00:16:55> 00:16:57:	sustainability and and less water use.
00:16:58> 00:16:59:	That's a great example.
00:16:59> 00:17:01:	A one year payback is pretty hard to beat so
00:17:01> 00:17:03:	appreciate sharing that example.
00:17:03> 00:17:05:	Any other comments before we move on to the second
00:17:05> 00:17:05:	topic?
00:17:06> 00:17:08:	Here I have one final comment and just some examples
00:17:08> 00:17:11:	of sub national policies at the state level that will
00:17:11> 00:17:12:	stay intact.
00:17:12> 00:17:17:	These include State bill 253-2261 in California and the CLCPA,
00:17:17> 00:17:20:	the so-called Climate Act in New York State.
00:17:20> 00:17:22:	We'll come back to this when we talk about the
00:17:22> 00:17:24:	Chippy project in topic 4.
00:17:24> 00:17:26:	But one final theme for me will be on C
00:17:26> 00:17:27:	pace financing.
00:17:27> 00:17:30:	This is a bit of an exotic type of financing
00:17:30> 00:17:32:	that was created about 15 years ago.

00:17:32> 00:17:34:	Today, there are about 40 states here in the LIC
00:17:34> 00:17:38:	Today, there are about 40 states here in the US authorized for C PACE financing, where it's an assessment
00.17.34> 00.17.30.	on
00:17:38> 00:17:42:	a mortgage providing financing for owners to complete energy efficiency
00:17:42> 00:17:44:	upgrades to commercial real estate.
00:17:44> 00:17:48:	At the end of 2023, about \$7 billion of cumulative
00:17:48> 00:17:49:	C PACE loans were made.
00:17:50> 00:17:54:	About 30% of that 2 billion were made in 2023
00:17:54> 00:17:55:	alone.
00:17:55> 00:17:57:	So one of the biggest drivers for C pace is
00:17:57> 00:17:58:	what I mentioned earlier on, right?
00:17:58> 00:18:01:	Since 201950 cities in the US, about 50 cities have
00:18:01> 00:18:05:	enacted building performance standards loss or in the
	process of
00:18:05> 00:18:06:	doing it.
00:18:06> 00:18:08:	So C Pace is a type of financing that can
00:18:08> 00:18:12:	meet some of these building performance standards loss that
	are
00:18:12> 00:18:15:	now increasingly being put into effect throughout our great cities
00:18:15> 00:18:16:	here in the US.
00:18:17> 00:18:17:	Yeah.
00:18:17> 00:18:18:	You know, that's a great point.
00:18:18> 00:18:21:	And it really kind of speaks Mark to like what
00:18:21> 00:18:25:	we're seeing here on this survey that, you know, 51%
00:18:25> 00:18:28:	of participants and we have about 275 folks on the
00:18:29> 00:18:32:	call right now said measuring energy use intensity.
00:18:32> 00:18:34:	So half of the folks are looking at that.
00:18:34> 00:18:38:	Is that a voluntary priority or is that a priority
00:18:38> 00:18:42:	because you have to measure EUI because there are, you
00:18:43> 00:18:47:	know, requirements in your city or jurisdiction or, or state.
00:18:47> 00:18:49:	So that's really interesting to see.
00:18:49> 00:18:52:	It would, it would be interesting for me, you know,
00:18:52> 00:18:54:	at at UI looking at impact of of this webinar
00:18:54> 00:18:57:	and beyond if we add added follow up questions and
00:18:57> 00:18:59:	maybe we will next year.
00:18:59> 00:18:59:	Like why is that?
00:18:59> 00:19:01:	Is it because you are in a city that you
00:19:01> 00:19:02:	know
00:19:02> 00:19:04:	but it is, you know, it kind of speaks to
00:19:04> 00:19:05:	what's happening in the industry.
00:19:05> 00:19:07:	Oh, and look, folks are answering it as I said
	<del>-</del>

00:19:07> 00:19:10:	that and flipped it a little bit, but not too
00:19:10> 00:19:10:	much.
00:19:11> 00:19:15:	All right, we'll move on here to number 2
00:19:15> 00:19:18:	and this one does not have a slide.
00:19:18> 00:19:19:	Oh quiz, but we will be doing a couple more.
00:19:20> 00:19:24:	So the second topic was emphasizing the impact of building
00:19:24> 00:19:25:	materials.
00:19:25> 00:19:29:	As Clemens, our Head of Head of Sustainability at Rediffco
00:19:29> 00:19:33:	said, we are making a bigger push towards reducing embodied
00:19:34> 00:19:37:	carbon in our development and retro retrofit activities.
00:19:38> 00:19:41:	For those of you that are on the webinar today,
00:19:41> 00:19:44:	this is really focusing on the carbon content of building
00:19:44> 00:19:49:	materials including the the carbon emissions associated with the extraction,
00:19:49> 00:19:54:	manufacturing, transportation, construction of buildings and building material.
00:19:54> 00:19:58:	So all of that taken into consideration in addition to
00:19:58> 00:20:01:	what I think we commonly haul and focus on, I
00:20:01> 00:20:05:	know an operation operational emissions what you what emissions are
00:20:05> 00:20:07:	associated with running.
00:20:07> 00:20:08:	Operating your building.
00:20:08> 00:20:11:	So I'd like to hear from the panel, how are
00:20:11> 00:20:13:	you emphasizing the impact of building materials?
00:20:13> 00:20:16:	What are you seeing ahead in 2025?
00:20:17> 00:20:20:	I know building material cost is a big piece of
00:20:20> 00:20:24:	that, but also the impact of the materials themselves.
00:20:25> 00:20:27:	I can start on this one.
00:20:28> 00:20:31:	Just picking up on the embodied carbon idea.
00:20:32> 00:20:37:	You know, some basic metrics are that building materials can
00:20:37> 00:20:40:	contribute up to 80% of the embodied carbon in a
00:20:40> 00:20:45:	building and the embodied carbon contributes 30% of overall carbon
00:20:45> 00:20:47:	emissions of a building.
00:20:47> 00:20:50:	ermeere er a samarig.
	So as, as you kind of mentioned there in the
00:20:50> 00:20:53:	<u> </u>
00:20:50> 00:20:53: 00:20:53> 00:20:56:	So as, as you kind of mentioned there in the
	So as, as you kind of mentioned there in the intro, the most sustainable thing a developer can do is to maintain an existing building and improve the energy
00:20:53> 00:20:56:	So as, as you kind of mentioned there in the intro, the most sustainable thing a developer can do is to maintain an existing building and improve the energy efficiency
00:20:53> 00:20:56: 00:20:56> 00:21:00:	So as, as you kind of mentioned there in the intro, the most sustainable thing a developer can do is to maintain an existing building and improve the energy efficiency of that building versus building a new building, even if
00:20:53> 00:20:56: 00:20:56> 00:21:00: 00:21:00> 00:21:03:	So as, as you kind of mentioned there in the intro, the most sustainable thing a developer can do is to maintain an existing building and improve the energy efficiency of that building versus building a new building, even if that new building is say, lead platinum, for example.

00:21:11> 00:21:13:	more sense for that location.
00:21:14> 00:21:18:	And you know, the most commonly heard one in the
00:21:18> 00:21:22:	US at least today is office to multi family conversions.
00:21:22> 00:21:26:	And while this can be very difficult to make work
00:21:26> 00:21:30:	in certain situations from a cost and feasibility perspective, given
00:21:30> 00:21:33:	the number of empty office buildings that we have in
00:21:33> 00:21:36:	a number of our downtowns in the US, you're seeing
00:21:36> 00:21:41:	developers and architects starting to become more and more creative
00:21:41> 00:21:44:	as to how to convert these buildings and frankly, convert
00:21:44> 00:21:48:	neighborhoods that are currently highly office focused to more live
00:21:48> 00:21:50:	work play type locations.
00:21:50> 00:21:53:	And, you know, picking up on what Mark mentioned on
00:21:53> 00:21:57:	public private partnerships, I think you're going to see more
00:21:57> 00:22:00:	of these public private partnerships try to solve these issues
00:22:00> 00:22:03:	in terms of, you know, the vacant office stock and
00:22:03> 00:22:06:	how we can convert those existing buildings.
00:22:06> 00:22:09:	And that whole story has a great, you know, kind
00:22:09> 00:22:11:	of sustainability story around it.
00:22:14> 00:22:14:	Thank you.
00:22:14> 00:22:18:	And for those of you who are familiar with ULIHQ
00:22:18> 00:22:21:	and DC, right across the street from our HQ at
00:22:21> 00:22:25:	20th and L is an office to residential conversion.
00:22:25> 00:22:28:	So if you're looking to see that in person near
00:22:28> 00:22:30:	us, let us know and we're happy to to pop
00:22:30> 00:22:32:	you over there and and take a tour.
00:22:32> 00:22:33:	Mark or Antonio?
00:22:34> 00:22:35:	I can go.
00:22:35> 00:22:38:	So I think that in this point is interesting also
00:22:38> 00:22:41:	related to the the answers that we that we got
00:22:41> 00:22:44:	from the previous question, because at the end, you know,
00:22:44> 00:22:47:	embodied carbon is almost a trade off with energy use
00:22:47> 00:22:50:	intensity, because the more we increase the performance of a
00:22:51> 00:22:54:	building, the more embodied carbon becomes important.
00:22:55> 00:22:57:	Also because, you know, we need more material to insulate
00:22:57> 00:22:58:	our buildings.
00:22:58> 00:23:02:	So it's interesting to see how how we approach this
00:23:02> 00:23:02:	problem.
00:23:02> 00:23:05:	So here in Europe, I can mention a few things.
00:23:05> 00:23:08:	So first of all, for the new taxonomy alignment, we

00:23:12 -> 00:23:16:through the whole life cycle called carbon assessment of a00:23:16 -> 00:23:20:building where we, you know, assess both the embodied carbon00:23:20 -> 00:23:24:coming from materials and the, let's say operational carbon from,00:23:25 -> 00:23:27:you know, the use of the building.00:23:28 -> 00:23:31:The other thing that I wanted to mention is you00:23:31 -> 00:23:35:know, one of the projects we have been working on00:23:30 -> 00:23:40:And so the UK is one of the the countries00:23:44 -> 00:23:44:And so the UK is one of the the countries00:23:44 -> 00:23:45:that is you know pushing the most in this because00:23:40 -> 00:23:45:we have seen that we have set threshold of embodied00:23:40 -> 00:23:45:So in that case was was 600 kilograms of CO200:23:55 -> 00:23:56:Per square meter.00:23:56 -> 00:24:00:And we had to demonstrate that, you know, the the00:24:00 -> 00:24:01:And we had to demonstrate that, you know, the the00:24:07 -> 00:24:02:And we had to demonstrate that, you know, the the00:24:07 -> 00:24:13:to pay a certain amount for every tons of CO200:24:14 -> 00:24:14:So, you know, it introduces also the the carbon pricing00:24:13 -> 00:24:18:So, you know, it introduces also the the carbon pricing00:24:27 -> 00:24:28:Mark, any thoughts on building materials?00:24:39 -> 00:24:31:You're on mute, care.00:24:39 -> 00:24:41:You have a cold when you're on a webinar.00:24:40 -> 00:24:41:Ook.00:24:40	00:23:08> 00:23:12:	need to demonstrate the global warming potential and we demonstrated
carbon  00:23:20 -> 00:23:24:  coming from materials and the, let's say operational carbon from,  00:23:25 -> 00:23:31:  The other thing that I wanted to mention is you  00:23:33 -> 00:23:33:  Was in Birmingham in the UK.  00:23:36 -> 00:23:44:  00:23:40 -> 00:23:49:  00:23:49 -> 00:23:51:  00:23:55 -> 00:23:56:  00:23:56 -> 00:23:56:  00:24:00 -> 00:24:00:  00:24:10 -> 00:24:13:  00:24:13 -> 00:24:18:  00:24:14 -> 00:24:18:  00:24:17 -> 00:24:22:  00:24:27 -> 00:24:37:  00:24:35 -> 00:24:47:  00:24:35 -> 00:24:47:  00:24:35 -> 00:24:49:  00:24:47 -> 00:24:49:  00:24:18 -> 00:24:49:  00:24:19 -> 00:24:21:  00:24:21 -> 00:24:31:  00:24:22 -> 00:24:27:  00:24:35 -> 00:24:40:  00:24:37 -> 00:24:48:  00:24:38 -> 00:24:49:  00:24:40 -> 00:24:49:  00:24:40 -> 00:24:49:  00:24:40 -> 00:24:49:  00:24:35 -> 00:24:41:  00:24:40 -> 00:24:49:  00:24:41 -> 00:24:49:  00:24:35 -> 00:24:41:  00:24:41 -> 00:24:41:  00:24:40 -> 00:24:41:  00:24:40 -> 00:24:41:  00:24:35 -> 00:24:41:  00:24:41 -> 00:24:41:  00:24:40 -> 00:24:41:  00:24:40 -> 00:24:41:  00:24:40 -> 00:24:41:  00:24:40 -> 00:24:41:  00:24:40 -> 00:24:41:  00:24:40 -> 00:24:41:  00:24:40 -> 00:24:41:  00:24:40 -> 00:24:41:  00:24:41 -> 00:24:41:  00:24:42 -> 00:24:45:  00:24:45 -> 00:24:45:  00:24:46 -> 00:24:45:  00:24:47 -> 00:24:45:  00:24:48 -> 00:24:45:  00:24:48 -> 00:24:45:  00:24:55 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:22:50:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:58 -> 00:24:58:  00:24:	00:23:12> 00:23:16:	through the whole life cycle called carbon assessment of a
from,  00:23:25 -> 00:23:27: you know, the use of the building.  00:23:28 -> 00:23:31: The other thing that I wanted to mention is you know, one of the projects we have been working on was in Birmingham in the UK.  00:23:36 -> 00:23:40: And so the UK is one of the the countries  00:23:40 -> 00:23:49: We have seen that we have set threshold of embodied carbon that you can reach.  00:23:49 -> 00:23:55: So in that case was was 600 kilograms of CO2 per square meter.  00:23:56 -> 00:23:56: One 24:00: And we had to demonstrate that, you know, the the development was not exceeding the the threshold.  00:24:07 -> 00:24:10: And in the case you exceed the threshold, you have to pay a certain amount for every tons of CO2  00:24:13 -> 00:24:14: for 30 years.  00:24:27 -> 00:24:21: you know, it introduces also the the carbon pricing and probably makes you know, it helps you know, make you know developers and then stakeholders aware of of of this issue.  00:24:39 -> 00:24:37: Mark, any thoughts on building materials?  00:24:44 -> 00:24:41: You have a cold when you're on a webinar.  00:24:42 -> 00:24:41: On't.  00:24:44 -> 00:24:45: OK.  00:24:47 -> 00:24:45: OK.  00:24:47 -> 00:24:45: OK.  00:24:48 -> 00:24:45: OK.  00:24:48 -> 00:24:55: Oi you know, interesting building materials that are out there.  00:24:55 -> 00:24:58: Probably the most exciting from my point of view is mass timber or CLT cross laminated timber, which you know, whow, which you know, which you know, who wond were the projects we have been working on was in Birmingham in the UK.  100:24:58 -> 00:24:58: Probably the most exciting from my point of view is mass timber or CLT cross laminated timber, which you know, one of the projects we have been working on working on the projects we have been working on was in Birmingham in the UK.  100:24:68 -> 00:24:49: Or 24:49: Or 24:	00:23:16> 00:23:20:	
00:23:28 -> 00:23:31: The other thing that I wanted to mention is you   00:23:31 -> 00:23:33: know, one of the projects we have been working on   00:23:33 -> 00:23:40: was in Birmingham in the UK.   00:23:40 -> 00:23:44: that is you know pushing the most in this because   00:23:44 -> 00:23:45: that is you know pushing the most in this because   00:23:49 -> 00:23:51: carbon that you can reach.   00:23:55 -> 00:23:56: So in that case was was 600 kilograms of CO2   00:23:55 -> 00:23:56: per square meter.   00:24:00 -> 00:24:00: And we had to demonstrate that, you know, the the   00:24:01 -> 00:24:01: development was not exceeding the the threshold.   00:24:02 -> 00:24:10: development was not exceeding the threshold, you have   00:24:10 -> 00:24:13: for 30 years.   00:24:14 -> 00:24:14: for 30 years.   00:24:14 -> 00:24:18: So, you know, it introduces also the the carbon pricing   00:24:18 -> 00:24:22: and probably makes you know, it helps you know, make   00:24:27 -> 00:24:28: for 30 years.   00:24:32 -> 00:24:33:   00:24:33 -> 00:24:33:   00:24:39 -> 00:24:39:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:40:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:39:   00:24:39 -> 00:24:39:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:41:   00:24:40 -> 00:24:41:   00:24:41 -> 00:24:41:   00:24:42 -> 00:24:41:   00:24:44 -> 00:24:45:   0K.   00:24:47 -> 00:24:48:   0C:24:48 -> 00:24:51:   0K.   00:24:54 -> 00:24:58:   00:24:55 -> 00:24:58:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:   00:24:25 -> 00:24:58:   00:24:58 -> 00:25:02:   00:24:58 -> 00:25:02:	00:23:20> 00:23:24:	
00:23:31 -> 00:23:33: know, one of the projects we have been working on 00:23:33 -> 00:23:35: was in Birmingham in the UK.  00:23:36 -> 00:23:44: that is you know pushing the most in this because we have seen that we have set threshold of embodied carbon that you can reach.  00:23:49 -> 00:23:55: So in that case was was 600 kilograms of CO2 per square meter.  00:23:55 -> 00:23:56: per square meter.  And we had to demonstrate that, you know, the the development was not exceeding the the threshold.  00:24:04 -> 00:24:03: And in the case you exceed the threshold, you have to pay a certain amount for every tons of CO2 that you exceed and you have to pay this amount for 30 years.  00:24:10 -> 00:24:14: for 30 years.  00:24:14 -> 00:24:22: and probably makes you know, it helps you know, make you know developers and then stakeholders aware of of of this issue.  00:24:27 -> 00:24:28: Mark, any thoughts on building materials?  00:24:39 -> 00:24:40: You're on mute, care.  00:24:39 -> 00:24:41: Ok. I can just step in a coule of the material.  00:24:44 -> 00:24:48: Ok. I can just step, I can just step in a coule of the material.  00:24:47 -> 00:24:48: So if you are building ground up, you know some of the, you know, interesting building materials that are out there.  00:24:46 -> 00:24:51: So if you are building from my point of view is mass timber or CLT cross laminated timber, which you know, mass timber or CLT cross laminated timber, which you know, mass timber or CLT cross laminated timber, which you know, mass timber or CLT cross laminated timber, which you know, mass timber or CLT cross laminated timber, which you know, mass timber or CLT cross laminated timber, which you know, mass timber or CLT cross laminated timber, which you know, mass timber or CLT cross laminated timber.	00:23:25> 00:23:27:	you know, the use of the building.
00:23:33 -> 00:23:35: was in Birmingham in the UK.  00:23:36 -> 00:23:40: And so the UK is one of the the countries  00:23:44 -> 00:23:49: we have seen that we have set threshold of embodied  00:23:49 -> 00:23:51: carbon that you can reach.  00:23:55 -> 00:23:56: per square meter.  00:24:00 -> 00:24:03: development was not exceeding the threshold.  00:24:04 -> 00:24:07: And in the case you exceed the threshold, you have  00:24:11 -> 00:24:11: to pay a certain amount for every tons of CO2  00:24:13 -> 00:24:14: for 30 years.  00:24:14 -> 00:24:22: and probably makes you know, it helps you know, make  00:24:27 -> 00:24:28: you know developers and then stakeholders aware of of of  00:24:38 -> 00:24:37: Mark, any thoughts on building materials?  00:24:40 -> 00:24:41: You want to mute your coffee?  00:24:39 -> 00:24:41: Oor:24:39: No, I.  00:24:40 -> 00:24:47: Oor:24:39: Oor:24:39: Oo:24:47: Oor:24:39: Oor:24:49: Oo	00:23:28> 00:23:31:	The other thing that I wanted to mention is you
00:23:36> 00:23:40:         And so the UK is one of the the countries           00:23:40> 00:23:44:         that is you know pushing the most in this because           00:23:44> 00:23:49:         we have seen that we have set threshold of embodied           00:23:52> 00:23:55:         carbon that you can reach.           00:23:55> 00:23:56:         per square meter.           00:24:00> 00:24:00:         And we had to demonstrate that, you know, the the           00:24:04> 00:24:07:         And in the case you exceed the threshold, you have           00:24:04> 00:24:10:         to pay a certain amount for every tons of CO2           00:24:10> 00:24:13:         that you exceed and you have to pay this amount           00:24:13> 00:24:14:         for 30 years.           00:24:18> 00:24:18:         So, you know, it introduces also the the carbon pricing           00:24:18> 00:24:22:         and probably makes you know, it helps you know, make           00:24:27> 00:24:28:         this issue.           00:24:37> 00:24:33:         You're on mute, care.           00:24:39> 00:24:39:         Mark, any thoughts on building materials?           00:24:40> 00:24:41:         You have a cold when you're on a webinar.           00:24:44> 00:24:44:         Don't.           00:24:46> 00:24:47:         OK.           00:24:46> 00:24:	00:23:31> 00:23:33:	know, one of the projects we have been working on
00:23:44> 00:23:44:         that is you know pushing the most in this because           00:23:44> 00:23:49:         we have seen that we have set threshold of embodied           00:23:52> 00:23:54:         carbon that you can reach.           00:23:55> 00:23:56:         per square meter.           00:24:00> 00:24:00:         And we had to demonstrate that, you know, the the           00:24:04> 00:24:07:         And in the case you exceed the threshold, you have           00:24:07> 00:24:10:         to pay a certain amount for every tons of CO2           00:24:10> 00:24:13:         that you exceed and you have to pay this amount           00:24:14> 00:24:18:         So, you know, it introduces also the the carbon pricing           00:24:18> 00:24:22:         and probably makes you know, it helps you know, make           00:24:27> 00:24:28:         you know developers and then stakeholders aware of of of           00:24:27> 00:24:28:         this issue.           00:24:38> 00:24:31:         You're on mute, care.           00:24:39> 00:24:43:         You have a cold when you're on a webinar.           00:24:40> 00:24:44:         Don't.           00:24:44> 00:24:44:         Don't.           00:24:44> 00:24:45:         OK.           00:24:45> 00:24:55:         So if you are building ground up, you know some           00:24	00:23:33> 00:23:35:	was in Birmingham in the UK.
00:23:44> 00:23:49:         we have seen that we have set threshold of embodied           00:23:52> 00:23:54:         So in that case was was 600 kilograms of CO2           00:23:55> 00:23:56:         per square meter.           00:24:00> 00:24:03:         And we had to demonstrate that, you know, the the           00:24:04> 00:24:07:         And in the case you exceed the threshold.           00:24:07> 00:24:10:         to pay a certain amount for every tons of CO2           00:24:10> 00:24:13:         that you exceed and you have to pay this amount           00:24:14> 00:24:14:         for 30 years.           00:24:18> 00:24:22:         so, you know, it introduces also the the carbon pricing           00:24:22> 00:24:23:         and probably makes you know, it helps you know, make           00:24:23> 00:24:23:         you know developers and then stakeholders aware of of of           00:24:27> 00:24:28:         this issue.           00:24:38> 00:24:37:         Mark, any thoughts on building materials?           00:24:39> 00:24:40:         You want to mute your coffee?           00:24:40> 00:24:41:         You want to mute your coffee?           00:24:44> 00:24:43:         Oor.           00:24:46> 00:24:45:         OK.           00:24:48> 00:24:45:         So if you are building ground up, you know some           00:	00:23:36> 00:23:40:	And so the UK is one of the the countries
00:23:49> 00:23:51:         carbon that you can reach.           00:23:55> 00:23:56:         per square meter.           00:23:56> 00:24:00:         And we had to demonstrate that, you know, the the development was not exceeding the the threshold.           00:24:00> 00:24:07:         And in the case you exceed the threshold, you have to pay a certain amount for every tons of CO2           00:24:10> 00:24:13:         that you exceed and you have to pay this amount for 30 years.           00:24:14> 00:24:14:         So, you know, it introduces also the the carbon pricing and probably makes you know, it helps you know, make you know developers and then stakeholders aware of of of this issue.           00:24:22> 00:24:27:         Wor're on mute, care.           00:24:33> 00:24:39:         Mark, any thoughts on building materials?           00:24:40> 00:24:40:         You want to mute your coffee?           00:24:44> 00:24:41:         Ook.           00:24:44> 00:24:45:         OK.           00:24:47> 00:24:48:         Ook.           00:24:48> 00:24:51:         So if you are building ground up, you know some of the, you know, interesting building materials that are out there.           00:24:55> 00:24:58:         Probably the most exciting from my point of view is mass timber or CLT cross laminated timber, which you know,	00:23:40> 00:23:44:	that is you know pushing the most in this because
00:23:52> 00:23:54:         So in that case was was 600 kilograms of CO2           00:23:55> 00:23:56:         per square meter.           00:24:00> 00:24:03:         And we had to demonstrate that, you know, the the           00:24:04> 00:24:07:         And in the case you exceed the threshold, you have           00:24:07> 00:24:10:         to pay a certain amount for every tons of CO2           00:24:10> 00:24:13:         that you exceed and you have to pay this amount           00:24:13> 00:24:14:         for 30 years.           00:24:14> 00:24:18:         So, you know, it introduces also the the carbon pricing           00:24:18> 00:24:22:         and probably makes you know, it helps you know, make           00:24:27> 00:24:28:         this issue.           00:24:32> 00:24:33:         You're on mute, care.           00:24:38> 00:24:39:         Mark, any thoughts on building materials?           00:24:40> 00:24:40:         You have a cold when you're on a webinar.           00:24:40> 00:24:41:         You want to mute your coffee?           00:24:44> 00:24:45:         OK.           00:24:47> 00:24:48:         OK.           00:24:48> 00:24:45:         OK.           00:24:51> 00:24:54:         So if you are building ground up, you know some           00:24:54> 00:24:55:         Of the, you know, interest	00:23:44> 00:23:49:	we have seen that we have set threshold of embodied
00:23:55> 00:23:56: per square meter.  00:23:56> 00:24:00: And we had to demonstrate that, you know, the the development was not exceeding the the threshold.  00:24:04> 00:24:07: And in the case you exceed the threshold, you have 00:24:07> 00:24:10: to pay a certain amount for every tons of CO2 00:24:13> 00:24:13: for 30 years.  00:24:14> 00:24:18: So, you know, it introduces also the the carbon pricing 00:24:18> 00:24:22: and probably makes you know, it helps you know, make 00:24:22> 00:24:27: you know developers and then stakeholders aware of of 00:24:27> 00:24:28: this issue.  00:24:35> 00:24:37: Mark, any thoughts on building materials?  00:24:39> 00:24:40: You want to mute your coffee?  00:24:40> 00:24:41: You want to mute your coffee?  00:24:44> 00:24:45: OK.  00:24:44> 00:24:45: OK.  00:24:48> 00:24:45: OK.  00:24:48> 00:24:51: So if you are building ground up, you know some of the, you know, interesting building materials that are out there.  00:24:55> 00:24:58: Probably the most exciting from my point of view is mass timber or CLT cross laminated timber, which you know, make you know, interesting from my point of view is mass timber or CLT cross laminated timber, which you know,	00:23:49> 00:23:51:	carbon that you can reach.
00:23:56> 00:24:00:         And we had to demonstrate that, you know, the the           00:24:00> 00:24:03:         development was not exceeding the the threshold.           00:24:04> 00:24:07:         And in the case you exceed the threshold, you have           00:24:10> 00:24:10:         to pay a certain amount for every tons of CO2           00:24:13> 00:24:14:         for 30 years.           00:24:14> 00:24:18:         So, you know, it introduces also the the carbon pricing           00:24:18> 00:24:22:         and probably makes you know, it helps you know, make           00:24:22> 00:24:27:         you know developers and then stakeholders aware of of of           00:24:27> 00:24:28:         You're on mute, care.           00:24:30> 00:24:37:         Mark, any thoughts on building materials?           00:24:38> 00:24:39:         That's what happens.           00:24:39> 00:24:40:         You have a cold when you're on a webinar.           00:24:40> 00:24:41:         You want to mute your coffee?           00:24:44> 00:24:43:         OK.           00:24:44> 00:24:45:         OK.           00:24:48> 00:24:45:         OK.           00:24:48> 00:24:45:         Ook.           00:24:48> 00:24:51:         So if you are building ground up, you know some           00:24:51> 00:24:54:         Ook there.	00:23:52> 00:23:54:	So in that case was was 600 kilograms of CO2
00:24:00> 00:24:03:         development was not exceeding the the threshold.           00:24:04> 00:24:07:         And in the case you exceed the threshold, you have           00:24:07> 00:24:10:         to pay a certain amount for every tons of CO2           00:24:10> 00:24:13:         that you exceed and you have to pay this amount           00:24:13> 00:24:14:         for 30 years.           00:24:14> 00:24:18:         So, you know, it introduces also the the carbon pricing           00:24:18> 00:24:22:         and probably makes you know, it helps you know, make           00:24:22> 00:24:27:         you know developers and then stakeholders aware of of of           00:24:27> 00:24:28:         You're on mute, care.           00:24:33> 00:24:33:         You're on mute, care.           00:24:38> 00:24:39:         Mark, any thoughts on building materials?           00:24:39> 00:24:39:         That's what happens.           00:24:40> 00:24:40:         You have a cold when you're on a webinar.           00:24:42> 00:24:41:         You want to mute your coffee?           00:24:44> 00:24:45:         OK.           00:24:46> 00:24:45:         OK.           00:24:47> 00:24:48:         Oil Can just step in a           00:24:51> 00:24:54:         So if you are building ground up, you know some           00:24:51> 00:24:54:<	00:23:55> 00:23:56:	per square meter.
00:24:04> 00:24:07:         And in the case you exceed the threshold, you have           00:24:07> 00:24:10:         to pay a certain amount for every tons of CO2           00:24:10> 00:24:13:         that you exceed and you have to pay this amount           00:24:13> 00:24:14:         for 30 years.           00:24:14> 00:24:18:         So, you know, it introduces also the the carbon pricing           00:24:18> 00:24:22:         and probably makes you know, it helps you know, make           00:24:27> 00:24:28:         you know developers and then stakeholders aware of of of           00:24:32> 00:24:33:         You're on mute, care.           00:24:35> 00:24:37:         Mark, any thoughts on building materials?           00:24:38> 00:24:39:         That's what happens.           00:24:39> 00:24:40:         You have a cold when you're on a webinar.           00:24:40> 00:24:41:         You want to mute your coffee?           00:24:42> 00:24:43:         No, I.           00:24:44> 00:24:45:         OK.           00:24:47> 00:24:48:         OK.           00:24:48> 00:24:51:         So if you are building ground up, you know some           00:24:51> 00:24:54:         Of the, you know, interesting building materials that are out           00:24:55> 00:24:58:         Probably the most exciting from my point of view is	00:23:56> 00:24:00:	And we had to demonstrate that, you know, the the
00:24:07> 00:24:10:         to pay a certain amount for every tons of CO2           00:24:10> 00:24:13:         that you exceed and you have to pay this amount           00:24:13> 00:24:14:         for 30 years.           00:24:14> 00:24:18:         So, you know, it introduces also the the carbon pricing           00:24:18> 00:24:22:         and probably makes you know, it helps you know, make           00:24:22> 00:24:27:         you know developers and then stakeholders aware of of of           00:24:27> 00:24:28:         this issue.           00:24:32> 00:24:33:         You're on mute, care.           00:24:38> 00:24:39:         Mark, any thoughts on building materials?           00:24:39> 00:24:40:         You have a cold when you're on a webinar.           00:24:40> 00:24:41:         You want to mute your coffee?           00:24:42> 00:24:43:         No, I.           00:24:44> 00:24:45:         OK.           00:24:44> 00:24:47:         I can just step, I can just step in a           00:24:47> 00:24:48:         Couple of the material.           00:24:51> 00:24:54:         So if you are building ground up, you know some           00:24:54> 00:24:54:         of the, you know, interesting building materials that are out           00:24:55> 00:24:58:         Probably the most exciting from my point of view is <t< th=""><th>00:24:00&gt; 00:24:03:</th><th>development was not exceeding the the threshold.</th></t<>	00:24:00> 00:24:03:	development was not exceeding the the threshold.
00:24:10> 00:24:13:         that you exceed and you have to pay this amount           00:24:13> 00:24:14:         for 30 years.           00:24:14> 00:24:18:         So, you know, it introduces also the the carbon pricing           00:24:18> 00:24:22:         and probably makes you know, it helps you know, make           00:24:22> 00:24:27:         you know developers and then stakeholders aware of of of           00:24:27> 00:24:28:         this issue.           00:24:32> 00:24:33:         You're on mute, care.           00:24:35> 00:24:37:         Mark, any thoughts on building materials?           00:24:39> 00:24:40:         You have a cold when you're on a webinar.           00:24:40> 00:24:41:         You want to mute your coffee?           00:24:42> 00:24:43:         No, I.           00:24:44> 00:24:44:         Don't.           00:24:44> 00:24:45:         OK.           00:24:47> 00:24:48:         couple of the material.           00:24:51> 00:24:54:         So if you are building ground up, you know some           00:24:51> 00:24:54:         of the, you know, interesting building materials that are out there.           00:24:55> 00:24:58:         Probably the most exciting from my point of view is mass timber or CLT cross laminated timber, which you know,	00:24:04> 00:24:07:	And in the case you exceed the threshold, you have
00:24:13> 00:24:14:         for 30 years.           00:24:14> 00:24:18:         So, you know, it introduces also the the carbon pricing           00:24:18> 00:24:22:         and probably makes you know, it helps you know, make           00:24:22> 00:24:27:         you know developers and then stakeholders aware of of of           00:24:27> 00:24:28:         this issue.           00:24:32> 00:24:33:         You're on mute, care.           00:24:35> 00:24:37:         Mark, any thoughts on building materials?           00:24:39> 00:24:40:         You have a cold when you're on a webinar.           00:24:40> 00:24:41:         You want to mute your coffee?           00:24:42> 00:24:43:         No, I.           00:24:44> 00:24:44:         Don't.           00:24:44> 00:24:47:         OK.           00:24:47> 00:24:48:         Couple of the material.           00:24:48> 00:24:51:         So if you are building ground up, you know some           00:24:51> 00:24:54:         of the, you know, interesting building materials that are out           00:24:55> 00:24:58:         Probably the most exciting from my point of view is           00:24:58> 00:25:02:         mass timber or CLT cross laminated timber, which you know,	00:24:07> 00:24:10:	to pay a certain amount for every tons of CO2
00:24:14> 00:24:18:         So, you know, it introduces also the the carbon pricing           00:24:18> 00:24:22:         and probably makes you know, it helps you know, make           00:24:22> 00:24:27:         you know developers and then stakeholders aware of of of           00:24:27> 00:24:28:         this issue.           00:24:32> 00:24:37:         Mark, any thoughts on building materials?           00:24:38> 00:24:39:         That's what happens.           00:24:40> 00:24:40:         You have a cold when you're on a webinar.           00:24:40> 00:24:41:         You want to mute your coffee?           00:24:42> 00:24:43:         No, I.           00:24:44> 00:24:45:         OK.           00:24:46> 00:24:47:         OK.           00:24:47> 00:24:48:         couple of the material.           00:24:51> 00:24:54:         So if you are building ground up, you know some           00:24:54> 00:24:54:         of the, you know, interesting building materials that are out           00:24:55> 00:24:58:         Probably the most exciting from my point of view is           00:24:58> 00:25:02:         mass timber or CLT cross laminated timber, which you know,	00:24:10> 00:24:13:	that you exceed and you have to pay this amount
00:24:18> 00:24:22:       and probably makes you know, it helps you know, make         00:24:22> 00:24:27:       you know developers and then stakeholders aware of of of         00:24:27> 00:24:28:       this issue.         00:24:35> 00:24:37:       Mark, any thoughts on building materials?         00:24:38> 00:24:39:       That's what happens.         00:24:40> 00:24:40:       You have a cold when you're on a webinar.         00:24:42> 00:24:41:       You want to mute your coffee?         00:24:44> 00:24:43:       No, I.         00:24:44> 00:24:45:       OK.         00:24:47> 00:24:48:       couple of the material.         00:24:48> 00:24:51:       So if you are building ground up, you know some         00:24:51> 00:24:54:       of the, you know, interesting building materials that are out         00:24:55> 00:24:58:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:13> 00:24:14:	for 30 years.
00:24:22> 00:24:27:         you know developers and then stakeholders aware of of of 00:24:27> 00:24:28:           00:24:32> 00:24:33:         You're on mute, care.           00:24:35> 00:24:37:         Mark, any thoughts on building materials?           00:24:38> 00:24:39:         That's what happens.           00:24:40> 00:24:41:         You have a cold when you're on a webinar.           00:24:42> 00:24:41:         You want to mute your coffee?           00:24:44> 00:24:44:         Don't.           00:24:44> 00:24:45:         OK.           00:24:47> 00:24:47:         I can just step, I can just step in a           00:24:48> 00:24:48:         couple of the material.           00:24:51> 00:24:51:         So if you are building ground up, you know some           00:24:54> 00:24:54:         of the, you know, interesting building materials that are out           00:24:55> 00:24:58:         Probably the most exciting from my point of view is           00:24:58> 00:25:02:         mass timber or CLT cross laminated timber, which you know,	00:24:14> 00:24:18:	So, you know, it introduces also the the carbon pricing
00:24:27> 00:24:28:       this issue.         00:24:32> 00:24:33:       You're on mute, care.         00:24:35> 00:24:37:       Mark, any thoughts on building materials?         00:24:38> 00:24:39:       That's what happens.         00:24:39> 00:24:40:       You have a cold when you're on a webinar.         00:24:40> 00:24:41:       You want to mute your coffee?         00:24:42> 00:24:43:       No, I.         00:24:44> 00:24:44:       Don't.         00:24:44> 00:24:45:       OK.         00:24:47> 00:24:48:       couple of the material.         00:24:48> 00:24:51:       So if you are building ground up, you know some         00:24:51> 00:24:54:       of the, you know, interesting building materials that are out         00:24:54> 00:24:54:       there.         00:24:55> 00:24:58:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:18> 00:24:22:	and probably makes you know, it helps you know, make
00:24:32> 00:24:33:       You're on mute, care.         00:24:35> 00:24:37:       Mark, any thoughts on building materials?         00:24:38> 00:24:39:       That's what happens.         00:24:40> 00:24:41:       You have a cold when you're on a webinar.         00:24:40> 00:24:41:       You want to mute your coffee?         00:24:42> 00:24:43:       No, I.         00:24:44> 00:24:44:       Don't.         00:24:46> 00:24:47:       I can just step, I can just step in a         00:24:47> 00:24:48:       couple of the material.         00:24:48> 00:24:51:       So if you are building ground up, you know some         00:24:51> 00:24:54:       of the, you know, interesting building materials that are out         00:24:55> 00:24:58:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:22> 00:24:27:	you know developers and then stakeholders aware of of of
00:24:35> 00:24:37:       Mark, any thoughts on building materials?         00:24:38> 00:24:39:       That's what happens.         00:24:39> 00:24:40:       You have a cold when you're on a webinar.         00:24:40> 00:24:41:       You want to mute your coffee?         00:24:42> 00:24:43:       No, I.         00:24:44> 00:24:45:       OK.         00:24:46> 00:24:47:       I can just step, I can just step in a         00:24:47> 00:24:48:       couple of the material.         00:24:48> 00:24:51:       So if you are building ground up, you know some         00:24:51> 00:24:54:       of the, you know, interesting building materials that are out         00:24:55> 00:24:58:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:27> 00:24:28:	this issue.
00:24:38> 00:24:39:       That's what happens.         00:24:39> 00:24:40:       You have a cold when you're on a webinar.         00:24:40> 00:24:41:       You want to mute your coffee?         00:24:42> 00:24:43:       No, I.         00:24:44> 00:24:44:       Don't.         00:24:46> 00:24:47:       I can just step, I can just step in a         00:24:47> 00:24:48:       couple of the material.         00:24:48> 00:24:51:       So if you are building ground up, you know some         00:24:51> 00:24:54:       of the, you know, interesting building materials that are out         00:24:55> 00:24:58:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:32> 00:24:33:	You're on mute, care.
00:24:39> 00:24:40:       You have a cold when you're on a webinar.         00:24:40> 00:24:41:       You want to mute your coffee?         00:24:42> 00:24:43:       No, I.         00:24:44> 00:24:44:       Don't.         00:24:46> 00:24:47:       I can just step, I can just step in a         00:24:47> 00:24:48:       couple of the material.         00:24:48> 00:24:51:       So if you are building ground up, you know some         00:24:51> 00:24:54:       of the, you know, interesting building materials that are out         00:24:54> 00:24:55:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:35> 00:24:37:	Mark, any thoughts on building materials?
00:24:40> 00:24:41:       You want to mute your coffee?         00:24:42> 00:24:43:       No, I.         00:24:44> 00:24:44:       Don't.         00:24:44> 00:24:45:       OK.         00:24:46> 00:24:47:       I can just step, I can just step in a         00:24:47> 00:24:48:       couple of the material.         00:24:48> 00:24:51:       So if you are building ground up, you know some         00:24:51> 00:24:54:       of the, you know, interesting building materials that are out         00:24:54> 00:24:54:       there.         00:24:55> 00:24:58:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:38> 00:24:39:	That's what happens.
00:24:42> 00:24:43:       No, I.         00:24:44> 00:24:44:       Don't.         00:24:44> 00:24:45:       OK.         00:24:46> 00:24:47:       I can just step, I can just step in a         00:24:47> 00:24:48:       couple of the material.         00:24:48> 00:24:51:       So if you are building ground up, you know some         00:24:51> 00:24:54:       of the, you know, interesting building materials that are out         00:24:54> 00:24:54:       there.         00:24:55> 00:25:02:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:39> 00:24:40:	You have a cold when you're on a webinar.
00:24:44> 00:24:44:       Don't.         00:24:44> 00:24:45:       OK.         00:24:46> 00:24:47:       I can just step, I can just step in a         00:24:47> 00:24:48:       couple of the material.         00:24:48> 00:24:51:       So if you are building ground up, you know some         00:24:51> 00:24:54:       of the, you know, interesting building materials that are out         00:24:54> 00:24:54:       there.         00:24:55> 00:24:58:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:40> 00:24:41:	You want to mute your coffee?
00:24:44> 00:24:45:       OK.         00:24:46> 00:24:47:       I can just step, I can just step in a         00:24:47> 00:24:48:       couple of the material.         00:24:48> 00:24:51:       So if you are building ground up, you know some         00:24:51> 00:24:54:       of the, you know, interesting building materials that are out         00:24:54> 00:24:54:       there.         00:24:55> 00:24:58:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:42> 00:24:43:	No, I.
00:24:46> 00:24:47:I can just step, I can just step in a00:24:47> 00:24:48:couple of the material.00:24:48> 00:24:51:So if you are building ground up, you know some00:24:51> 00:24:54:of the, you know, interesting building materials that are out00:24:54> 00:24:54:there.00:24:55> 00:24:58:Probably the most exciting from my point of view is00:24:58> 00:25:02:mass timber or CLT cross laminated timber, which you know,	00:24:44> 00:24:44:	Don't.
00:24:47> 00:24:48:couple of the material.00:24:48> 00:24:51:So if you are building ground up, you know some00:24:51> 00:24:54:of the, you know, interesting building materials that are out00:24:54> 00:24:54:there.00:24:55> 00:24:58:Probably the most exciting from my point of view is00:24:58> 00:25:02:mass timber or CLT cross laminated timber, which you know,	00:24:44> 00:24:45:	OK.
00:24:48> 00:24:51:So if you are building ground up, you know some00:24:51> 00:24:54:of the, you know, interesting building materials that are out00:24:54> 00:24:54:there.00:24:55> 00:24:58:Probably the most exciting from my point of view is00:24:58> 00:25:02:mass timber or CLT cross laminated timber, which you know,	00:24:46> 00:24:47:	l can just step, l can just step in a
00:24:51> 00:24:54:of the, you know, interesting building materials that are out00:24:54> 00:24:55:there.00:24:55> 00:24:58:Probably the most exciting from my point of view is00:24:58> 00:25:02:mass timber or CLT cross laminated timber, which you know,	00:24:47> 00:24:48:	couple of the material.
00:24:54> 00:24:54:       there.         00:24:55> 00:24:58:       Probably the most exciting from my point of view is         00:24:58> 00:25:02:       mass timber or CLT cross laminated timber, which you know,	00:24:48> 00:24:51:	So if you are building ground up, you know some
00:24:55> 00:24:58: Probably the most exciting from my point of view is mass timber or CLT cross laminated timber, which you know,	00:24:51> 00:24:54:	of the, you know, interesting building materials that are out
00:24:58> 00:25:02: mass timber or CLT cross laminated timber, which you know,	00:24:54> 00:24:54:	there.
•	00:24:55> 00:24:58:	Probably the most exciting from my point of view is
00:25:02> 00:25:06: is essentially wood you could manufactured wood that you	00:24:58> 00:25:02:	mass timber or CLT cross laminated timber, which you know,
	00:25:02> 00:25:06:	is essentially wood you could manufactured wood that you

can

	can
00:25:06> 00:25:09:	go vertical into a high rise building with.
00:25:09> 00:25:13:	And it's absolutely a beautiful product for those who have
00:25:13> 00:25:16:	not seen it, but some other some other examples are
00:25:17> 00:25:21:	green or low carbon concrete, which which includes industrial waste
00:25:21> 00:25:25:	products like fly ash into the concrete mixture to reduce
00:25:25> 00:25:26:	the carbon footprint.
00:25:27> 00:25:31:	Hemp is a carbon sequestering material that can be used
00:25:31> 00:25:36:	in insulation and recycled wood and recycled steel in buildings
00:25:36> 00:25:36:	as well.
00:25:36> 00:25:38:	So these are some of the, you know, the materials
00:25:38> 00:25:40:	that are gaining traction out there.
00:25:41> 00:25:44:	Yeah, thank you for for adding that, Sonia, because it's
00:25:44> 00:25:45:	it's not always about it.
00:25:46> 00:25:49:	Often times it's about value engineering and using less materials
00:25:49> 00:25:52:	or looking about where your materials come from.
00:25:52> 00:25:55:	But there also are lots of innovations in the building
00:25:55> 00:25:57:	material space as well.
00:25:57> 00:25:59:	So looking at the different options, seeing where you can
00:25:59> 00:26:02:	source that, seeing what the cost comparison is, there certainly
00:26:02> 00:26:05:	are lots of tools available to help you through that.
00:26:05> 00:26:07:	And we're happy to, you know, share some resources about
00:26:07> 00:26:08:	that as well.
00:26:10> 00:26:10:	OK.
00:26:10> 00:26:15:	We are going to move on to #3 focusing on
00:26:15> 00:26:20:	occupiers, demand, health and well-being.
00:26:20> 00:26:23:	So as Paul Stephen with JLL mentioned during our conversations,
00:26:23> 00:26:27:	don't forget about the energy and transport transitions too.
00:26:27> 00:26:29:	These are a huge value pool.
00:26:29> 00:26:31:	Landlords never had a chance to play it and now
00:26:31> 00:26:32:	they do.
00:26:32> 00:26:35:	This could result in more income from the site than
00:26:35> 00:26:36:	they even receive in rent.
00:26:36> 00:26:38:	So this is really just a focus on occupiers.
00:26:38> 00:26:42:	We need to look at who is actually using, working
00:26:42> 00:26:45:	and living in the buildings.
00:26:45> 00:26:47:	We do have another quick Slido for everyone.
00:26:47> 00:26:51:	So you all can again join slido.com at that number

00:26:51> 00:26:54:	on the bottom or take a quick picture of the
00:26:54> 00:26:56:	QR code with your cell phone.
00:26:56> 00:26:59:	And as you all start in answering the question of
00:26:59> 00:27:02:	what is the best way for your company to engage
00:27:02> 00:27:05:	with tenants in 2025, obviously this is your two building
00:27:05> 00:27:08:	owners and operators, but certainly want to hear from you
00:27:08> 00:27:09:	all.
00:27:09> 00:27:13:	Is it focused on affordability and cost saving for tenants,
00:27:13> 00:27:14:	improve measurability?
00:27:14> 00:27:18:	So these are your smart meters, prop tech really to
00:27:18> 00:27:22:	meet those occupier expectations or to really focus on social
00:27:22> 00:27:23:	impact.
00:27:23> 00:27:26:	How do you measure the impact of your social KPIs?
00:27:26> 00:27:30:	So as folks are answering that question, let's go to
00:27:30> 00:27:34:	our panel and and see what you all are thinking
00:27:34> 00:27:36:	about tenant engagement in 2025.
00:27:36> 00:27:39:	And it's so interesting to see these answers come through.
00:27:39> 00:27:42:	So feel free to comment on that as well.
00:27:43> 00:27:44:	Kara, I could start here.
00:27:45> 00:27:48:	So the healthy building movement in real estate, this was
00:27:48> 00:27:50:	a trend with you and I before the pandemic.
00:27:50> 00:27:54:	And of course, the pandemic has accelerated this trend towards
00:27:50> 00:27:54: 00:27:54> 00:27:55:	•
	towards
00:27:54> 00:27:55:	towards healthier buildings. We could see this very prominently through the International
00:27:54> 00:27:55: 00:27:55> 00:27:59:	towards healthier buildings. We could see this very prominently through the International Well Building Institute's WELL certification and other well related
00:27:54> 00:27:55: 00:27:55> 00:27:59: 00:27:59> 00:28:02:	towards healthier buildings. We could see this very prominently through the International Well Building Institute's WELL certification and other well related products.
00:27:54> 00:27:55: 00:27:55> 00:27:59: 00:27:59> 00:28:02: 00:28:03> 00:28:06:	towards healthier buildings. We could see this very prominently through the International Well Building Institute's WELL certification and other well related products. And we could see this in the office sector, including this bifurcation between Class A trophy office buildings today
00:27:54> 00:27:55: 00:27:55> 00:27:59: 00:27:59> 00:28:02: 00:28:03> 00:28:06: 00:28:06> 00:28:09:	towards healthier buildings. We could see this very prominently through the International Well Building Institute's WELL certification and other well related products. And we could see this in the office sector, including this bifurcation between Class A trophy office buildings today and
00:27:54> 00:27:55: 00:27:55> 00:27:59:  00:27:59> 00:28:02:  00:28:03> 00:28:06: 00:28:06> 00:28:09:  00:28:09> 00:28:12:	towards healthier buildings. We could see this very prominently through the International Well Building Institute's WELL certification and other well related products. And we could see this in the office sector, including this bifurcation between Class A trophy office buildings today and then Class A commodity and then B&C office space.
00:27:54> 00:27:55: 00:27:55> 00:27:59:  00:27:59> 00:28:02:  00:28:03> 00:28:06: 00:28:06> 00:28:09:  00:28:09> 00:28:12: 00:28:12> 00:28:16:	healthier buildings.  We could see this very prominently through the International Well  Building Institute's WELL certification and other well related products.  And we could see this in the office sector, including this bifurcation between Class A trophy office buildings today and then Class A commodity and then B&C office space.  These Class A trophy office buildings, as we know we're outperforming the market as tenants are really seeking out
00:27:54> 00:27:55: 00:27:55> 00:27:59:  00:27:59> 00:28:02:  00:28:03> 00:28:06: 00:28:06> 00:28:09:  00:28:12> 00:28:16: 00:28:16> 00:28:20:	healthier buildings.  We could see this very prominently through the International Well  Building Institute's WELL certification and other well related products.  And we could see this in the office sector, including this bifurcation between Class A trophy office buildings today and then Class A commodity and then B&C office space.  These Class A trophy office buildings, as we know we're outperforming the market as tenants are really seeking out spaces that are most amenitized, best located, but also most
00:27:54> 00:27:55: 00:27:55> 00:27:59:  00:27:59> 00:28:02:  00:28:03> 00:28:06: 00:28:06> 00:28:09:  00:28:10> 00:28:12: 00:28:12> 00:28:16: 00:28:16> 00:28:20:  00:28:20> 00:28:24:	healthier buildings.  We could see this very prominently through the International Well  Building Institute's WELL certification and other well related products.  And we could see this in the office sector, including this bifurcation between Class A trophy office buildings today and then Class A commodity and then B&C office space.  These Class A trophy office buildings, as we know we're outperforming the market as tenants are really seeking out spaces that are most amenitized, best located, but also most sustainable,
00:27:54> 00:27:55: 00:27:55> 00:27:59:  00:27:59> 00:28:02:  00:28:03> 00:28:06: 00:28:06> 00:28:09:  00:28:12> 00:28:12: 00:28:12> 00:28:16: 00:28:16> 00:28:20:  00:28:20> 00:28:24:	healthier buildings.  We could see this very prominently through the International Well  Building Institute's WELL certification and other well related products.  And we could see this in the office sector, including this bifurcation between Class A trophy office buildings today and then Class A commodity and then B&C office space.  These Class A trophy office buildings, as we know we're outperforming the market as tenants are really seeking out spaces that are most amenitized, best located, but also most sustainable, healthy and also modern with things such as modern HVAC
00:27:54> 00:27:55: 00:27:55> 00:27:59:  00:27:59> 00:28:02:  00:28:03> 00:28:06: 00:28:06> 00:28:09:  00:28:12> 00:28:12: 00:28:16> 00:28:20:  00:28:20> 00:28:27: 00:28:24> 00:28:27: 00:28:27> 00:28:27:	healthier buildings.  We could see this very prominently through the International Well  Building Institute's WELL certification and other well related products.  And we could see this in the office sector, including this bifurcation between Class A trophy office buildings today and then Class A commodity and then B&C office space.  These Class A trophy office buildings, as we know we're outperforming the market as tenants are really seeking out spaces that are most amenitized, best located, but also most sustainable, healthy and also modern with things such as modern HVAC systems.
00:27:54> 00:27:55: 00:27:55> 00:27:59:  00:27:59> 00:28:02:  00:28:03> 00:28:06: 00:28:06> 00:28:09:  00:28:12> 00:28:12: 00:28:16> 00:28:20:  00:28:20> 00:28:27: 00:28:27> 00:28:27: 00:28:28> 00:28:31:	healthier buildings.  We could see this very prominently through the International Well  Building Institute's WELL certification and other well related products.  And we could see this in the office sector, including this bifurcation between Class A trophy office buildings today and then Class A commodity and then B&C office space.  These Class A trophy office buildings, as we know we're outperforming the market as tenants are really seeking out spaces that are most amenitized, best located, but also most sustainable, healthy and also modern with things such as modern HVAC systems.  So key examples here will be such as One Vanderbilt
00:27:54> 00:27:55: 00:27:55> 00:27:59:  00:27:59> 00:28:02:  00:28:03> 00:28:06: 00:28:06> 00:28:09:  00:28:12> 00:28:12: 00:28:16> 00:28:20:  00:28:20> 00:28:27: 00:28:24> 00:28:27: 00:28:28> 00:28:31: 00:28:31> 00:28:34:	towards healthier buildings.  We could see this very prominently through the International Well Building Institute's WELL certification and other well related products. And we could see this in the office sector, including this bifurcation between Class A trophy office buildings today and then Class A commodity and then B&C office space.  These Class A trophy office buildings, as we know we're outperforming the market as tenants are really seeking out spaces that are most amenitized, best located, but also most sustainable, healthy and also modern with things such as modern HVAC systems.  So key examples here will be such as One Vanderbilt with its dual ESG certifications of lead and well Platinum

00:28:42> 00:28:42:	Asia.
00:28:42> 00:28:45:	But also, you know, just thinking about the operators, the
00:28:45> 00:28:49:	tenants, some of these owner occupied buildings just
	recently, Microsoft
00:28:49> 00:28:53:	Silicon Valley campus, just well certified at the platinum level.
00:28:53> 00:28:56:	Their Silicon Valley campus here in New York City, Citigroup's
00:28:56> 00:29:00:	world headquarters in Tribeca, well certified platinum, other 2.6 million
00:29:00> 00:29:04:	square feet, It's the largest well certified project in the
00:29:04> 00:29:04:	world.
00:29:05> 00:29:09:	And Pfizer's office at Hudson Yards just achieved well certification
00:29:09> 00:29:10:	at the platinum level.
00:29:11> 00:29:13:	There's also a new program that IWBI, which is the
00:29:14> 00:29:16:	largest certification body for healthy buildings in the world.
00:29:17> 00:29:19:	They just rolled out a well for residential program.
00:29:20> 00:29:22:	And regardless of where you fall on the political spectrum,
00:29:22> 00:29:25:	I think we can all agree one thing we should
00:29:25> 00:29:27:	all promote is greater support for a military.
00:29:27> 00:29:30:	Or if yes, one of the largest military housing operators
00:29:30> 00:29:34:	in the US committed 22,000 homes to this welfare residential
00:29:34> 00:29:37:	program and it's meant to improve the living conditions of
00:29:37> 00:29:38:	our military.
00:29:38> 00:29:43:	IWBIS also going through prototype installations with other
	major military
00:29:43> 00:29:44:	housing operators in the US.
00:29:47> 00:29:48:	Fantastic, Mark.
00:29:49> 00:29:53:	I really like that, you know, focus on different types
00:29:53> 00:29:54:	of tenants, right?
00:29:54> 00:29:57:	It's not just a, a commercial tenant or a residential
00:29:57> 00:29:57:	tenant.
00:29:57> 00:29:59:	You, you really spoke to all the tenants across the
00:29:59> 00:30:00:	the industry.
00:30:00> 00:30:02:	So appreciate that insight, Antonio.
00:30:04> 00:30:04:	Yeah.
00:30:04> 00:30:07:	And I have a comment here that is not specifically
00:30:07> 00:30:11:	related to the occupier itself, but a little bit broader.
00:30:11> 00:30:15:	So I would consider also the the, the surrounding community
00:30:15> 00:30:18:	and you know the benefits you do on the basically
00:30:18> 00:30:20:	the place where the building is located.
00:30:20> 00:30:22:	So I had the luck to to be participant of
00:30:23> 00:30:26:	the the 7th cohort of the Health Leaders Network that

00:30:26> 00:30:28: 00:30:28> 00:30:32:	Mark was mentioning at the beginning. And I was really, you know, I visited, we went
00:30:32> 00:30:35:	to Vancouver and to Philadelphia.
00:30:35> 00:30:38:	So, and this is a sponsor for this amazing QLI
00:30:38> 00:30:39:	program.
00:30:39> 00:30:43:	And then it really helped me, you know, increase my
00:30:43> 00:30:45:	awareness on these, on these aspects.
00:30:46> 00:30:48:	And at the end, you know, there are, there are
00:30:48> 00:30:51:	tools we use also in Europe to, to measure the
00:30:51> 00:30:53:	SROY, so the social return on investment.
00:30:54> 00:30:57:	And as I was mentioning, for, for the carbon also
00:30:57> 00:31:00:	these, you know, if you give a monetary value of
00:31:00> 00:31:05:	financial quantification of the social benefit, it can really help,
00:31:05> 00:31:08:	you know, to, to, to improve both the awareness
00:31:08> 00:31:12:	and the end of positive effect of such initiatives.
00:31:12> 00:31:15:	Just to give you an example, the project we worked
00:31:15> 00:31:19:	on when we measured it was public spaces, job creation,
00:31:19> 00:31:22:	accessibility to public transportation.
00:31:22> 00:31:25:	So all of these really, you know, helped quantify the
00:31:25> 00:31:28:	benefits that at the end the built environment was giving
00:31:28> 00:31:30:	to to to the surrounding community.
00:31:33> 00:31:35:	Thank you, Antonio, Sonia.
00:31:39> 00:31:40:	Nothing to add on this one.
00:31:42> 00:31:43:	OK, fantastic.
00:31:43> 00:31:48:	I am noticing a couple comments from the participants that
00:31:48> 00:31:50:	they are not seeing the presentation.
00:31:51> 00:31:54:	If you answered SLIDO on your computer, you might have
00:31:54> 00:31:56:	went over to a Slido screen.
00:31:56> 00:31:58:	So you have to shift back to Zoom.
00:31:58> 00:32:03:	Right now we are showing the SLIDO results for topic
00:32:03> 00:32:07:	area #3 and now we are showing the screen that
00:32:07> 00:32:10:	says #3 focusing on occupiers.
00:32:11> 00:32:14:	So find your Zoom link if you missed that.
00:32:14> 00:32:18:	And we are going to move on now to topic
00:32:18> 00:32:22:	#4 sourcing and storing green power.
00:32:22> 00:32:26:	So as John Hafner, Deputy Director of sustainability with Hang
00:32:26> 00:32:30:	Leung mentioned, we have got a lot more renewables on
00:32:30> 00:32:33:	the grid and a lot more electric vehicles coming online.
00:32:33> 00:32:36:	So that is less about what they're doing, but war,
00:32:37> 00:32:40:	what Hang Lung is looking towards in the future and
00:32:40> 00:32:43:	how they have to see these renewables coming online and

00:32:43> 00:32:46:	more electric vehicles coming into play.
00:32:46> 00:32:49:	And how are we going to work with the grid
00:32:49> 00:32:53:	and infrastructure to be able to power this increased demand.
00:32:53> 00:32:55:	So we don't have a Slido for this one, but
00:32:55> 00:32:58:	maybe Antonio, do you want to start us out?
00:32:59> 00:33:01:	I'm going to leave the other one to start with
00:33:01> 00:33:01:	this.
00:33:02> 00:33:03:	OK, Sonia.
00:33:04> 00:33:05:	Yeah, sure, sure, I can.
00:33:05> 00:33:06:	I can talk a little bit about this.
00:33:07> 00:33:11:	There are a couple of, you know, concepts or ideas
00:33:11> 00:33:12:	relative to the grid.
00:33:12> 00:33:16:	Grid is certainly something that is a major concern right
00:33:17> 00:33:20:	now here in the US So I'll start with talking
00:33:20> 00:33:23:	about the idea of a virtual power plant, which is
00:33:24> 00:33:28:	essentially a collection of distributed energy resources.
00:33:28> 00:33:32:	These can be rooftop solar, battery storage, EV charging,
	and
00:33:32> 00:33:37:	in in a virtual power plant, there's essentially a control
00:33:37> 00:33:40:	mechanism in place such that energy can be produced by
00:33:40> 00:33:44:	solar panels and then stored by the batteries and used
00:33:44> 00:33:47:	when, you know, at the times of most needs.
00:33:47> 00:33:51:	So this system has a significant benefit to owners in
00:33:51> 00:33:55:	that they can use stored energy during times of peak
00:33:55> 00:33:59:	demand and sell excess energy to the grid when that
00:33:59> 00:34:00:	pricing makes sense.
00:34:01> 00:34:06:	In addition, many times the transmission system operator will
	pay
00:34:06> 00:34:09:	a company to be part of a virtual power plant
00:34:09> 00:34:13:	network, which also helps with stability of the grid.
00:34:14> 00:34:18:	And then just, I saw that there was a question
00:34:18> 00:34:21:	that came up in the chat also related to Al
00:34:21> 00:34:26:	and, you know, energy uses, usage requirements caused by, and
00:34:26> 00:34:29:	I'll just add to it and say data centers that
00:34:29> 00:34:34:	are, you know, that have growing power requirements and needs
00:34:34> 00:34:35:	here in the US.
00:34:35> 00:34:40:	And you know, I'd say the what's new and interesting,
00:34:40> 00:34:45:	newish and interesting is the growth of SMRS or small
00:34:45> 00:34:46:	modular reactors.
00:34:46> 00:34:51:	There's a growing sentiment that the solution for powering
	data

00:34:51> 00:34:54:	centers is nuclear power in the form of SMRS, as
00:34:54> 00:34:58:	they provide a number of key benefits, one of them
00:34:58> 00:35:03:	being a reliable, uninterrupted power supply, carbon free
	energy, and
00:35:03> 00:35:06:	they're compact and secure and scalable.
00:35:07> 00:35:10:	There's obviously a number of hurdles in the growth of
00:35:10> 00:35:14:	SMRS, mainly due to regulatory issues and just public perception
00:35:14> 00:35:17:	of their safety, But there's a lot of money being
00:35:17> 00:35:20:	poured into SMR businesses right now by companies such as
00:35:20> 00:35:22:	Amazon, Microsoft, and Google.
00:35:22> 00:35:25:	So it's definitely a space to watch going forward and
00:35:25> 00:35:29:	can be, you know, part of this solution with the
00:35:29> 00:35:29:	grid.
00:35:30> 00:35:31:	Great.
00:35:31> 00:35:31:	Thank you.
00:35:31> 00:35:34:	And for those of you who haven't seen the the
00:35:34> 00:35:37:	Q&A yet, an attendee asked is the enormous energy and
00:35:37> 00:35:41:	water usage of AI taken into account with the sustainability
00:35:41> 00:35:43:	carbon reduction efforts?
00:35:43> 00:35:46:	And that is another big user obviously that we are
00:35:46> 00:35:47:	keeping an eye out for.
00:35:47> 00:35:50:	UI is looking into that in 2025.
00:35:51> 00:35:55:	And Utili is also looking at this number four topic,
00:35:55> 00:36:00:	sourcing green power, sourcing and storing green power and our
00:36:00> 00:36:02:	work with utilities in 2025.
00:36:03> 00:36:06:	So we're really looking to see how real estate can
00:36:06> 00:36:08:	get green power direct from utilities.
00:36:08> 00:36:11:	So one of our work streams starting last year and
00:36:11> 00:36:15:	moving really quickly into 2025 is working with regional and
00:36:15> 00:36:18:	local utilities and local develop developers to figure out the
00:36:18> 00:36:21:	best path for getting green power to buildings.
00:36:21> 00:36:24:	But before we talk more about Uli, Mark, did you
00:36:24> 00:36:27:	have anything to add to to sourcing and storing green
00:36:27> 00:36:28:	power?
00:36:28> 00:36:30:	I, I do so this past fall at one of
00:36:30> 00:36:34:	our NYU Stern sustainability conferences, I had the pleasure of
00:36:34> 00:36:39:	moderating the keynote with Justin Sauber, CEO of Transmission Developers
00:36:39> 00:36:42:	and we discussed the Chippy project.

00:36:42> 00:36:45:	They're the, that they're the developer on which is the
00:36:45> 00:36:47:	Champlain Hudson Power Express project.
00:36:47> 00:36:50:	It's one of those fascinating sustainability projects around.
00:36:50> 00:36:52:	If you haven't heard of it, you should look into
00:36:52> 00:36:52:	it.
00:36:52> 00:36:56:	It's a 339 mile transmission wire from the US Canada
00:36:57> 00:37:00:	border from from Quebec to Astoria, Queens.
00:37:01> 00:37:04:	And it's going to help New York State meet requirements
00:37:04> 00:37:08:	under the CLCPA, which I mentioned earlier on the Climate
00:37:08> 00:37:12:	Act, which is requiring New York State to lower fossil
00:37:12> 00:37:16:	fuel, fossil fuel energy use relative to a 1990 baseline.
00:37:16> 00:37:19:	But once this project is operational in a rough in
00:37:19> 00:37:23:	spring 2026 as it's expected, it's going to provide, depending
00:37:23> 00:37:25:	on the study, you look at 10 to 20% of
00:37:25> 00:37:29:	New York City electricity needs going forward, which is a
00:37:29> 00:37:30:	massive amount.
00:37:30> 00:37:34:	It's the largest infrastructure project in New York history, and
00:37:34> 00:37:38:	transmission developers, they're working on one or two other similar
00:37:38> 00:37:41:	projects, not to the same scale as Chippy, but it's
00:37:42> 00:37:46:	really a fascinating infrastructure project and something we should all
00:37:46> 00:37:49:	look to as an example of being able to source
00:37:46> 00:37:49: 00:37:49> 00:37:49:	look to as an example of being able to source green power.
00:37:49> 00:37:49:	green power.
00:37:49> 00:37:49: 00:37:51> 00:37:52:	green power.  Great, thank you.
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55:	green power.  Great, thank you.  I think we are ready to move on to #5
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59:	green power.  Great, thank you.  I think we are ready to move on to #5  and I do see Q&A questions coming through quickly.
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01:	green power.  Great, thank you.  I think we are ready to move on to #5  and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03:	green power.  Great, thank you.  I think we are ready to move on to #5  and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05:	green power.  Great, thank you.  I think we are ready to move on to #5  and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05: 00:38:06> 00:38:11:	green power.  Great, thank you.  I think we are ready to move on to #5  and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.  Let's move on to the next slide #5 is investing
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05: 00:38:11> 00:38:11:	green power.  Great, thank you.  I think we are ready to move on to #5  and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.  Let's move on to the next slide #5 is investing in resilience.
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05: 00:38:11> 00:38:12: 00:38:12> 00:38:16:	green power.  Great, thank you.  I think we are ready to move on to #5  and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.  Let's move on to the next slide #5 is investing in resilience.  As Peter Tami mentioned, how do we maintain resiliency of operations and purpose for our facilities and communities in
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05: 00:38:11> 00:38:11: 00:38:11> 00:38:12: 00:38:12> 00:38:16: 00:38:16> 00:38:21:	green power.  Great, thank you.  I think we are ready to move on to #5  and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.  Let's move on to the next slide #5 is investing in resilience.  As Peter Tami mentioned, how do we maintain resiliency of operations and purpose for our facilities and communities in the
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05: 00:38:11> 00:38:11: 00:38:11> 00:38:12: 00:38:12> 00:38:21: 00:38:16> 00:38:21:	green power.  Great, thank you.  I think we are ready to move on to #5 and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.  Let's move on to the next slide #5 is investing in resilience.  As Peter Tami mentioned, how do we maintain resiliency of operations and purpose for our facilities and communities in the face of unprecedented weather extremes?
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05: 00:38:11> 00:38:11: 00:38:12> 00:38:12: 00:38:12> 00:38:21: 00:38:24> 00:38:24:	green power.  Great, thank you.  I think we are ready to move on to #5 and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.  Let's move on to the next slide #5 is investing in resilience.  As Peter Tami mentioned, how do we maintain resiliency of operations and purpose for our facilities and communities in the face of unprecedented weather extremes?  Obviously, we have seen that a lot already in 2025,
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05: 00:38:11> 00:38:11: 00:38:12> 00:38:16: 00:38:12> 00:38:21: 00:38:24> 00:38:24: 00:38:24> 00:38:30:	green power.  Great, thank you.  I think we are ready to move on to #5  and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.  Let's move on to the next slide #5 is investing in resilience.  As Peter Tami mentioned, how do we maintain resiliency of operations and purpose for our facilities and communities in the face of unprecedented weather extremes?  Obviously, we have seen that a lot already in 2025, so it's very fresh on our minds.
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05: 00:38:06> 00:38:11: 00:38:11> 00:38:12: 00:38:12> 00:38:16: 00:38:16> 00:38:21:  00:38:24> 00:38:24: 00:38:24> 00:38:30: 00:38:31> 00:38:30:	green power.  Great, thank you.  I think we are ready to move on to #5  and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.  Let's move on to the next slide #5 is investing in resilience.  As Peter Tami mentioned, how do we maintain resiliency of operations and purpose for our facilities and communities in the face of unprecedented weather extremes?  Obviously, we have seen that a lot already in 2025, so it's very fresh on our minds.  With that, this is our last Slido for you all
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05: 00:38:11> 00:38:11: 00:38:11> 00:38:12: 00:38:12> 00:38:21: 00:38:24> 00:38:24: 00:38:24> 00:38:30: 00:38:31> 00:38:34: 00:38:31> 00:38:34:	green power.  Great, thank you.  I think we are ready to move on to #5 and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.  Let's move on to the next slide #5 is investing in resilience.  As Peter Tami mentioned, how do we maintain resiliency of operations and purpose for our facilities and communities in the face of unprecedented weather extremes?  Obviously, we have seen that a lot already in 2025, so it's very fresh on our minds.  With that, this is our last Slido for you all today.  And again, please use either your cell phone to take a picture of the QR code or visit slido.com.
00:37:49> 00:37:49: 00:37:51> 00:37:52: 00:37:53> 00:37:55: 00:37:55> 00:37:59: 00:37:59> 00:38:01: 00:38:01> 00:38:03: 00:38:03> 00:38:05: 00:38:06> 00:38:11: 00:38:11> 00:38:12: 00:38:12> 00:38:16: 00:38:14> 00:38:21: 00:38:21> 00:38:24: 00:38:24> 00:38:24: 00:38:31> 00:38:34: 00:38:31> 00:38:34: 00:38:34> 00:38:34:	green power.  Great, thank you.  I think we are ready to move on to #5 and I do see Q&A questions coming through quickly.  So we're going to save plenty of time for that.  If you do have any questions, please put it in the Q&A box and we will address it.  Let's move on to the next slide #5 is investing in resilience.  As Peter Tami mentioned, how do we maintain resiliency of operations and purpose for our facilities and communities in the face of unprecedented weather extremes?  Obviously, we have seen that a lot already in 2025, so it's very fresh on our minds.  With that, this is our last Slido for you all today.  And again, please use either your cell phone to take

00:38:42> 00:38:45:	back to the Zoom call, make sure if you do
00:38:45> 00:38:47:	come back to the Zoom or you'll be stuck on,
00:38:47> 00:38:49:	you know, your web browser.
00:38:49> 00:38:52:	So investing in resilience, Why should your organization
	invest in
00:38:52> 00:38:53:	resilience?
00:38:53> 00:38:56:	Why do you think the best reason for investing in
00:38:56> 00:39:01:	resilience is reduce physical climate risk, reduce transitional climate risk
00:39:01> 00:39:04:	or improve climate risk assessment tools or sort of the
00:39:04> 00:39:07:	catch all, all of the above, which already is getting
00:39:07> 00:39:09:	a lot of attention here.
00:39:09> 00:39:10:	That was kind of our our freebie.
00:39:12> 00:39:16:	So as folks are answering this slide out, let's address
00:39:16> 00:39:17:	this last topic.
00:39:19> 00:39:20:	You'd like to go first.
00:39:22> 00:39:24:	I can start, I can start.
00:39:24> 00:39:28:	So the the issue of, you know, climate risk is
00:39:28> 00:39:33:	very much a daily task we are we are facing.
00:39:33> 00:39:38:	So in terms of transitional risk, what you are seeing
00:39:38> 00:39:43:	actually there is also here a good program called Sea
00:39:43> 00:39:45:	Change from ULI.
00:39:45> 00:39:49:	And the thing we are seeing here is basically to
00:39:49> 00:39:53:	you know, quantify the transitional risk.
00:39:53> 00:39:57:	This goes, you know, with the, you know, eventual, you
00:39:57> 00:39:59:	know, carbon taxes or policy changes.
00:40:00> 00:40:04:	In terms of physical risks, we can see both, you
00:40:04> 00:40:06:	know, the, the acute risks.
00:40:06> 00:40:08:	So you know, the, the one, the, the wildfires in
00:40:08> 00:40:11:	LA was one of them, but also, you know, chronic
00:40:11> 00:40:11:	events.
00:40:11> 00:40:14:	So we see here, you know, there there will be
00:40:14> 00:40:16:	Winter Olympics in Milan next year.
00:40:16> 00:40:19:	And you know, the issue of, you know, global warming
00:40:19> 00:40:21:	is, is, is something chronic and it's going to be
00:40:21> 00:40:22:	there for sure.
00:40:23> 00:40:27:	And what we're seeing, you know, lately is also again,
00:40:28> 00:40:34:	converting those technical quantification quantifications into monetary value.
00:40:34> 00:40:39:	So into financial modelling, what we use is, you know,
00:40:39> 00:40:43:	value at risk, but you know, translated and also, you
00:40:43> 00:40:46:	know, that considers climate risks.

00:40:46> 00:40:50:	So we try to estimate what, what is the, the
00:40:50> 00:40:55:	loss of valuation of a property due to these events.
00:40:55> 00:40:58:	And you know, there are several algorithms that help to
00:40:58> 00:40:59:	calculate this.
00:41:00> 00:41:03:	And at the end this also relates to, you know,
00:41:03> 00:41:05:	insurance premiums.
00:41:05> 00:41:10:	So once we know and we can quantify this, you
00:41:10> 00:41:13:	know, the sooner the better.
00:41:13> 00:41:16:	So if we can quantify the development stage or before
00:41:16> 00:41:20:	acquiring an asset, it can really helps us and you
00:41:20> 00:41:23:	know to mitigate the risk once the asset is, is
00:41:23> 00:41:24:	in our hand basically.
00:41:27> 00:41:29:	Thank you, Antonio, Mark, Sonia, Mark.
00:41:31> 00:41:31:	Yeah.
00:41:31> 00:41:32:	Thanks, Kara.
00:41:34> 00:41:36:	Irrespective of where you fall in the political spectrum, one
00:41:36> 00:41:39:	thing that all owners are dealing with today with the
00:41:39> 00:41:42:	industries dealing with today is higher insurance premiums
	across the
00:41:42> 00:41:42:	board.
00:41:42> 00:41:45:	It's not just for properties located in climate prone areas
00:41:45> 00:41:47:	of Florida and Texas and Louisiana.
00:41:48> 00:41:51:	It's across the board and they're three main drivers behind
00:41:51> 00:41:54:	this very precipitous rise in insurance premiums.
00:41:55> 00:41:57:	One is that in the 1990s, we had a billion
00:41:57> 00:41:59:	dollar climate event once every four months.
00:41:59> 00:42:02:	Today, we're having this billion dollar climate event once
00:42:02> 00:42:02:	two weeks.
00:42:02> 00:42:02: 00:42:03> 00:42:05:	Second factor is the higher inflation we've seen since the
00:42:05> 00:42:06:	pandemic.
00:42:06> 00:42:09:	And the third reason is the higher cost in the
00:42:09> 00:42:13:	reinsurance market driven by the higher number of billion
00.42.03> 00.42.13.	dollar
00:42:13> 00:42:16:	and severe climate events that we're seeing more, more often.
00:42:17> 00:42:19:	So it's something we're grappling with in the industry and
00:42:19> 00:42:21:	it's really throwing a lot of underwriting.
00:42:21> 00:42:23:	Underwriting is out of whack, right?
00:42:23> 00:42:25:	If you want to wrote a property with 100 grand
00:42:26> 00:42:29:	insurance premium in 2019 and now it's double or something
00:42:29> 00:42:32:	along those lines, it can have very significant impacts on
00:42:32> 00:42:36:	your underwriting in terms of meeting your debt service

coverage 00:42:36 --> 00:42:36: levels. 00:42:37 --> 00:42:39: Also, one of the trends that was in place before 00:42:39 --> 00:42:42: the pandemic was this out migration from the gateway markets 00:42:42 --> 00:42:43: to the Sunbelt. 00:42:43 --> 00:42:47: Of course, these prominent Sunbelt markets like Austin and Nashville. 00:42:47 --> 00:42:50: We, we, we think about and that trend was accelerated 00:42:50 --> 00:42:51: by the pandemic. 00:42:51 --> 00:42:54: One thing we're seeing now is that those trends are 00:42:54 --> 00:42:55: starting to reverse. 00:42:55 --> 00:42:58: In some cases, they're actually going -1 of the reasons 00:42:58 --> 00:43:00: behind that is, is climate change. 00:43:00 --> 00:43:02: You know, you're now moving to areas that are more 00:43:02 --> 00:43:04: prone to climate risk and climate change. 00:43:04 --> 00:43:08: Also, the higher insurance premiums are driving potential people away 00:43:09 --> 00:43:10: from, from those areas. 00:43:11 --> 00:43:14: And in some cases, properties just aren't insurable. 00:43:14 --> 00:43:17: So the industry's really just starting to grapple with all 00:43:17 --> 00:43:20: of these issues along insurance premiums. 00:43:21 --> 00:43:22: Yeah. 00:43:22 --> 00:43:25: I mean that that brings up the whole concept there 00:43:25 --> 00:43:29: of climate migration, right, where you start seeing people move 00:43:29 --> 00:43:33: away from locations that have that are prone to these 00:43:33 --> 00:43:35: kind of traumatic weather events. 00:43:36 --> 00:43:40: I'll just bring up, you know, in terms of resilience 00:43:40 --> 00:43:44: measures in buildings and in homes, you know, what comes 00:43:44 --> 00:43:47: to mind for me are the recent fires in LA 00:43:47 --> 00:43:50: and my heart goes out to all of those affected. 00:43:50 --> 00:43:53: I realize, you know, in the US and in California 00:43:53 --> 00:43:55: particularly, this is a very raw topic. 00:43:55 --> 00:43:59: But in the midst of all the destruction, you may 00:43:59 --> 00:44:03: have seen pictures of a single home, for example, that 00:44:03 --> 00:44:07: is standing amongst an area that is completely burned down. 00:44:07 --> 00:44:10: And some, some of it, sometimes this is due to 00:44:10 --> 00:44:11: luck. 00:44:11 --> 00:44:15: But you know, I've seen certain cases of homes that 00:44:15 --> 00:44:21: had specific resilience characteristics to them that prevented them from

from perhaps burning down due to these fires.

00:44:21 --> 00:44:25:

00:44:25> 00:44:28:	There's one in particular that I looked at that you
00:44:28> 00:44:32:	know, for example, the yard had no vegetation or very
00:44:32> 00:44:34:	sparse desert style landscaping.
00:44:35> 00:44:38:	There was a concrete type fence or wall around the
00:44:38> 00:44:38:	house.
00:44:40> 00:44:43:	The deck was made of Class A wood, which was
00:44:43> 00:44:46:	which is as fire resistant as concrete or steel.
00:44:46> 00:44:51:	There's a metal roof, tempered glass for the windows.
00:44:51> 00:44:54:	And so these types of measures, they're very expensive, but
00:44:54> 00:44:57:	they may be what is required to kind of live
00:44:57> 00:44:59:	in these types of locations going forward.
00:45:01> 00:45:05:	I'll also touch on an interesting business that I looked
00:45:05> 00:45:07:	at as an investment.
00:45:07> 00:45:09:	And there are many of these types of businesses, I'm
00:45:09> 00:45:10:	sure out there.
00:45:10> 00:45:14:	But this one in particular is modular homes that are
00:45:14> 00:45:16:	made or built out of steel.
00:45:17> 00:45:22:	So modular homes themselves are sustainable because of
	the lack
00:45:22> 00:45:26:	of waste in the building process, but in this case
00:45:26> 00:45:31:	using steel, and this is recycled light gauge steel that
00:45:31> 00:45:36:	that you know, that obviously helps with the fire issue
00:45:36> 00:45:38:	that I was just talking about.
00:45:38> 00:45:41:	And these homes in particular are built to almost passive
00:45:41> 00:45:42:	house standards.
00:45:42> 00:45:47:	In addition, when this group builds these homes, they build
00:45:47> 00:45:50:	them in a community and have them essentially be an
00:45:50> 00:45:55:	integrated virtual power plant amongst the homes in a
	community.
00:45:56> 00:46:00:	So it's solutions like these that are I think super
00:46:00> 00:46:03:	interesting and could be some of the some of the
00:46:04> 00:46:07:	path in terms of rebuilding parts of LA or other
00:46:07> 00:46:11:	communities that are hurt by natural disasters.
00:46:12> 00:46:13:	Yeah, agree.
00:46:13> 00:46:15:	Sonia, thank you for that really fascinating take on that
00:46:15> 00:46:18:	and about what some options are we're looking at in
00:46:18> 00:46:19:	the future ahead.
00:46:20> 00:46:22:	We have about, we have less than 15 minutes left.
00:46:22> 00:46:24:	So I'm going to move ahead to the Q&A because
00:46:24> 00:46:25:	we have quite a few coming through.
00:46:26> 00:46:29:	But Antonio and Mark wanted to give you just an
00:46:29> 00:46:33:	opportunity to say some less words on investing in resilience

00:46:35 --> 00:46:35: Yeah, sure. 00:46:36 --> 00:46:38: I see also that there is a question asking what 00:46:38 --> 00:46:42: data are you using for entrance forecasting in high risk 00:46:42 --> 00:46:42: areas. 00:46:43 --> 00:46:48: And that's a good question because of course there, there 00:46:48 --> 00:46:52: are both, you know, open databases that you can use 00:46:52 --> 00:46:56: and where you know, based on the past events, you 00:46:56 --> 00:47:01: can forecast future events and, but you can also look 00:47:01 --> 00:47:05: for, you know, databases provided by interim companies. 00:47:07 --> 00:47:11: So those databases are typically private and they have a 00:47:11 --> 00:47:14: cost and it's hard to, to get to, to get 00:47:14 --> 00:47:15: to know them. 00:47:15 --> 00:47:19: But the more you know, the, the calculations are, 00:47:19 --> 00:47:24: are, are populated with, with data, the better and the 00:47:24 --> 00:47:25: more refined they are. 00:47:26 --> 00:47:30: So for Europe, we are using, for example, Eurostar database 00:47:31 --> 00:47:35: or other other public available, you know, databases. 00:47:36 --> 00:47:39: And yet knowing you know what, what has been happening 00:47:39 --> 00:47:42: in the past, you can really forecast the future. 00:47:42 --> 00:47:45: Also, I don't know if you've seen, you know, the 00:47:45 --> 00:47:46: recent increase of temperature. 00:47:46 --> 00:47:52: So, you know, the Paris Agreement aimed to, you know, 00:47:52 --> 00:47:58: keep the temperature well below 2?? by 2050 and preferably 00:47:58 --> 00:47:59: below 1.5. 00:47:59 --> 00:48:04: Well, actually in 2024 we already exceeded at 1.5 S 00:48:05 --> 00:48:11: Actually, all the estimations done in the past were probably 00:48:11 --> 00:48:13: too overly optimistics. 00:48:14 --> 00:48:19: So that's the realities or yeah, we should, even though, 00:48:19 --> 00:48:23: you know, the results give a very scary picture, but 00:48:23 --> 00:48:24: it's the reality. 00:48:24 --> 00:48:27: So I think we need to accept it and and 00:48:27 --> 00:48:28: then just go for it. 00:48:30 --> 00:48:31: Appreciate that take Antonio. 00:48:31 --> 00:48:32: Thank you. 00:48:32 --> 00:48:34: Mark any final words before we move on to to 00:48:34 --> 00:48:34: the Q&A? 00:48:35 --> 00:48:35: No. 00:48:36 --> 00:48:37: OK, thank you. 00:48:38 --> 00:48:40: So I did want to share with you before we 00:48:40 --> 00:48:43: do move on to the Q&A is that since we 00:48:43 --> 00:48:47: were just speaking about resilience, I wanted to share with

if you would like it.

00:46:33 --> 00:46:34:

00:48:47> 00:48:51:	the participants that our ULI spring meeting is in Denver
00:48:51> 00:48:55:	in May and we are holding a specific resilience summit
00:48:55> 00:48:57:	at the end of that meeting.
00:48:57> 00:49:02:	So if you are interested in attending, participating, please register
00:49:02> 00:49:04:	or reach out to us For more information.
00:49:04> 00:49:08:	Again, there's AQR code or you can visit ULI dot
00:49:08> 00:49:10:	org∖ resilience summit.
00:49:11> 00:49:15:	So right now, I am going to think I'm going
00:49:15> 00:49:20:	to stop the screen share right now and go right
00:49:20> 00:49:21:	into Q&A.
00:49:21> 00:49:23:	There are quite a few Q&A questions.
00:49:24> 00:49:26:	We'll start from the top.
00:49:26> 00:49:29:	So we're going to be going backwards a little bit
00:49:29> 00:49:32:	to some of the first topics and feel free to
00:49:32> 00:49:35:	jump in and answer these questions as you feel able
00:49:35> 00:49:36:	to.
00:49:36> 00:49:37:	Mark, I think this one is for you.
00:49:38> 00:49:41:	When folks use C Pace, they lose the opportunity to
00:49:41> 00:49:43:	apply for other funding because of the lands to the
00:49:43> 00:49:44:	property.
00:49:44> 00:49:46:	How have you worked around that?
00:49:47> 00:49:47:	That's true.
00:49:47> 00:49:50:	The C pace, the C pace lien does prime the
00:49:50> 00:49:53:	senior mortgage lien, but there are ways to get around
00:49:53> 00:49:53:	that.
00:49:54> 00:49:57:	First off, a default under the C pace loan doesn't
00:49:57> 00:50:00:	accelerate the loan in the same way that a senior
00:50:00> 00:50:02:	mortgage loan default would.
00:50:03> 00:50:06:	And I, I just think as the industry matures more
00:50:06> 00:50:09:	and more, more and more senior lenders, more and more
00:50:09> 00:50:13:	lenders are just getting comfortable with the C pay structure.
00:50:13> 00:50:16:	At first blush, certainly, you know, when you have a
00:50:16> 00:50:19:	lien priming the senior lien, it's problematic, but some lenders
00:50:19> 00:50:21:	are getting comfortable with it and you have to just
00:50:21> 00:50:23:	get comfortable with the structure.
00:50:23> 00:50:26:	And like an important point is that it doesn't accelerate
00:50:26> 00:50:26:	that loan.
00:50:27> 00:50:29:	Remember, it's also an assessment, not a mortgage, right?
00:50:29> 00:50:33:	So any type of default doesn't, you just have to
00:50:33> 00:50:36:	deal with it from future tax payments.
00:50:37> 00:50:39:	And you know, I just think we just need more

00:50:39> 00:50:42:	maturation in the industry and just more knowledge sharing to
00:50:43> 00:50:44:	get people comfortable with it.
00:50:45> 00:50:48:	You're, you're also seeing more and more companies come up
00:50:48> 00:50:51:	with a dual solution C pays plus senior type of
00:50:51> 00:50:51:	product.
00:50:52> 00:50:53:	So that's something to also look into.
00:50:57> 00:50:57:	Great.
00:50:57> 00:50:58:	Thank you both.
00:50:58> 00:51:02:	The next question states that is is measuring EUI a
00:51:02> 00:51:06:	priority for more than half the respondents because the metric
00:51:06> 00:51:10:	is tied to a value proposition around the costs of
00:51:10> 00:51:11:	those materials?
00:51:11> 00:51:14:	In other words, if the materials cost more but have
00:51:14> 00:51:18:	some level of payback through EUI levels, maybe that'll drive
00:51:18> 00:51:22:	the economic decision to use those higher cost materials versus
00:51:22> 00:51:23:	less expensive materials.
00:51:23> 00:51:25:	This is a great, great question and sort of why
00:51:25> 00:51:28:	I think in the future when we pull respondents, we
00:51:28> 00:51:30:	want to get some more information there.
00:51:30> 00:51:33:	But do the three of you have any thoughts on,
00:51:33> 00:51:37:	you know, EUI versus higher cost materials and less expensive
00:51:37> 00:51:39:	materials and what that link is?
00:51:40> 00:51:42:	Yeah, I can take the question.
00:51:42> 00:51:45:	So this is similar to what we were discussing before.
00:51:45> 00:51:49:	So the trade off between and the more the materials
00:51:49> 00:51:51:	and the the energy is intensity.
00:51:52> 00:51:54:	What you can do in this case is to to
00:51:54> 00:51:58:	run a life cycle cost analysis where you basically not
00:51:58> 00:52:02:	only calculate you know the initial CapEx and the operational
00:52:02> 00:52:06:	expenditure, but you also understand the the end of life
00:52:06> 00:52:08:	of the material itself.
00:52:08> 00:52:11:	So in that case, you, you can make, you know,
00:52:11> 00:52:15:	thought decisions based on, you know, the best material and
00:52:15> 00:52:18:	the best, let's say, design solution to optimize it.
00:52:18> 00:52:22:	Because again, at the end, if you over, you know,
00:52:22> 00:52:27:	use materials with very high embodied carbon, probably it's
	not
00:52:27> 00:52:31:	worth, you know, this is this also, you know, goes
00:52:31> 00:52:34:	with the what has been done for the EPBD.

00:52:34> 00:52:40:	So the energy performance of building directives in Europe where
00:52:40> 00:52:44:	basically you know, it was undertaken a study of you
00:52:44> 00:52:49:	know, optimal cost and optimal efficiency based again on the
00:52:49> 00:52:53:	on the level of insulation basically to to optimize the
00:52:53> 00:52:56:	the final energies intensity.
00:52:58> 00:52:58:	Great.
00:52:58> 00:52:59:	Thank you, Antonio.
00:52:59> 00:53:01:	I'm going to move ahead to some more questions because
00:53:01> 00:53:02:	we have so many open right now.
00:53:03> 00:53:07:	The next question states that projects in Vancouver move so
00:53:07> 00:53:08:	quickly.
00:53:08> 00:53:11:	How do you do these types of assessments like life
00:53:11> 00:53:14:	cycle carbon assessments in the design process quick enough to
00:53:14> 00:53:18:	inform the design and take action while still meeting the
00:53:18> 00:53:19:	project schedule?
00:53:20> 00:53:21:	Great question.
00:53:25> 00:53:26:	I can take it.
00:53:26> 00:53:28:	I mean, you have to do it as soon as
00:53:28> 00:53:31:	possible before starting the construction.
00:53:32> 00:53:35:	Then of course, if it's designing construction at the same
00:53:35> 00:53:37:	time, it's going to be harder.
00:53:37> 00:53:40:	But if you know the design phase is comes first
00:53:40> 00:53:43:	and then the construction phase where you have to start
00:53:43> 00:53:45:	as soon as possible with, with, with this type of
00:53:46> 00:53:49:	analysis and then you have to proceed with the construction.
00:53:49> 00:53:52:	Actually, there are some charts that you can find where
00:53:52> 00:53:55:	you see that the sooner you approach, you know, those
00:53:55> 00:53:58:	sustainability topics, the easier and, and the less is the
00:53:58> 00:54:01:	final impact on the, on the overall, you know, business
00:54:02> 00:54:03:	plan of the development.
00:54:06> 00:54:08:	Any other thoughts there, Mark Sonia?
00:54:09> 00:54:12:	OK, so this next question, I'm going to combine the
00:54:12> 00:54:13:	next two questions it's asking.
00:54:13> 00:54:15:	This isn't the materials category.
00:54:16> 00:54:19:	What do you see in construction cost variance with energy
00:54:19> 00:54:22:	efficient products and other popular building materials?
00:54:22> 00:54:25:	And is there a energy cost savings for using energy
00:54:25> 00:54:26:	efficient materials?
00:54:27> 00:54:29:	And what do you see as an average payback for
00:54:29> 00:54:31:	investing in these energy efficient measures?

00:54:31> 00:54:33:	So Sonia, I know that you mentioned your, your 1,
00:54:33> 00:54:36:	you know, one year payback, which is fantastic.
00:54:37> 00:54:39:	But what are you all seeing in sort of that
00:54:39> 00:54:39:	variance in costs?
00:54:39> 00:54:41:	Like is it worth it to get a better payback?
00:54:41> 00:54:43:	What are some other examples you have if you want
00:54:43> 00:54:43:	to share?
00:54:44> 00:54:46:	I can I can share another example.
00:54:47> 00:54:51:	We have an investment for example, in a company that
00:54:51> 00:54:56:	builds panelized walls and floors for typically apartment buildings and
00:54:56> 00:54:59:	they build out of mass, mass timber CLT.
00:54:59> 00:55:02:	And what we find is that the cost can be
00:55:02> 00:55:04:	higher to to use these materials.
00:55:04> 00:55:05:	This process.
00:55:05> 00:55:10:	However, the time savings associated with it essentially make make
00:55:10> 00:55:13:	up for the cost because the the panels are built
00:55:13> 00:55:17:	inside of a factory essentially and then taken out to
00:55:17> 00:55:18:	the field and installed.
00:55:18> 00:55:20:	So they can be installed extremely quickly.
00:55:20> 00:55:23:	The building goes up very, very fast and so it
00:55:24> 00:55:28:	saves on labor and time associated with the development
00:55:28> 00:55:32:	process.  So it's not always necessarily exactly looking at that building
00:55:32> 00:55:35:	material, but it could be, you know, the process associated
00:55:35> 00:55:38:	with another savings that could happen in other pieces of
00:55:38> 00:55:39:	the construction budget.
00:55:40> 00:55:43:	But with the other types of building materials that are
00:55:43> 00:55:45:	out there, I think it's just on a on a
00:55:45> 00:55:47:	material by material basis, you have to look at it
00:55:47> 00:55:48:	varies.
00:55:50> 00:55:50:	Yeah, great.
00:55:50> 00:55:51:	Thank you, Antonio Ormark.
00:55:54> 00:55:57:	I can give quickly a few examples.
00:55:57> 00:56:00:	So we are working on a few net 0 Carbon
00:56:00> 00:56:00:	Rd.
00:56:00> 00:56:05:	maps here where we basically address, you know,
00.00.00	improvement measures.
00:56:05> 00:56:09:	And we see that the return on investment, it goes,
00:56:09> 00:56:12:	you know, from three years to 1015 years.
00:56:12> 00:56:16:	But I would say when it's more than 15 years,
00:56:16> 00:56:20:	probably it's not the best approach because probably in 15

00:56:20> 00:56:25:	years, you know, the building will already be sold or
00:56:25> 00:56:28:	you know, there will be another scenario.
00:56:28> 00:56:32:	So what we recommend is to undertake measures with an
00:56:32> 00:56:36:	SROY, oh sorry, an ROI less than 10 years I
00:56:36> 00:56:36:	would say.
00:56:39> 00:56:39:	Great.
00:56:39> 00:56:40:	Thank you.
00:56:40> 00:56:42:	I'm going to move on so we can answer a
00:56:42> 00:56:44:	couple more questions before we end here.
00:56:44> 00:56:46:	So this is an interesting question.
00:56:47> 00:56:51:	Are there any regulatory requirements being discussed to provide sub
00:56:51> 00:56:53:	meter data to tenants at state levels?
00:56:53> 00:56:56:	This has been a hurdle in collecting scopes 1 and
00:56:56> 00:56:59:	2, carbon accounting, not that I know of at the
00:56:59> 00:57:00:	state level.
00:57:00> 00:57:03:	Certainly that's something we're talking to utilities about at the
00:57:03> 00:57:05:	utility or utility region level.
00:57:05> 00:57:08:	But have you all heard of anything in terms of
00:57:09> 00:57:10:	regulatory data sharing?
00:57:10> 00:57:13:	Obviously that'd be, that'd be the dream to just have
00:57:13> 00:57:13:	it.
00:57:13> 00:57:14:	You have to share all your data.
00:57:14> 00:57:17:	But I haven't seen that.
00:57:20> 00:57:23:	I think that maybe not, but we'll take a look
00:57:23> 00:57:25:	and see what what's on the horizon.
00:57:26> 00:57:30:	And then there's another question from from Melissa that says
00:57:30> 00:57:34:	with sustainability and resilience programs limited to the sub national
00:57:34> 00:57:37:	level, what do you see as some of the biggest
00:57:37> 00:57:43:	challenges in sustainability and resiliency, wildfires, sea level rise, infrastructure
00:57:43> 00:57:44:	grids, etcetera.
00:57:44> 00:57:47:	So many of these topics span across state borders.
00:57:47> 00:57:50:	Do you envision more states working together on these issues?
00:57:50> 00:57:51:	That's a great question.
00:57:53> 00:57:56:	Again, sort of the dream the answer would be yes,
00:57:56> 00:57:59:	but have any of you seen that in action or
00:57:59> 00:58:03:	worked with your, you know, projects or portfolio across states?
00:58:04> 00:58:05:	Well, I know.

00:58:05> 00:58:07:	There's I'll just talk about green banks.
00:58:08> 00:58:10:	So one of the things that came up during a
00:58:10> 00:58:14:	lot during the last during the Biden administration essentially
00.30.10> 00.30.14.	are
00:58:14> 00:58:18:	these green banks and each state and even local, local
00:58:18> 00:58:22:	municipalities, etcetera or counties have green banks in certain cases.
00:58:23> 00:58:26:	And then so they they've been trying to finance green
00:58:26> 00:58:29:	projects within their specific locations.
00:58:29> 00:58:33:	But this idea of a national green bank had come
00:58:33> 00:58:34:	off.
00:58:34> 00:58:37:	And I think that's the closest thing that I've seen
00:58:37> 00:58:41:	to, you know, state green banks kind of working together
00:58:41> 00:58:45:	or having this umbrella kind of national green bank
	organization
00:58:45> 00:58:49:	that could then farm out opportunities to to state level
00:58:49> 00:58:50:	green banks.
00:58:50> 00:58:52:	But that's the only thing that I've seen so far.
00:58:52> 00:58:56:	But, you know, I think it's definitely a possibility going
00:58:56> 00:58:58:	forward that we see more of that.
00:58:59> 00:59:03:	Kara, Kara, if we go back to the Chippy project,
00:59:03> 00:59:07:	I mentioned, right, that's a 339 mile, 339 mile transmission
00:59:07> 00:59:10:	line of hydropower being delivered into Astoria.
00:59:11> 00:59:13:	And obviously for that project, you have to have the
00:59:13> 00:59:15:	land rights from all of those states.
00:59:15> 00:59:19:	So there was definitely collaboration between those States and the
00:59:19> 00:59:23:	developer transmission developers to get that project to come together.
00:59:24> 00:59:27:	So that's another another example we could look at, slightly
00:59:27> 00:59:29:	different than what I think the question was, but it's
00:59:29> 00:59:30:	it's related.
00:59:31> 00:59:33:	Appreciate that, Mark, and maybe you could drop that a
00:59:33> 00:59:35:	link to that project in the chat.
00:59:35> 00:59:37:	As we close out here, we do have quite a
00:59:37> 00:59:39:	few of unanswered questions.
00:59:39> 00:59:42:	We will make sure to copy those questions and get
00:59:42> 00:59:45:	them to our panelists so they can respond to you
00:59:45> 00:59:47:	if they have a fulfilling answer.
00:59:48> 00:59:50:	But right now, we are on the top of the
00:59:50> 00:59:50:	hour.
00:59:50> 00:59:54:	I really appreciate this fantastic panel for going through the
00:59:54> 00:59:56:	global sustainability outlook with us today.

 00:59:57 --> 00:59:59:
 Really, what's on the horizon for 2025?

 01:00:00 --> 01:00:00:
 These 5 topics?

 01:00:01 --> 01:00:03:
 Amongst many, many others.

 01:00:04 --> 01:00:05:
 Thank you all for joining us.

 01:00:05 --> 01:00:07:
 If you have any questions, let us know.

 01:00:07 --> 01:00:10:
 We will be sharing the recording and the transcript of

this webinar so you can get some more information and

01:00:13 --> 01:00:14: share it.

01:00:10 --> 01:00:13:

**01:00:14 --> 01:00:15:** Thanks all, have a great Friday.

01:00:16 --> 01:00:17: Thank you.

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