Webinar

The Materials Movement: Creating Value with Better Building Materials

Date: December 01, 2023

00:00:11 --> 00:00:13: Hi everyone, Welcome.
00:00:14 --> 00:00:16: It looks like people are trickling in from the waiting
00:00:16 --> 00:00:16: room.
00:00:18 --> 00:00:19: We'll get started in a couple of minutes.
00:00:20 --> 00:00:22: While we're waiting, feel free to introduce yourself in the
00:00:22 --> 00:00:24: chat and tell us where you're joining us from.
00:00:27 --> 00:00:28: Thanks for being here.
00:00:49 --> 00:00:49: All right.
00:00:50 --> 00:00:51: Well, go ahead and get started.
00:00:51 --> 00:00:52: So welcome.
00:00:52 --> 00:00:55: My name is Victoria Ostreich and I'm Senior Manager with
00:00:55 --> 00:00:58: the Urban Land Institute's Randall Lewis Center for Sustainability in
00:00:58 --> 00:00:59: Real Estate.
00:01:00 --> 00:01:02: I'm really excited to have you here and tell you
00:01:02 --> 00:01:05: a little bit about the materials movement.
00:01:05 --> 00:01:08: We've assembled an amazing panel of experts who are going
00:01:08 --> 00:01:11: to share their perspectives on the real estate industries movement
00:01:11 --> 00:01:13: towards healthy and sustainable building materials.
00:01:14 --> 00:01:16: We'll talk about why material choices are important for the
00:01:16 --> 00:01:19: environment, for future tenants and for communities.
00:01:20 --> 00:01:23: We'll also talk about how professionals across the value chain
00:01:23 --> 00:01:26: are successfully making more informed choices to integrate better materials
00:01:26 --> 00:01:28: that are good for people on the planet.
00:01:29 --> 00:01:31: We're really glad to have you with us, so let's
00:01:31 --> 00:01:31: get started.

00:01:33 --> 00:01:35: I'm excited to introduce you to today's speakers.

00:01:36 --> 00:01:39: Sydney Mainster is the Vice President of Sustainability and Design

00:01:39 --> 00:01:42: Management for the Durst Organization, one of the oldest family

00:01:42 --> 00:01:45: run commercial and residential real estate companies in New York

00:01:45 --> 00:01:45: City.

00:01:46 --> 00:01:49: Suzanne Fallander is the Vice President of Global ESG for

00:01:49 --> 00:01:52: Prologis, which acquires, develops and maintains the largest collection of

00:01:53 --> 00:01:55: high quality logistics real estate in the world.

00:01:56 --> 00:01:59: Heidi Creighton is the Vice President of Sustainability for Skanska

00:01:59 --> 00:02:00: USA Commercial Development.

00:02:01 --> 00:02:04: Skanska is a 135 year old development and construction company

00:02:04 --> 00:02:07: that began in Sweden and operates globally.

00:02:09 --> 00:02:12: Today's webinar was organized through the Uli Randall Lewis Center

00:02:12 --> 00:02:15: for Sustainability in Real Estate, which leads the industry in

00:02:15 --> 00:02:19: creating places and buildings where people and the environment thrive.

00:02:23 --> 00:02:24: Here's our agenda for today.

00:02:25 --> 00:02:27: First, we're going to do a quick poll to better

00:02:27 --> 00:02:29: understand who's in the audience.

00:02:29 --> 00:02:32: Then I'm going to provide a brief overview of the

00:02:32 --> 00:02:33: Materials Movement report.

00:02:34 --> 00:02:37: Later, our panelists will present their firm's approach to sustainable

00:02:37 --> 00:02:40: building materials and highlight example projects that are leading this

00:02:40 --> 00:02:41: movement.

00:02:42 --> 00:02:45: Following the presentations, we'll move to a panel discussion and

00:02:45 --> 00:02:47: then open it up for panelists to answer your questions.

00:02:48 --> 00:02:50: So as you're listening in, please enter your questions in

00:02:50 --> 00:02:51: the Q&A box.

00:02:51 --> 00:02:54: You can also use the upvote feature to elevate questions

00:02:54 --> 00:02:55: that you like.

00:02:56 --> 00:02:58: And finally, I want to flag that this webinar is

00:02:58 --> 00:03:01: being recorded and we'll share a recording with all the

00:03:01 --> 00:03:04: participants and publish it on UL Eyes Knowledge Finder website.

00:03:06 --> 00:03:08: It looks like folks are introducing themselves in the chat.

00:03:08 --> 00:03:09: Thanks for doing that.

00:03:09 --> 00:03:10: Welcome.

00:03:11 --> 00:03:14: So we're going to go ahead and launch our poll.

00:03:14 --> 00:03:17: We this is a three question anonymous poll for you

00:03:17 --> 00:03:18: to answer.

00:03:18 --> 00:03:20: We're just hoping to get a better sense of who's

00:03:20 --> 00:03:22: in the virtual room and what you already know about

00:03:22 --> 00:03:24: embodied carbon and material health.

00:03:25 --> 00:03:26: Don't worry, it's not a test.

00:03:26 --> 00:03:28: We're just hoping to learn a little bit more about

00:03:28 --> 00:03:28: you.

00:03:28 --> 00:03:31: And if you've never heard of these terms, don't worry,

00:03:31 --> 00:03:31: sit tight.

00:03:31 --> 00:03:33: We'll we'll define them for you in just a minute.

00:03:34 --> 00:03:37: So we'll give this about 30 seconds or so for

00:03:38 --> 00:03:39: people to respond.

00:03:51 --> 00:03:54: Looks like we have almost everyone responding.

00:03:54 --> 00:03:54: Thank you.

00:04:17 --> 00:04:22: Maybe 10 more seconds to get your responses in.

00:04:30 --> 00:04:30: Great.

00:04:30 --> 00:04:32: We'll go ahead and end the poll.

00:04:32 --> 00:04:33: Thanks for responding.

00:04:33 --> 00:04:36: It looks like we have a diverse group and we

00:04:36 --> 00:04:40: have mixed levels of knowledge of these topics, which is

00:04:40 --> 00:04:40: really great.

00:04:46 --> 00:04:48: So I do want to just provide a couple of

00:04:48 --> 00:04:51: quick definitions to make sure that we're all on the

00:04:51 --> 00:04:51: same page.

00:04:52 --> 00:04:55: Embodied carbon is the greenhouse gas emissions that arise from

00:04:55 --> 00:04:59: the production, transportation, installation, and disposal of building materials.

00:04:59 --> 00:05:02: Studies have shown that embodied carbon can represent up to

00:05:02 --> 00:05:05: 50% of a building's total carbon emissions over its lifetime.

00:05:06 --> 00:05:09: As buildings become more energy efficient, embodied carbon becomes a

00:05:09 --> 00:05:12: larger share of a building's total carbon footprint.

00:05:13 --> 00:05:16: Material health generally refers to the impact of material components

00:05:16 --> 00:05:18: or ingredients on human health.

00:05:18 --> 00:05:21: Like embodied carbon, this encompasses the health impacts that can

00:05:21 --> 00:05:24: occur across the entire life cycle of a product, so

00:05:24 --> 00:05:27: this includes people who are exposed to that product while

00:05:27 --> 00:05:30: it's being extracted or manufactured, recycled, or put into a

00:05:30 --> 00:05:30: landfill.

00:05:31 --> 00:05:34: This graphic from the Carbon Leadership Forum shows the different

00:05:34 --> 00:05:35: stages of a product's life cycle.

00:05:36 --> 00:05:39: This is obviously for embodied carbon, but it's a useful

00:05:39 --> 00:05:41: frame for thinking about material health impacts as well.

00:05:46 --> 00:05:49: So diving into the drivers of this movement towards better

00:05:49 --> 00:05:51: materials, the first driver is regulation.

00:05:51 --> 00:05:54: It seems like almost every day there are new regulations

00:05:54 --> 00:05:57: and financial disclosures that are asking companies to report on

00:05:57 --> 00:05:58: the embodied carbon of their buildings.

00:05:59 --> 00:06:00: And it's not just regulation.

00:06:00 --> 00:06:03: In the embodied carbon space, we're also seeing increased scrutiny

00:06:03 --> 00:06:06: of certain classes of chemicals that are commonly used in

00:06:06 --> 00:06:07: building products.

00:06:07 --> 00:06:09: One class you might have heard of is P Foss,

00:06:09 --> 00:06:12: which is known more commonly as Forever Chemicals.

00:06:13 --> 00:06:16: Green building certifications are also motivating a shift in the

00:06:16 --> 00:06:16: industry.

00:06:17 --> 00:06:20: More and more, these certifications are demanding that real estate

00:06:20 --> 00:06:23: meet certain criteria for low embodied carbon materials, healthy materials

00:06:24 --> 00:06:25: or improved air quality.

00:06:26 --> 00:06:29: The next driver that we're seeing is demand from occupiers

00:06:29 --> 00:06:30: in tenant spaces.

00:06:30 --> 00:06:33: Building materials can be an important expression of a company's

00:06:34 --> 00:06:37: brand, and many large space users such as Google, Salesforce,

00:06:37 --> 00:06:40: Meta and Kaiser Permanente are leading the charge and demanding

00:06:40 --> 00:06:44: these better materials because they know that healthy materials create

00:06:44 --> 00:06:48: healthy spaces leading to greater employee health, Wellness and productivity.

00:06:49 --> 00:06:52: As a result of this demand, there's also financial benefit.

00:06:52 --> 00:06:56: Buildings that are sustainable and healthy, especially those with certifications,

00:06:56 --> 00:06:58: are transacting higher rent premiums and attracting tenants.

00:07:00 --> 00:07:03: And finally, ESG investing is another key driver towards better

00:07:03 --> 00:07:04: materials.

00:07:04 --> 00:07:08: Investors are increasingly demanding ESG performance, and so many companies

00:07:08 --> 00:07:12: are formally integrating embodied carbon and material health in their

00:07:12 --> 00:07:13: ESG frameworks.

00:07:14 --> 00:07:17: Net 0 carbon targets often include ambitions for reducing Scope

00:07:17 --> 00:07:21: 3 emissions, which encompass all of the indirect emissions that

00:07:21 --> 00:07:24: occur both upstream and downstream of a company's activities in

00:07:25 --> 00:07:25: real estate.

00:07:25 --> 00:07:28: That includes the emissions from construction materials.

00:07:30 --> 00:07:32: So how do our material choices affect humans in the

00:07:32 --> 00:07:32: environment?

00:07:33 --> 00:07:35: There are five key impact categories.

00:07:35 --> 00:07:38: These categories were initially created by the AIA Architecture and

00:07:38 --> 00:07:41: Design Materials Pledge and are starting to form the basis

00:07:41 --> 00:07:45: of many conversations and initiatives for reducing material impacts in

00:07:45 --> 00:07:48: the industry, including the Mindful Materials Common Materials Framework.

00:07:49 --> 00:07:51: The first category of impact is climate.

00:07:52 --> 00:07:56: Around 11% of global carbon emissions are from the manufacturer,

00:07:56 --> 00:07:58: transportation and disposal of building materials.

00:08:00 --> 00:08:01: The second category is human health.

00:08:02 --> 00:08:05: We all spend about 90% of our lives inside buildings

00:08:05 --> 00:08:07: and are exposed to chemicals and other substances on a

00:08:07 --> 00:08:08: daily basis.

00:08:09 --> 00:08:12: The choices that development teams make about building materials directly

00:08:12 --> 00:08:16: affect the health of future tenants, workers and communities.

00:08:17 --> 00:08:20: There are also equity implications of our material choices.

00:08:21 --> 00:08:24: People of colour and those with low incomes are disproportionately

00:08:24 --> 00:08:25: impacted by toxic chemicals.

00:08:26 --> 00:08:29: They're more likely to have industrial manufacturing facilities sited in

00:08:29 --> 00:08:31: their neighbourhoods and face air pollution as a result.

00:08:32 --> 00:08:35: And complex global supply chains can hide unethical working conditions

00:08:35 --> 00:08:37: and even modern slavery.

00:08:38 --> 00:08:40: The next category is ecosystems.

00:08:41 --> 00:08:45: Ecosystems around the world are impacted by material extraction, manufacturer

00:08:45 --> 00:08:45: and disposal.

00:08:46 --> 00:08:49: Insufficient regulation in certain areas can allow invasive and unethical

00:08:49 --> 00:08:53: extraction practices that deplete natural resource stocks before they can

00:08:53 --> 00:08:53: regenerate.

00:08:55 --> 00:08:57: And finally, circularity, which is just a fancy word for

00:08:57 --> 00:09:01: a system that reuses products indefinitely without waste, currently in

00:09:01 --> 00:09:04: the built environment, is one of the largest producers of

00:09:04 --> 00:09:06: solid waste and only a very small fraction of those

00:09:06 --> 00:09:07: materials are reused.

00:09:08 --> 00:09:12: In addition, many recycling processes require energy and release carbon

00:09:12 --> 00:09:15: to grind up, burn, or convert that material to different

00:09:15 --> 00:09:15: products.

00:09:19 --> 00:09:21: The good news is that there are many strategies that

00:09:21 --> 00:09:24: teams can implement at every stage of the development process.

00:09:24 --> 00:09:26: We won't have time to walk through every strategy, but

00:09:26 --> 00:09:28: I do want to highlight a couple of key points.

00:09:29 --> 00:09:30: The first one is to start early.

00:09:31 --> 00:09:33: By starting to think about materials at the outset of

00:09:33 --> 00:09:37: a project, you can consider alternative structural materials, engage manufacturers,

00:09:37 --> 00:09:39: and potentially save cost down the line.

00:09:40 --> 00:09:42: The second point is to reuse and repurpose as much

00:09:42 --> 00:09:43: as possible.

00:09:43 --> 00:09:46: The most sustainable building is one that already exists.

00:09:46 --> 00:09:49: Of course, we're in real estate and not building is

00:09:49 --> 00:09:50: not always an option.

00:09:50 --> 00:09:53: So it's important to look for ways to use salvage

00:09:53 --> 00:09:56: materials when possible and think about how to maximize efficiency

00:09:56 --> 00:09:57: in the design.

00:09:57 --> 00:09:58: To do more with less.

00:09:59 --> 00:10:02: #3 is to build your requirements for embodied carbon and

00:10:02 --> 00:10:05: material health into your specifications.

00:10:05 --> 00:10:07: This signals to potential partners that you are serious about

00:10:07 --> 00:10:09: choosing better materials.

00:10:09 --> 00:10:13: Many organizations, including Building Transparency and others, offer example spec

00:10:14 --> 00:10:15: language to help you do this.

00:10:16 --> 00:10:19: And last, there are software programs and online resources, many

00:10:19 --> 00:10:22: of which are free, to help teams make more informed

00:10:22 --> 00:10:22: choices.

00:10:23 --> 00:10:26: These products can help model the embodied carbon and chemicals

00:10:26 --> 00:10:27: during project scoping.

00:10:27 --> 00:10:30: They can identify and evaluate low carbon or healthy products,

00:10:30 --> 00:10:33: and they can help teams report on its successes at

00:10:33 --> 00:10:34: project completion.

00:10:34 --> 00:10:37: This market is advancing rapidly and it's really exciting to

00:10:37 --> 00:10:38: see.

00:10:39 --> 00:10:41: There's obviously a lot more here, but in the interest

00:10:41 --> 00:10:43: of time, I'm going to keep going.

00:10:43 --> 00:10:45: So if you like this content and want to learn

00:10:46 --> 00:10:48: more, keep an eye out for the materials movement report

00:10:48 --> 00:10:49: coming out very soon.

00:10:49 --> 00:10:52: The report highlights more details around the topics that I

00:10:52 --> 00:10:55: just highlighted, including the market drivers that are inspiring a

00:10:55 --> 00:10:58: shift in the industry, how materials impact human health in

00:10:58 --> 00:11:02: the environment and strategies for incorporating better materials throughout the

00:11:02 --> 00:11:03: development process.

00:11:03 --> 00:11:06: It also shares 9 innovative projects that are leading the

00:11:06 --> 00:11:08: way, a few of which will be featured in this

00:11:08 --> 00:11:09: presentation.

00:11:10 --> 00:11:12: So with that, I'm going to hand it over to

00:11:12 --> 00:11:13: Sydney mainster Sydney.

00:11:16 --> 00:11:21: Victoria, thank you so much for introducing this entire webinar,

00:11:21 --> 00:11:21: man.

00:11:21 --> 00:11:24: Can you can introduce every panel I'm on because that

00:11:25 --> 00:11:26: was an amazing, amazing intro.

00:11:27 --> 00:11:29: So hello everyone.

00:11:29 --> 00:11:30: My name is Sydney Mainster.

00:11:30 --> 00:11:33: I'm the Vice President of Sustainability and Design Management for

00:11:33 --> 00:11:34: the Durst Organization.

00:11:35 --> 00:11:35: Next slide please.

00:11:38 --> 00:11:41: So today I've been asked to speak about Durst approach

00:11:41 --> 00:11:45: to selecting and installing sustainable building products using Spen as

00:11:45 --> 00:11:46: a case study.

00:11:46 --> 00:11:49: So just a quick overview of this building, it's located

00:11:49 --> 00:11:50: in Long Island City.

00:11:51 --> 00:11:55: The architect was hand out Interiors done by Seldorf Architects.

00:11:55 --> 00:11:59: 978,000 square feet, 71 stories.

00:11:59 --> 00:12:03: It's that tall building you see in the back there,

00:12:03 --> 00:12:08: 958 residential units total, of which 288 are affordable units.

00:12:10 --> 00:12:14: That development also included the restoration of a historic 1927

00:12:14 --> 00:12:17: Long Island City clock tower building.

00:12:17 --> 00:12:19: You can see it right in front of the of

00:12:19 --> 00:12:23: the building there, just next to the the elevated subway

00:12:23 --> 00:12:23: line.

00:12:24 --> 00:12:27: It opened in 2022 and it is the first building

00:12:27 --> 00:12:31: in the world, excuse me, first multi family building in

00:12:31 --> 00:12:36: the world to achieve lead before new construction platinum level

00:12:36 --> 00:12:37: certification.

00:12:37 --> 00:12:38: Next slide please.

00:12:40 --> 00:12:43: So before I go into more detail about the Durst

00:12:43 --> 00:12:47: approach at Spen, I think it's important to introduce Durst

00:12:47 --> 00:12:51: as a company as Spen really exemplifies decades of commitment

00:12:51 --> 00:12:54: to designing and constructing sustainable buildings.

00:12:55 --> 00:12:57: So as you see on the slide here, the Durst

00:12:57 --> 00:13:00: mission is to build, own and operate many of the

00:13:00 --> 00:13:02: world's most innovative and efficient buildings.

00:13:03 --> 00:13:07: We create value for our tenants by developing sustainable residential

00:13:07 --> 00:13:10: and commercial properties in which people live, work and thrive.

00:13:11 --> 00:13:13: There's that thrive word again, Victoria.

00:13:14 --> 00:13:18: As you can see, sustainability is, is directly integrated into

00:13:18 --> 00:13:19: that mission statement.

00:13:20 --> 00:13:20: Next slide please.

00:13:23 --> 00:13:28: As developers, owners and operators, we operate 13,000,000 square feet

00:13:28 --> 00:13:32: of premier office space in Manhattan, including 151 which

was

00:13:32 --> 00:13:36: formerly known as Four Times Square, the world's first green

00:13:36 --> 00:13:41: skyscraper, 1 Bryant Park, the first LEED Platinum skyscraper and

00:13:41 --> 00:13:45: One World Trade Center, the tallest building designed to achieve

00:13:45 --> 00:13:49: LEED Gold certification in the US And so tall in

00:13:49 --> 00:13:51: fact that it actually goes off the slide.

00:13:51 --> 00:13:53: And if I try to actually scale this slide, all

00:13:54 --> 00:13:55: the other buildings become quite tiny.

00:13:56 --> 00:13:57: Next slide please.

00:13:59 --> 00:14:03: The nearest residential portfolio has 3400 units across 3,000,000 square

00:14:03 --> 00:14:06: feet with several thousand more in the pipeline.

00:14:07 --> 00:14:10: Spen is the most recently completed residential property.

00:14:11 --> 00:14:11: Next slide please.

00:14:13 --> 00:14:16: So all ground up development design decisions are made to

00:14:16 --> 00:14:21: balance these four sustainability focused areas, water conservation and quality,

00:14:21 --> 00:14:26: energy efficiency, material stream optimization and indoor Environmental Quality.

00:14:26 --> 00:14:30: There is a relationship and trade-offs between selections made in

00:14:30 --> 00:14:34: each of these categories and it's important to test out

00:14:34 --> 00:14:38: and weigh out options when you're making design decisions of

00:14:38 --> 00:14:40: how they impact each of these.

00:14:41 --> 00:14:41: Next slide please.

00:14:43 --> 00:14:47: So here's a very busy slide that I love to

00:14:47 --> 00:14:52: show because it shows how how our values around choosing

00:14:53 --> 00:14:57: materials play out in terms of decision making.

00:14:57 --> 00:14:59: A decision making tree, let's call it.

00:14:59 --> 00:15:02: The big take away from this slide is that when

00:15:02 --> 00:15:05: you work with us on a project, the project selection

00:15:05 --> 00:15:08: requires iterative review for many team members.

00:15:08 --> 00:15:12: That could include design team members, operations team members, people

00:15:12 --> 00:15:16: that are have used this before or even the manufacturer,

00:15:16 --> 00:15:21: excuse me, definitely the manufacturers themselves, the design team members

00:15:21 --> 00:15:23: will do initial product research.

00:15:23 --> 00:15:28: Consider the their sustainability goals as integral to the material

00:15:28 --> 00:15:33: selection and really the ideal selection balances

performance, sustainability, cost,

00:15:33 --> 00:15:37: availability, appearance, maintenance, end of life reuse.

00:15:37 --> 00:15:41: But really few perfect ideal products exist on the market.

00:15:42 --> 00:15:44: One item to add is that I I created this

00:15:44 --> 00:15:48: decision flow chart actually back in 2015 and it is

00:15:48 --> 00:15:51: still how we assess and evaluate projects Excuse me which

00:15:51 --> 00:15:54: products go into our projects today right please.

00:15:54 --> 00:15:58: So at Spen and an all new Durst development projects,

00:15:58 --> 00:16:02: building products are pre vetted during the design phase with

00:16:02 --> 00:16:07: follow up confirmation of materials selected during construction administration.

00:16:08 --> 00:16:12: We do not want procurement and or installation the installation

00:16:12 --> 00:16:15: portion of the project to be delayed due to building

00:16:15 --> 00:16:19: products not meeting health or sustainable design criteria and not

00:16:19 --> 00:16:23: only being discovered through the submittal review process.

00:16:23 --> 00:16:27: Subs and our construction managers should not be selecting the

00:16:27 --> 00:16:28: building products.

00:16:28 --> 00:16:31: We want that to be overseen by the design professionals.

00:16:31 --> 00:16:32: I can't stress that enough.

00:16:33 --> 00:16:36: That means listed products in our specs.

00:16:36 --> 00:16:39: So when the submittals come through we are not seeing

00:16:39 --> 00:16:41: something for the first time.

00:16:41 --> 00:16:43: Is it 100% perfect?

00:16:43 --> 00:16:46: No, but we try to minimize as many surprises coming

00:16:46 --> 00:16:49: through or showing up on site as possible.

00:16:50 --> 00:16:54: During Spen we created our own building product database and

00:16:54 --> 00:16:58: workflow tool to enable the design team to better and

00:16:58 --> 00:17:01: more efficiently be able to complete that vetting process of

00:17:01 --> 00:17:05: material of building products and getting them listed into the

00:17:05 --> 00:17:06: spec.

00:17:06 --> 00:17:09: The slide you see shows a snapshot of the range

00:17:09 --> 00:17:11: of products in our tool as well as vetting status

00:17:11 --> 00:17:13: on those products of and as well as which are

00:17:13 --> 00:17:15: included in our best in class.

00:17:15 --> 00:17:18: So this is a number of product projects along the

00:17:18 --> 00:17:21: bottom and their status in the vetting process.

00:17:22 --> 00:17:27: Our residential project currently under construction 2030 Hollets Point has

00:17:27 --> 00:17:30: over 1400 products listed in our database, which is about

00:17:30 --> 00:17:34: the number we'll typically see in a high rise multifamily
00:17:34 --> 00:17:35: project.
00:17:35 --> 00:17:38: Again, we try to avoid to the greatest extent possible
00:17:38 --> 00:17:41: leaving any spec section without a listed product option.
00:17:42 --> 00:17:43: Next slide please.
00:17:44 --> 00:17:46: So I'd like to talk a little bit about an
00:17:47 --> 00:17:49: example of some of the criteria we use for our
00:17:49 --> 00:17:50: building products.
00:17:51 --> 00:17:56: We each product category has bespoke criteria that is associated
00:17:56 --> 00:18:01: with either the installation or use or known health concerns
00:18:01 --> 00:18:03: around that product.
00:18:03 --> 00:18:08: I think this is well exemplified by our cabinetry criteria.
00:18:09 --> 00:18:13: So specifically with cabinetry we have criteria around FSD certification.
00:18:13 --> 00:18:16: We have criteria around formaldehyde content.
00:18:17 --> 00:18:20: But the one of the most important criteria we have
00:18:20 --> 00:18:21: is around emissions.
00:18:21 --> 00:18:27: And because the cabinetry on our project is manufactured bespoke
00:18:27 --> 00:18:31: for the project, we require that we do spot testing
00:18:31 --> 00:18:35: of that cabinetry for emissions throughout the project.
00:18:36 --> 00:18:42: So we require a CPH version 1.22017 residential scenario.
00:18:43 --> 00:18:45: We need to see the full report as part of
00:18:45 --> 00:18:46: this.
00:18:46 --> 00:18:49: This happens first immediately after reward.
00:18:49 --> 00:18:52: We require a mockup that gets sent for testing.
00:18:52 --> 00:18:56: And then because we don't want surprises coming off the
00:18:56 --> 00:19:01: full production line, we actually randomly pull select cabinets want
00:19:01 --> 00:19:05: from each delivery that we actually send ourselves to spot
00:19:05 --> 00:19:08: check and do emissions testing on to make sure that
00:19:08 --> 00:19:12: what we tested right after the buy is exactly what
00:19:12 --> 00:19:13: we're receiving.
00:19:14 --> 00:19:17: And you can imagine that helps keep the fabricator on
00:19:17 --> 00:19:21: their toes as they know that we are testing it.
00:19:21 --> 00:19:25: It also helps to remind the the Subs and on
00:19:25 --> 00:19:29: the trades that we take this quite seriously and that
00:19:30 --> 00:19:34: we indeed are going to be doing this random testing.
00:19:34 --> 00:19:37: We also conducted a full indoor air quality test at
00:19:37 --> 00:19:38: the end of the project.
00:19:39 --> 00:19:41: So it's as critical to the for those Subs to
00:19:41 --> 00:19:45: understand that in order to pass that IAT test, they

00:19:45 --> 00:19:48: need to make sure they're installing products that are listed
00:19:49 --> 00:19:52: and tested and meet our criteria because that is the
00:19:52 --> 00:19:55: ultimate confirmation that we've met our target.
00:19:55 --> 00:19:56: Next slide please.
00:19:58 --> 00:20:02: One of the other pieces that we included in Sven
00:20:02 --> 00:20:06: was a post consumer glass in lieu of Portland cement
00:20:06 --> 00:20:07: in our concrete.
00:20:07 --> 00:20:12: This ground glass PUZZLIN or GGP was incorporated in a
00:20:12 --> 00:20:16: slab circled here in orange as a test of viability,
00:20:16 --> 00:20:20: poor ease of pouring and workability in a slab on
00:20:20 --> 00:20:21: deck scenario.
00:20:21 --> 00:20:22: Fairly low risk.
00:20:23 --> 00:20:25: This pour as well as a pilot in another Durst
00:20:25 --> 00:20:29: multifamily high rise project give us the confidence to incorporate
00:20:30 --> 00:20:33: ground ground glass pazlin at a much larger scale on
00:20:33 --> 00:20:35: our two multifamily towers currently underway.
00:20:36 --> 00:20:39: We've been able to incorporate it in over 18,000 cubic
00:20:39 --> 00:20:43: yards of concrete on the project as a partial replacement
00:20:43 --> 00:20:46: for Portland cement in the mixes, right please.
00:20:48 --> 00:20:51: And then finally as mentioned Sven is the the first
00:20:51 --> 00:20:54: multi family building in the world to achieve lead before
00:20:54 --> 00:20:57: new construction platinum certification.
00:20:57 --> 00:21:01: Durst views lead certification as a reflection of our core
00:21:01 --> 00:21:06: sustainability values and criteria and especially regards to materials, health
00:21:06 --> 00:21:07: and indoor quality.
00:21:07 --> 00:21:10: Indoor air quality, excuse me, but it's not the driver.
00:21:10 --> 00:21:14: While the sustain why the sustainability criteria is actually placed
00:21:14 --> 00:21:18: on building product selection without changes to our approach to
00:21:18 --> 00:21:21: sustainable building product specification and use.
00:21:21 --> 00:21:25: The project had over 100 contributing EP DS in the
00:21:25 --> 00:21:30: environmental product declarations and health project declarations HPDS.
00:21:30 --> 00:21:34: We also had fantastic success passing our IQ test which
00:21:34 --> 00:21:37: we rewrote to reflect the lower than lead allowed values
00:21:37 --> 00:21:41: we'd actually seen that we could accomplish on our other
00:21:41 --> 00:21:44: existing multi family projects due to the stringency of our
00:21:44 --> 00:21:47: health, our healthy building product criteria.
00:21:48 --> 00:21:51: Our aim with spend as with all our projects is
00:21:51 --> 00:21:54: not just to provide a place where residents can live

00:21:54 --> 00:21:57: and thrive, but to demonstrate to the entire community that
00:21:57 --> 00:22:01: this high standard is achievable with the right criteria, correct
00:22:01 --> 00:22:03: processes and attention put into place.
00:22:06 --> 00:22:06: Thank you very much.
00:22:09 --> 00:22:09: Thank you, Sydney.
00:22:10 --> 00:22:10: Wonderful.
00:22:11 --> 00:22:13: So now we're going to transition to Suzanne.
00:22:15 --> 00:22:15: Great.
00:22:15 --> 00:22:17: Thank you and and great project Sydney.
00:22:17 --> 00:22:20: Looking forward to hearing even more in the discussion about
00:22:20 --> 00:22:22: that and and thank you everyone, really happy to be
00:22:22 --> 00:22:23: here with you today.
00:22:23 --> 00:22:26: I'm Suzanne Founder, I head up global ESG at Prologis.
00:22:26 --> 00:22:30: And for those of you not as familiar with Prologis,
00:22:30 --> 00:22:34: we're the global leader in logistics real estate and we've
00:22:34 --> 00:22:37: got 1.2 billion square feet in 19 countries.
00:22:37 --> 00:22:41: And our portfolio is really distribution centers, warehouses that we
00:22:41 --> 00:22:44: develop and lease out to customers around the world.
00:22:44 --> 00:22:46: This might be some of the largest global companies who
00:22:47 --> 00:22:49: are a key part of their supply chain as well
00:22:49 --> 00:22:51: as many small and medium sized businesses.
00:22:51 --> 00:22:55: And so what's important though in our strategies, we're not
00:22:55 --> 00:22:59: just providing the space and also helping them on kind
00:22:59 --> 00:23:03: of looking at how to incorporate green aspects into development,
00:23:03 --> 00:23:08: but we're also increasingly providing services related to renewable energy,
00:23:08 --> 00:23:11: helping them with their EV trucks to transition to more
00:23:11 --> 00:23:16: sustainable transportation as well as other sustainability services.
00:23:17 --> 00:23:20: We also when you think about construction, every real estate
00:23:20 --> 00:23:22: asset class is really different.
00:23:22 --> 00:23:24: So the things that Sydney can innovate on and multi
00:23:24 --> 00:23:27: family are different than what you could do at industrial.
00:23:27 --> 00:23:30: If you think about a warehouse and the roof space
00:23:30 --> 00:23:33: that we have, a big part of our strategy is
00:23:33 --> 00:23:34: being able to scale solar.
00:23:35 --> 00:23:37: And so we right now are #2 in the US
00:23:37 --> 00:23:40: for on site solar and it's a big part of
00:23:40 --> 00:23:42: our our strategy going forward.
00:23:43 --> 00:23:48: Next slide, we think about that scale just for context,

00:23:48 --> 00:23:53: but 2.8% of the world's GDP goes through a Prologis
00:23:53 --> 00:23:57: building in a year and so and 1.1 million people
00:23:57 --> 00:24:00: work under a Prologis roof.
00:24:00 --> 00:24:03: So we think about that and and take that scale
00:24:03 --> 00:24:07: really we see that comes with great responsibility but also
00:24:07 --> 00:24:09: we see that as an opportunity for how do we
00:24:09 --> 00:24:13: enable all those customers and and and really help Dr.
00:24:13 --> 00:24:15: sustainability not just for us but kind of more more
00:24:15 --> 00:24:16: broadly.
00:24:16 --> 00:24:20: If you go to the next slide, one back, we
00:24:20 --> 00:24:26: have been setting public goals for many years.
00:24:26 --> 00:24:31: We have sustainability goals related to building certifications.
00:24:31 --> 00:24:34: Every new development is either LEED certified or one of
00:24:34 --> 00:24:37: the other certifications in the countries where we operate.
00:24:37 --> 00:24:42: We also have a number of well certified buildings going
00:24:42 --> 00:24:46: on to the Wellness piece, but last year we levelled
00:24:46 --> 00:24:50: our upper ambition to drive a new net zero strategy.
00:24:50 --> 00:24:53: We'd already had an approved science based target, but we
00:24:53 --> 00:24:57: aligned with the science based targets initiative net 0 standard
00:24:57 --> 00:25:00: to drive net zero across our full value chain.
00:25:00 --> 00:25:04: So not only Prologis's own operations but also across our
00:25:04 --> 00:25:07: full portfolio and value chain by 2040.
00:25:08 --> 00:25:10: We have a number of interim targets that help us
00:25:10 --> 00:25:13: to get there including getting to one GW of solar.
00:25:13 --> 00:25:18: We're around 500 megawatts right now, but we're and we'll
00:25:18 --> 00:25:22: get to for own operations sooner than 2040 by 20-30.
00:25:22 --> 00:25:25: If you go to the next slide, one of the
00:25:25 --> 00:25:29: things put this in context and and Victoria did a
00:25:29 --> 00:25:33: great job kind of talking about different types of emissions
00:25:33 --> 00:25:37: and and what level of control you have over it,
00:25:37 --> 00:25:41: 99, .9% of Prologis's emissions are indirect, they're scope 3
00:25:41 --> 00:25:44: and of that 75% is the energy use of our
00:25:44 --> 00:25:46: customers in our buildings.
00:25:47 --> 00:25:50: So for that we're working with them to drive energy
00:25:50 --> 00:25:54: efficient design and also helping them to reduce their, their
00:25:54 --> 00:25:58: energy needs, but also we're helping with renewable energy.
00:25:58 --> 00:26:01: So whatever energy they do use, they can use green
00:26:01 --> 00:26:01: power.
00:26:02 --> 00:26:04: The 25% is really what we're going to talk about
00:26:04 --> 00:26:06: in the case study today, which is related to construction
00:26:06 --> 00:26:08: and development and embodied carbon.

00:26:08 --> 00:26:12: And when you think about construction of an industrial building,

00:26:12 --> 00:26:15: we don't have as many different products as Sydney.

00:26:15 --> 00:26:18: We don't have lots of very special beautiful cabinets and

00:26:18 --> 00:26:21: different things, but we have a lot of concrete, we

00:26:21 --> 00:26:25: have roof materials, steel and then a number of other

00:26:25 --> 00:26:27: things that we're we're looking at.

00:26:27 --> 00:26:29: And so a lot of our strategy has been how

00:26:29 --> 00:26:32: do we Sidney has done with her company, what are

00:26:32 --> 00:26:35: the standards we have to do in our specs and

00:26:35 --> 00:26:37: then what are the ways we can innovate.

00:26:38 --> 00:26:41: So next slide, so one of the first things we

00:26:41 --> 00:26:45: did after launching the net zero goal was to put

00:26:45 --> 00:26:49: in place new specs for our our new construction.

00:26:49 --> 00:26:53: And so this also is you know focused on making

00:26:53 --> 00:26:56: sure every building is solar and EV ready, you know

00:26:56 --> 00:27:00: making sure you have a roof life that can support

00:27:00 --> 00:27:04: solar for the long term, also high efficiency HVAC materials

00:27:04 --> 00:27:08: and also completing a life cycle assessment for every new

00:27:08 --> 00:27:12: building that helps us to really get that embodied carbon

00:27:12 --> 00:27:13: piece.

00:27:14 --> 00:27:16: The other thing we did is we had standards for

00:27:16 --> 00:27:17: retrofit.

00:27:17 --> 00:27:19: So going back to some of Victoria said at the

00:27:19 --> 00:27:22: start, we want to make sure everything is ready in

00:27:22 --> 00:27:25: our new buildings, but also how are we looking at

00:27:25 --> 00:27:28: our existing portfolio and making the right investments and upgrades

00:27:28 --> 00:27:31: as we have new tenants coming in or as we

00:27:31 --> 00:27:32: need to replace equipment.

00:27:33 --> 00:27:39: So next slide, so we have within piloting and testing

00:27:39 --> 00:27:42: different types of materials.

00:27:42 --> 00:27:44: Some of these I think Sydney had had covered in

00:27:44 --> 00:27:45: hers as well.

00:27:45 --> 00:27:48: And really the the key comes down to making sure

00:27:48 --> 00:27:51: because the buildings need to last for a long time

00:27:51 --> 00:27:54: and because of the industrial usage of the building, we

00:27:54 --> 00:27:57: need to make sure they still meet all of our

00:27:57 --> 00:27:59: long term quality needs, durability.

00:27:59 --> 00:28:02: But we, we do really approach this from an innovation

00:28:02 --> 00:28:05: perspective because we have in 19 countries, we have very

00:28:05 --> 00:28:09: different environmental climates, different weather and so some things that

00:28:10 --> 00:28:12: might work in one location or with one type of
00:28:12 --> 00:28:14: build might not work in another.
00:28:14 --> 00:28:18: So we've really worked with our our local teams also
00:28:18 --> 00:28:19: to innovate.
00:28:19 --> 00:28:22: We go to the next slide.
00:28:23 --> 00:28:25: So this brings to me to the case study we'll
00:28:25 --> 00:28:26: talk about today.
00:28:26 --> 00:28:28: This is Prologis Evergreen.
00:28:28 --> 00:28:30: I'm really excited about this project.
00:28:30 --> 00:28:33: It's a project in Brampton ON Canada and it was
00:28:33 --> 00:28:36: a project that as the team was kicking off said,
00:28:36 --> 00:28:40: you know, there's lots of different things we could test
00:28:40 --> 00:28:43: and we could test mass timber or we could test
00:28:43 --> 00:28:45: you know, different things.
00:28:45 --> 00:28:49: And they had come across the supplier in Canada that
00:28:49 --> 00:28:54: creates a low carbon alternative to the concrete panels and
00:28:54 --> 00:28:57: they're called Nexi, Nexi panels.
00:28:57 --> 00:29:01: And what they they have a lower embodied carbon around
00:29:01 --> 00:29:06: in this project, 17% lower embodied carbon than a traditional
00:29:06 --> 00:29:08: concrete panel.
00:29:08 --> 00:29:10: And then they also have a lot of other benefits.
00:29:10 --> 00:29:13: And so we decided not just to test one or
00:29:13 --> 00:29:15: the other, but test those two things together.
00:29:15 --> 00:29:18: And I think that's one of the key learnings as
00:29:18 --> 00:29:20: we go through our, our testing and piloting is, is
00:29:21 --> 00:29:24: really understanding what we can accomplish when we're looking at
00:29:24 --> 00:29:27: the the whole design and the building and the different
00:29:27 --> 00:29:28: things we can test together.
00:29:29 --> 00:29:32: So you know when we think about Nexi panels, it's
00:29:32 --> 00:29:36: the lower embodied carbon but also some of the life
00:29:36 --> 00:29:39: cycle pieces it low uses less water kind of in
00:29:39 --> 00:29:40: construction.
00:29:40 --> 00:29:43: There are benefits in terms of the time to put
00:29:44 --> 00:29:47: that in place because it's pre poured and and we're
00:29:47 --> 00:29:49: able to pull that together quicker.
00:29:51 --> 00:29:54: You know from mast timber, everything we're using for mast
00:29:55 --> 00:29:59: timber is FSC certified, so for stewardship Council certified.
00:30:00 --> 00:30:04: And mass timber also allows you to really address that
00:30:04 --> 00:30:08: steel component which is the the second largest contributor to
00:30:09 --> 00:30:13: embodied carbon in one of our buildings and that results

00:30:13 --> 00:30:17: in a 62% decrease in embodied carbon than a traditional
00:30:17 --> 00:30:18: steel skeleton.
00:30:20 --> 00:30:23: Again, a lot of this is very data-driven for us
00:30:23 --> 00:30:23: as well.
00:30:23 --> 00:30:27: So having a third party do the life cycle analysis
00:30:27 --> 00:30:30: on a building on a project that's when you have
00:30:30 --> 00:30:34: the different pieces coming together is helping then to drive
00:30:34 --> 00:30:37: that design back with our other teams and looking at
00:30:37 --> 00:30:41: where we can use this in other locations as well.
00:30:44 --> 00:30:48: So with next slide, so just a few other kind
00:30:48 --> 00:30:49: of details on here.
00:30:49 --> 00:30:52: On the other piece on terms of learn, well this
00:30:52 --> 00:30:55: will also have lead certification, but we're also looking at
00:30:55 --> 00:30:58: some other features, you know, cool roof LED lighting as
00:30:58 --> 00:31:01: a standard in all of our new buildings as well.
00:31:01 --> 00:31:04: So all these things to help drive the energy use
00:31:04 --> 00:31:07: down in addition to the lower embodied carbon.
00:31:09 --> 00:31:11: So I'll stop there and hand it back, but happy
00:31:11 --> 00:31:13: to discuss more when we get into discussion.
00:31:14 --> 00:31:15: Thank you so much, Suzanne.
00:31:16 --> 00:31:18: We're going to pass it over to Heidi.
00:31:18 --> 00:31:21: And just as a friendly reminder to the audience, please
00:31:21 --> 00:31:23: feel free to enter your questions in the Q&A box
00:31:24 --> 00:31:26: and we'll get back, we'll get to them after Heidi's
00:31:26 --> 00:31:27: presentation.
00:31:27 --> 00:31:28: So thank you.
00:31:28 --> 00:31:29: Take it away, Heidi.
00:31:29 --> 00:31:30: Thank you.
00:31:31 --> 00:31:33: Thanks everybody for joining us this morning.
00:31:33 --> 00:31:34: Happy December, everybody.
00:31:35 --> 00:31:39: Again, Heidi Creighton, I'm with Skanska Commercial Development, VP of
00:31:39 --> 00:31:40: Sustainability.
00:31:40 --> 00:31:45: So really overseeing Skanska sustainability initiatives across our US portfolio
00:31:45 --> 00:31:48: and just making sure that we're making the most sustainable,
00:31:48 --> 00:31:52: healthy, circular, resilient and impactful projects in in all of
00:31:52 --> 00:31:53: our markets.
00:31:53 --> 00:31:57: Next slide and as Victoria said at the beginning, we're
00:31:57 --> 00:32:02: an international construction and development firm, 135 years old and
00:32:02 --> 00:32:05: we're, we're headquartered in Stockholm and Sweden.
00:32:06 --> 00:32:08: And here in the US we have three different business

00:32:09 --> 00:32:09: units.
00:32:09 --> 00:32:11: We have our civil group, we have our construction group
00:32:11 --> 00:32:14: and we have commercial development and commercial development is where
00:32:14 --> 00:32:14: I sit.
00:32:15 --> 00:32:19: You know slightly different from Durston, Sydney, we we also
00:32:19 --> 00:32:22: do all new construction but we don't hold on to
00:32:22 --> 00:32:23: our properties.
00:32:23 --> 00:32:26: We we get them leased and then we divest and
00:32:26 --> 00:32:27: sell to investors.
00:32:28 --> 00:32:31: So a little bit different model there, but this gives
00:32:31 --> 00:32:33: you a pretty good snapshot of when we opened up
00:32:33 --> 00:32:37: our offices here in the US for commercial development, how
00:32:37 --> 00:32:40: many projects we finished and how many we have we
00:32:40 --> 00:32:40: have underway.
00:32:41 --> 00:32:44: But you know we're a self funded business model and
00:32:44 --> 00:32:45: which is really exciting.
00:32:45 --> 00:32:48: It gives us really great opportunity to kind of take
00:32:48 --> 00:32:52: some risks and really invest in sustainability and an innovation
00:32:52 --> 00:32:56: and have aggressive sustainability goals somewhere to to Prologis and
00:32:56 --> 00:32:57: Durst.
00:32:58 --> 00:33:01: And we're really motivated to kind of do do that
00:33:01 --> 00:33:05: innovation and leading edge technologies and investment and really share
00:33:05 --> 00:33:08: that with with the broader industry and share with all
00:33:08 --> 00:33:10: of you and venues like this.
00:33:11 --> 00:33:15: But yeah, it's you know working for a Swedish company
00:33:15 --> 00:33:20: really prioritizing sustainability is is extremely ingrained in all of
00:33:20 --> 00:33:24: Skanska's values and and decisions that we make and then
00:33:24 --> 00:33:27: it's actually extremely helpful, right.
00:33:27 --> 00:33:29: We've got great partners with our construction arm.
00:33:30 --> 00:33:33: It gives us just so much more control and visibility
00:33:33 --> 00:33:35: over what we do, gives us a ton more accountability,
00:33:35 --> 00:33:36: right.
00:33:36 --> 00:33:38: We have the same governance, we have the same values,
00:33:38 --> 00:33:40: we have the same climate targets that we're reaching for.
00:33:40 --> 00:33:44: So it really helps us have much more collaborative and
00:33:44 --> 00:33:47: long term conversations and and decisions that we make on
00:33:47 --> 00:33:48: our projects.
00:33:49 --> 00:33:52: And it's been really fantastic working for a company that's

00:33:52 --> 00:33:54: been doing sustainability for so long.

00:33:54 --> 00:33:59: We actually created our first sustainability report in 1996 and

00:34:00 --> 00:34:04: it was one of the industry's first environmental reports and

00:34:05 --> 00:34:09: you know like Suzanne and Sydney shared too, we also

00:34:09 --> 00:34:12: are really you know and do a lot of third

00:34:12 --> 00:34:14: party certifications.

00:34:14 --> 00:34:17: We think that's really important to have that that third

00:34:17 --> 00:34:18: party verification.

00:34:18 --> 00:34:22: And so 100% of our commercial development USA portfolio is

00:34:22 --> 00:34:27: the certified or pursuing certifications and many of those projects

00:34:27 --> 00:34:31: also pursue well or fit well and other certifications on

00:34:31 --> 00:34:32: top of that.

00:34:32 --> 00:34:35: But proud to say we've got 4.7 million square feet

00:34:35 --> 00:34:39: of LEED Platinum certified space to date and we've got

00:34:39 --> 00:34:43: another million and a half targeting Platinum in our pipeline

00:34:43 --> 00:34:43: right now.

00:34:43 --> 00:34:45: Next slide.

00:34:47 --> 00:34:51: So this graphic is really showing our sustainability target, so

00:34:51 --> 00:34:54: 0 emissions by 2045 and then we've got some interim

00:34:55 --> 00:34:57: goals listed there on the slide for 2030.

00:34:58 --> 00:35:01: So yeah, we've got a lot of work to do

00:35:01 --> 00:35:04: and and as you can imagine the decisions that we're

00:35:04 --> 00:35:07: making today are going to be really impacting our emissions

00:35:07 --> 00:35:08: in in 2030.

00:35:08 --> 00:35:10: So we need to be really proactive on top of

00:35:10 --> 00:35:13: this and be really strategic about the decisions we're making

00:35:13 --> 00:35:15: in what we're investing in.

00:35:16 --> 00:35:21: And our you know our targets are are science based

00:35:21 --> 00:35:27: targets which means that they're in line with Paris 1.5??C

00:35:27 --> 00:35:31: capping our emissions at at that EC3 tool.

00:35:32 --> 00:35:34: Hopefully many of you have heard of this hopefully many

00:35:34 --> 00:35:36: of you are using this tool.

00:35:36 --> 00:35:38: The the link is right there.

00:35:38 --> 00:35:41: It's a free tool to use, but it's called it's

00:35:41 --> 00:35:45: embodied Carbon and construction calculator, that's the EC3.

00:35:47 --> 00:35:50: So Skanska Co created this tool with Microsoft years ago

00:35:50 --> 00:35:53: and it's we use it in all of our design

00:35:53 --> 00:35:57: and construction projects and it's basically kind of like you

00:35:57 --> 00:36:00: know, Sydney was talking about the EP DS.

00:36:00 --> 00:36:03: So it's a database of a huge you know hundreds

00:36:03 --> 00:36:07: of thousands of environmental product declarations which are basically like

00:36:07 --> 00:36:10: a a nutrition level of embodied carbon.

00:36:11 --> 00:36:13: So there's lots of tools out there.

00:36:14 --> 00:36:18: You know, there's there's some other tools that probably more

00:36:18 --> 00:36:21: teams might use during design to really inform, well, do

00:36:21 --> 00:36:23: we want to do a concrete or steel or a

00:36:23 --> 00:36:27: mask timber scheme and really selecting the best structural scheme

00:36:27 --> 00:36:28: for the project.

00:36:29 --> 00:36:31: EC3 tool can be used for some of that early

00:36:31 --> 00:36:35: modeling, but really it's best for helping make those procurement

00:36:35 --> 00:36:36: decisions, right.

00:36:36 --> 00:36:40: So you put the material quantities into the database at

00:36:40 --> 00:36:43: your site location and then it will show you kind

00:36:43 --> 00:36:46: of the best in class, best version of the materials

00:36:46 --> 00:36:49: that you want to specify and procure for your project.

00:36:50 --> 00:36:52: So please use it.

00:36:52 --> 00:36:55: The more, the more people using it, the more kind

00:36:55 --> 00:36:58: of you know demand across the subplay chain that we're

00:36:58 --> 00:37:01: all asking for these EP DS, the more transparency and

00:37:02 --> 00:37:05: the more information we'll have to make better and better

00:37:05 --> 00:37:08: decisions as we are all driving down to to 0.

00:37:09 --> 00:37:13: And just just really quickly you know we're finding that

00:37:13 --> 00:37:16: on our projects we can easily see like a 10

00:37:16 --> 00:37:19: to 30% reduction in body carbon by using a tool

00:37:19 --> 00:37:22: like this with no, absolutely no cost impacts.

00:37:23 --> 00:37:25: And then it's also really helpful.

00:37:26 --> 00:37:29: You know there's still some markets where there aren't many

00:37:29 --> 00:37:29: or any EP DS.

00:37:30 --> 00:37:33: So you know asking these questions, having those conversations with

00:37:33 --> 00:37:36: your suppliers is is super helpful and we've we've seen

00:37:36 --> 00:37:38: good willingness to engage in those conversations.

00:37:40 --> 00:37:43: Next slide, so I'm gonna get into the case study

00:37:43 --> 00:37:47: that I'll be sharing with you today and that's 1550

00:37:47 --> 00:37:48: on the green.

00:37:49 --> 00:37:50: So that's the rendering of it right there.

00:37:51 --> 00:37:52: The envelope is up.

00:37:52 --> 00:37:55: So you know the photograph of that view, it looks

00:37:55 --> 00:37:59: pretty much like the rendering you see there, but it's

00:37:59 --> 00:38:02: a 28 story building and it's 387,000 square feet office
00:38:02 --> 00:38:05: tower and it's on track to be one of the
00:38:05 --> 00:38:09: most sustainable projects in the Houston area which we're really
00:38:09 --> 00:38:12: thrilled about and it's located next to Discovery Green.
00:38:12 --> 00:38:15: That's the point of view from that that photo there.
00:38:15 --> 00:38:18: That's Discovery Green Park, which is a 12 acre park
00:38:18 --> 00:38:20: in the heart of Houston Central Business District.
00:38:21 --> 00:38:24: And this is the first phase of a three block
00:38:24 --> 00:38:28: mixed-use development that that we own and we'll be developing
00:38:28 --> 00:38:31: the next blocks over the next couple of years and
00:38:31 --> 00:38:32: decades.
00:38:33 --> 00:38:36: But there's retail at the base about about 7000 square
00:38:36 --> 00:38:40: feet and then there's beautiful terraces on levels 1220 and
00:38:40 --> 00:38:41: 28.
00:38:41 --> 00:38:44: You can see some of the trees popping up there
00:38:44 --> 00:38:47: and just absolutely stunning views of Discovery Green and the
00:38:47 --> 00:38:48: city.
00:38:48 --> 00:38:52: The architect for this project is big, the Archangels group
00:38:52 --> 00:38:55: and we're about to wrap up construction and we'll be
00:38:55 --> 00:38:58: delivering the project in in early 2024.
00:38:59 --> 00:39:02: And next slide, so you know in addition to to
00:39:02 --> 00:39:07: Well and leave Putnam certification for the project, we're also
00:39:07 --> 00:39:10: pursuing Wired Score and Fit Well certifications.
00:39:12 --> 00:39:14: And you know we've been working closely with the city
00:39:14 --> 00:39:15: and the Mayor of Houston.
00:39:16 --> 00:39:19: So it's aligned with with the city's environmental goals.
00:39:20 --> 00:39:22: We've got 30% more fresh air than a typical Class
00:39:22 --> 00:39:24: A building in the project.
00:39:24 --> 00:39:28: There's a listing of other sustainability features that I'll just
00:39:28 --> 00:39:31: let you you scan through there on the slide.
00:39:31 --> 00:39:34: But you know it's surrounded by greenery and that really
00:39:34 --> 00:39:37: allows the tenants to experience the benefits of nature.
00:39:37 --> 00:39:40: You know when they're working inside or outside the building,
00:39:41 --> 00:39:43: we have floor to ceiling vision and glazing and so
00:39:43 --> 00:39:46: really great natural light coming into the space.
00:39:46 --> 00:39:49: And then we also have a unique side core design
00:39:49 --> 00:39:53: and really open floor plates and that really allows for
00:39:53 --> 00:39:56: our tenants that that have a very kind of airy
00:39:56 --> 00:39:59: flexible office environment when they come to work in the

00:39:59 --> 00:40:00: building.
00:40:01 --> 00:40:01: OK.
00:40:01 --> 00:40:02: Next slide.
00:40:04 --> 00:40:07: So just wanted to dive in more specifically on the
00:40:07 --> 00:40:09: embodied carbon for this project.
00:40:09 --> 00:40:11: So we use the EC3 tool to track the, the
00:40:12 --> 00:40:16: carbon intensive materials, right, like the carbon, sorry, the concrete,
00:40:16 --> 00:40:19: the the rebar, the aluminum etcetera to really find out
00:40:20 --> 00:40:22: where those key reductions could be made.
00:40:23 --> 00:40:26: And we discovered really quickly and early in the process
00:40:26 --> 00:40:30: that the local suppliers, especially the concrete suppliers, we didn't
00:40:30 --> 00:40:32: have EP DS in place for their products and we're
00:40:33 --> 00:40:36: just starting to become more transparent about embodied carbon.
00:40:36 --> 00:40:40: And so for the manufacturers, as you've probably many of
00:40:40 --> 00:40:43: you heard, that process can be pretty lengthy to get
00:40:43 --> 00:40:43: EP DS.
00:40:43 --> 00:40:46: So you know us having those early conversations and showing
00:40:47 --> 00:40:49: the supply chain that we were going to be demanding,
00:40:49 --> 00:40:52: this was really important to to prompt the market to
00:40:52 --> 00:40:55: move forward and be more transparent and get those EP
00:40:55 --> 00:40:55: DS.
00:40:56 --> 00:40:58: But I'm really proud to say the numbers up there
00:40:59 --> 00:41:01: on the slide, but we've we've achieved a 45% reduction
00:41:01 --> 00:41:03: in embodied carbon from the baseline.
00:41:05 --> 00:41:08: And so the scope of that is the foundations and
00:41:08 --> 00:41:13: the basement construction, the superstructure, the enclosure, the roofing and
00:41:13 --> 00:41:17: then some corn shell interior construction scope of work.
00:41:18 --> 00:41:22: And so the materials that that had the most impact
00:41:22 --> 00:41:25: are are listed in the box there, but it is
00:41:25 --> 00:41:30: the concrete rebar, metal framing, aluminum fins, gypsum board, acoustic
00:41:30 --> 00:41:34: ceiling tile acoustic ceilings and the carpet tiles as well.
00:41:35 --> 00:41:39: And then specifically in the foundations, we were able to
00:41:39 --> 00:41:43: replace 55% of the cement with a low carbon intensive
00:41:43 --> 00:41:46: cement and just to to give you a reference point
00:41:46 --> 00:41:50: that's similar to taking you know 2 million vehicle miles,
00:41:50 --> 00:41:53: not driven just as a carbon equivalency.
00:41:53 --> 00:41:58: So these decisions we're making are, are very powerful.

00:41:58 --> 00:42:01: And then I think I just have one last slide
00:42:01 --> 00:42:03: if you'd like to learn more about the project.
00:42:03 --> 00:42:04: This is the development team.
00:42:04 --> 00:42:06: So I just wanted to put their names and faces
00:42:06 --> 00:42:08: up there, that's their LinkedIn profiles.
00:42:09 --> 00:42:12: So if you or you know anyone who'd like to
00:42:12 --> 00:42:16: to leave some really stunning office space that's also low
00:42:16 --> 00:42:19: carbon and healthy, reach out to me Or or any
00:42:19 --> 00:42:21: of these three fantastic people.
00:42:22 --> 00:42:23: That's it for me, Vic.
00:42:25 --> 00:42:26: Excellent.
00:42:26 --> 00:42:28: Thank you so much to all three of you for
00:42:28 --> 00:42:30: your wonderful presentations.
00:42:30 --> 00:42:32: I'm going to go ahead and stop sharing my screen
00:42:33 --> 00:42:35: and if you'd like to pull your videos on and
00:42:35 --> 00:42:37: we can open it up for discussion.
00:42:38 --> 00:42:40: I was watching the Q&A function throughout and it looks
00:42:40 --> 00:42:43: like there's lots of good questions that are coming in
00:42:43 --> 00:42:44: from the audience as well.
00:42:45 --> 00:42:48: And I'll just plug another quick reminder, if you have
00:42:48 --> 00:42:51: questions, please feel free to continue to enter them.
00:42:51 --> 00:42:54: As we're chatting, I have a couple of first questions
00:42:54 --> 00:42:56: that to direct to the panelists.
00:42:57 --> 00:43:00: So first one being, you know as I was researching
00:43:00 --> 00:43:03: for this materials report, one of the big discoveries for
00:43:03 --> 00:43:05: me and maybe this is obvious to people who are
00:43:05 --> 00:43:08: working in this space all the time, but supporting better
00:43:08 --> 00:43:11: materials in many ways is more about the process changes
00:43:11 --> 00:43:14: that you can make to the development process to incorporate
00:43:14 --> 00:43:16: those better materials, better specs.
00:43:16 --> 00:43:20: Talking to manufacturers and Sidney, you highlighted some of those
00:43:20 --> 00:43:21: changes.
00:43:21 --> 00:43:23: I wonder if you might just be able to elaborate
00:43:23 --> 00:43:25: a little bit more on some of the things that
00:43:25 --> 00:43:28: you found to be most successful and if there's any
00:43:28 --> 00:43:31: low hanging fruit that people listening in can do right
00:43:31 --> 00:43:33: now to start to incorporate better materials.
00:43:34 --> 00:43:34: Yeah.
00:43:34 --> 00:43:39: I think I can't emphasize enough that one of the
00:43:39 --> 00:43:44: biggest pieces we really tried to change was leaving any
00:43:44 --> 00:43:49: product or material selection in the CA space after

procurement
00:43:49 --> 00:43:55: and shifting the majority of those selections to the design
00:43:55 --> 00:44:00: process because you means that you have better ability to
00:44:00 --> 00:44:05: vet it early without running into possible delays or impacts
00:44:05 --> 00:44:09: to construction or submittal schedules.
00:44:09 --> 00:44:13: So really pulling, pulling that out of submittal review, which
00:44:13 --> 00:44:16: is where it kind of traditionally lived and really living
00:44:16 --> 00:44:19: with the Subs to make sure that all the criteria
00:44:19 --> 00:44:22: was met and placing it back on the design team
00:44:22 --> 00:44:25: to make sure that you're really careful about what you're
00:44:25 --> 00:44:28: putting in the specs to begin with.
00:44:29 --> 00:44:32: And I think the other piece as I mentioned, really
00:44:32 --> 00:44:35: improving A workflow around how to take what we learned
00:44:36 --> 00:44:39: on past projects and be able to give design teams
00:44:39 --> 00:44:40: a starting point.
00:44:40 --> 00:44:42: There was one of the questions actually in the chat.
00:44:42 --> 00:44:45: There was do we do we prescribe A spec from
00:44:45 --> 00:44:49: the beginning or do we ask designers to go and
00:44:49 --> 00:44:50: research this?
00:44:50 --> 00:44:53: And my answer is we really do both.
00:44:53 --> 00:44:56: But we wanted to make it as easy as possible
00:44:56 --> 00:45:00: for the designers to start with Stuff already vetted that
00:45:00 --> 00:45:03: we knew met are really intense criteria like drywall or
00:45:03 --> 00:45:07: sealants or fire stopping or which is something maybe you
00:45:07 --> 00:45:10: know you don't want to spend a lot of time
00:45:10 --> 00:45:13: researching, you want to do the designers want to do
00:45:13 --> 00:45:17: the fun stuff they want to do the finishes and
00:45:17 --> 00:45:18: the cool technology stuff.
00:45:19 --> 00:45:21: So if I can kind of shepherd them and and
00:45:21 --> 00:45:24: give them a great starting point for that kind of
00:45:24 --> 00:45:25: material.
00:45:25 --> 00:45:27: The behind the wall stuff that we've spent a lot
00:45:27 --> 00:45:30: of time with the manufacturers really refining like insulation for
00:45:30 --> 00:45:31: example.
00:45:31 --> 00:45:35: It lets them kind of focus and and do some
00:45:35 --> 00:45:39: fun questions with some of them maybe more innovative or
00:45:39 --> 00:45:44: or present materials in the project sort of visible materials.
00:45:45 --> 00:45:49: And then finally, I think the biggest thing is that
00:45:49 --> 00:45:53: we think it's important for everyone in the project to
00:45:53 --> 00:45:57: understand their role and how critical they are to meeting
00:45:57 --> 00:46:01: the sustainability and health expectations for the project.

00:46:02 --> 00:46:05: So sitting with contractors making sure my face or one

00:46:05 --> 00:46:10: of my team members face is there one-on-one talking through

00:46:10 --> 00:46:15: exactly what the expectations are, educating them about material health,

00:46:15 --> 00:46:19: making sure it's clear there are consequences if they do

00:46:19 --> 00:46:23: not provide the documentation they're looking for or again that

00:46:23 --> 00:46:27: we're going to go ahead and test the whole project.

00:46:27 --> 00:46:28: So they better do their part.

00:46:30 --> 00:46:33: I think just making sure that that everyone's got buy

00:46:33 --> 00:46:37: in whether you're dragging them along or they're ready team

00:46:37 --> 00:46:40: members is is super key to to getting success.

00:46:40 --> 00:46:42: Oh, when you wanted low hanging fruit, sorry.

00:46:42 --> 00:46:45: I think going back to the behind the wall stuff

00:46:45 --> 00:46:49: like literally just hand over a drywall spec and an

00:46:49 --> 00:46:53: insulation spec and a concrete sealer, like give the stuff

00:46:53 --> 00:46:57: that like studs, you know, again like all the stuff

00:46:57 --> 00:46:59: that duck sealant etcetera.

00:46:59 --> 00:47:00: Like get that out of the way.

00:47:00 --> 00:47:03: Make that your basis for all of your projects if

00:47:03 --> 00:47:06: possible, so that you have a good list to start

00:47:06 --> 00:47:10: from, and then make the bespoke kind of project finishes

00:47:10 --> 00:47:12: or or pieces that are really visible.

00:47:13 --> 00:47:16: You can make that, you'll make those changes over time,

00:47:16 --> 00:47:19: but if you can start with like really good behind

00:47:19 --> 00:47:21: the wall stuff as a firm or as a company,

00:47:21 --> 00:47:23: I think you're already, you know, 50% of the way

00:47:23 --> 00:47:26: there with hitting some sustainable, healthy targets.

00:47:28 --> 00:47:29: Thank you so much.

00:47:29 --> 00:47:32: So many good Nuggets in that you talked a little

00:47:32 --> 00:47:36: bit about ensuring that everybody knows their role and having

00:47:36 --> 00:47:38: those conversations, Heidi.

00:47:38 --> 00:47:40: I know that was a big piece of 1550 on

00:47:40 --> 00:47:44: the green and having those conversations early with manufacturers and

00:47:45 --> 00:47:48: suppliers locally who at that point did not have environmental

00:47:48 --> 00:47:50: product declarations in place.

00:47:50 --> 00:47:54: But through those early conversations you were able to get

00:47:54 --> 00:47:55: them, you know, pull them along.

00:47:56 --> 00:47:58: So any additional thoughts that you wanted to add on

00:47:59 --> 00:47:59: that topic?

00:48:00 --> 00:48:01: Yeah, thanks.
00:48:02 --> 00:48:02: Yeah.
00:48:02 --> 00:48:04: And you know, I think if you're just really understanding
00:48:05 --> 00:48:07: what's most material and where you could have the most
00:48:07 --> 00:48:10: impact and focusing on that, right, don't let perfection get
00:48:10 --> 00:48:11: in the way of great progress.
00:48:12 --> 00:48:15: So yeah, we we proactively reached out to the key
00:48:15 --> 00:48:18: Subs, you know prior to bidding really to inform them
00:48:19 --> 00:48:20: of what our expectations were.
00:48:20 --> 00:48:23: We wrote an advocacy letter, we had a bunch of
00:48:23 --> 00:48:27: calls and basically told them that their ability to provide
00:48:27 --> 00:48:29: us with specific EP DS would be part of the
00:48:30 --> 00:48:31: selection and the word process.
00:48:31 --> 00:48:34: So that signalling was really important.
00:48:35 --> 00:48:38: And then you know as we reached out to suppliers
00:48:38 --> 00:48:41: just making sure that the EP DS would be created
00:48:41 --> 00:48:45: during the project since they weren't there at the beginning
00:48:45 --> 00:48:48: because when we started 1550 on the green, there were
00:48:48 --> 00:48:51: no concrete DP DS in the entire state of Texas.
00:48:51 --> 00:48:54: And now now there are because because of of the
00:48:54 --> 00:48:56: work that we did there and I'm sure other people
00:48:56 --> 00:48:58: are are building off of the work that we've done.
00:48:58 --> 00:49:01: But it's just so important to get everybody on board
00:49:01 --> 00:49:04: and and and really just signal to them that you
00:49:04 --> 00:49:06: know this is going to be heavily weighted in our
00:49:07 --> 00:49:09: decision making and you need to get on board.
00:49:11 --> 00:49:11: Thanks for that, Heidi.
00:49:12 --> 00:49:14: And Suzanne, I know you know going back to that
00:49:14 --> 00:49:18: process piece, there's a couple of different things that Prologis
00:49:18 --> 00:49:21: has done to incorporate better materials and embody carbon goals
00:49:21 --> 00:49:23: into your processes.
00:49:23 --> 00:49:24: Do you mind speaking to some of those?
00:49:25 --> 00:49:25: Yeah.
00:49:25 --> 00:49:28: So I think the first thing it starts, you know,
00:49:28 --> 00:49:29: with our capital deployment process.
00:49:29 --> 00:49:32: So again, I think I always think about ESG and
00:49:32 --> 00:49:35: sustainability as making sure it's not a separate process, but
00:49:35 --> 00:49:37: how do you build it into your processes like Sydney
00:49:37 --> 00:49:39: and Heidi have talked through.
00:49:40 --> 00:49:43: But the first thing is every investment committee memo, anytime

00:49:43 --> 00:49:46: we're gonna build a new building, anytime we're gonna do
00:49:47 --> 00:49:50: a major project, there are sections in that investment committee
00:49:50 --> 00:49:53: memo that have our new net zero requirements.
00:49:53 --> 00:49:55: So we can include the cost of the underwriting in
00:49:55 --> 00:49:56: that project.
00:49:56 --> 00:49:59: And then also it's an opportunity for teams when they
00:49:59 --> 00:50:02: are able to do different innovations or requests to kind
00:50:02 --> 00:50:05: of test things we're seeing that come through that process
00:50:05 --> 00:50:05: too.
00:50:05 --> 00:50:07: So it can really be discussed at the highest levels
00:50:07 --> 00:50:09: of the company in terms of what the learnings are
00:50:09 --> 00:50:12: and there's a learning section of what we've learned through
00:50:12 --> 00:50:13: the projects as well.
00:50:13 --> 00:50:16: So I think that has been a real key for
00:50:16 --> 00:50:18: us and and moving this forward.
00:50:18 --> 00:50:21: And then the other piece of that just from a
00:50:21 --> 00:50:24: data and learning perspective, our global ESG team reviews every
00:50:24 --> 00:50:27: investment committee memo that goes through to.
00:50:27 --> 00:50:29: And then we have that discussion back and forth with
00:50:29 --> 00:50:32: the teams when they have choices to make or when
00:50:32 --> 00:50:35: they're trying to move to a higher certification level or
00:50:35 --> 00:50:38: where they're trying to engage with our you know procurement
00:50:38 --> 00:50:41: team on different types of materials to make sure they're
00:50:41 --> 00:50:42: meeting our standards.
00:50:43 --> 00:50:47: The other thing I'd say from kind of the integration,
00:50:47 --> 00:50:51: we're lucky to have a Prologis Ventures arm that has
00:50:51 --> 00:50:55: invested 180 million and 40 early in the growth stage
00:50:55 --> 00:50:56: companies.
00:50:56 --> 00:51:00: But we've been having good conversations with them about circularity
00:51:00 --> 00:51:04: and you know basically the embodied carbon aspects and and
00:51:04 --> 00:51:08: all the innovations they're seeing in the market related to
00:51:08 --> 00:51:10: some of these new materials.
00:51:10 --> 00:51:12: So that's another piece.
00:51:12 --> 00:51:14: One new thing that they invested in last year related
00:51:14 --> 00:51:17: to our solar business is a company called Solar Cycle.
00:51:17 --> 00:51:20: So as we are scaling more solar installations, we're also
00:51:20 --> 00:51:25: investing and partnering with organizations that are really thinking about

00:51:25 --> 00:51:27: that life cycle approach to those as well.
00:51:29 --> 00:51:31: So I am happy to add more.
00:51:31 --> 00:51:33: I know there's a bunch of questions in the in
00:51:33 --> 00:51:33: the chat that I it's.
00:51:34 --> 00:51:34: Perfect.
00:51:34 --> 00:51:36: Yes, there are a bunch of questions in the chat.
00:51:36 --> 00:51:38: I just have one more that I wanted to get
00:51:38 --> 00:51:38: to.
00:51:38 --> 00:51:40: Talking about measurements.
00:51:40 --> 00:51:43: Obviously, there's some great tools on the market both to
00:51:43 --> 00:51:47: measure embodied carbon and material health a little bit more,
00:51:47 --> 00:51:49: a little easier for the embodied carbon piece.
00:51:49 --> 00:51:52: Right now, material health is maybe a little bit less
00:51:52 --> 00:51:53: tangible in some ways.
00:51:53 --> 00:51:58: Obviously there's health, product declarations and other labels that can
00:51:58 --> 00:51:59: help get us there.
00:52:00 --> 00:52:02: Vinny, you could speak to a little bit about what
00:52:02 --> 00:52:05: are you using to measure your success when it comes
00:52:05 --> 00:52:06: to material health?
00:52:06 --> 00:52:08: You talked a little bit about indoor air quality and
00:52:08 --> 00:52:09: some of those other pieces.
00:52:09 --> 00:52:11: I wonder if you could expand on that.
00:52:12 --> 00:52:13: Yeah, it is.
00:52:13 --> 00:52:15: I would say we honestly still also struggle with how
00:52:16 --> 00:52:18: to communicate the success in this area effectively.
00:52:18 --> 00:52:22: To your point, it's the the metric based idea of
00:52:22 --> 00:52:26: communicating material health in a or visually or graphically or
00:52:26 --> 00:52:30: even how do you put the the metrics together around
00:52:30 --> 00:52:33: this is I I certainly do not have a great
00:52:33 --> 00:52:34: solution off hand.
00:52:34 --> 00:52:39: However I do think luckily we have healthy building network
00:52:39 --> 00:52:43: which is working on a footprint tool which I think
00:52:43 --> 00:52:47: is going to be I really like what they're trying
00:52:47 --> 00:52:47: to do.
00:52:47 --> 00:52:50: And I was even thinking as, as I think about
00:52:50 --> 00:52:53: this question, that might be an opportunity for us to
00:52:53 --> 00:52:57: kind of retroactively actually go back through a project and
00:52:57 --> 00:52:59: and put it in there to sort of demonstrate a
00:52:59 --> 00:53:03: starting point and against the baseline of how much better
00:53:03 --> 00:53:07: our building is actually performed given the selections we've

done.

00:53:08 --> 00:53:11: I think mainly the piece that I used to talk

00:53:11 --> 00:53:16: about hitting success with healthy materials criteria is talking about

00:53:16 --> 00:53:20: the rigorous process we use to actually make the selections

00:53:20 --> 00:53:23: in the 1st place and ensure that what we've put

00:53:23 --> 00:53:27: in the design documents and we've selected actually makes it

00:53:27 --> 00:53:30: to the project and is what is installed.

00:53:30 --> 00:53:33: Because we don't just assume that what is in a

00:53:33 --> 00:53:35: set of documents is going to get there.

00:53:35 --> 00:53:39: There's a lot of checks and balances and oversight, and

00:53:39 --> 00:53:42: I think that is just as important to relay to

00:53:42 --> 00:53:46: somebody that we're serious about looking out for human and

00:53:46 --> 00:53:51: environmental health by implementing these process and putting human resources

00:53:51 --> 00:53:54: on it to watch this as it is through the

00:53:54 --> 00:53:57: vetting process itself and the selection itself.

00:53:57 --> 00:53:59: So that's typically what I use to convey it.

00:53:59 --> 00:54:02: One day I'll have a beautiful graphic and it'll be

00:54:02 --> 00:54:05: amazing and easy to understand, but we're not quite there

00:54:05 --> 00:54:05: yet.

00:54:07 --> 00:54:09: Be excited to look forward to it.

00:54:10 --> 00:54:12: So let's shift to some of the questions that are

00:54:12 --> 00:54:13: in the chat.

00:54:13 --> 00:54:16: Thanks to everyone who has plugged their questions in.

00:54:16 --> 00:54:19: We have a couple of questions that have been highly

00:54:19 --> 00:54:19: voted.

00:54:20 --> 00:54:21: I like this one.

00:54:21 --> 00:54:24: What do the presenters think is the major roadblock for

00:54:24 --> 00:54:28: developers to implement more and healthier buildings building materials?

00:54:28 --> 00:54:32: Is it cost, performance, lack of information and that can

00:54:32 --> 00:54:33: go to anyone?

00:54:33 --> 00:54:33: Yeah.

00:54:34 --> 00:54:34: Yeah, I can start.

00:54:34 --> 00:54:36: I think I think it's a mixture of things and

00:54:36 --> 00:54:39: sometimes and there's a lot moving in the external environment

00:54:39 --> 00:54:40: that's shifting this too.

00:54:40 --> 00:54:42: But I think cost is you know, still an issue,

00:54:42 --> 00:54:45: especially you know, I think there were some other questions

00:54:45 --> 00:54:48: in, in the chat around size, organization and what you're
00:54:48 --> 00:54:51: able to do in one project versus scaling across multiple
00:54:51 --> 00:54:51: ones.
00:54:52 --> 00:54:55: And I think it's a time horizon thing as well.
00:54:55 --> 00:54:58: Some of these, as they mature, I think the costs
00:54:58 --> 00:55:01: are going to change and become you know more useful
00:55:01 --> 00:55:02: as we go forward.
00:55:03 --> 00:55:06: I think the other piece is just human nature, resistance
00:55:06 --> 00:55:08: to change, you know what works, risk aversion of trying
00:55:08 --> 00:55:11: something new that you might have to replace if it's
00:55:11 --> 00:55:13: not durable enough or if there might be a risk.
00:55:13 --> 00:55:16: And then the third part is regulation.
00:55:16 --> 00:55:18: I think you had highlighted Victoria, some of the positive
00:55:18 --> 00:55:21: regulation moving to some of these, but I think there
00:55:21 --> 00:55:24: might be some of these more innovative materials that don't
00:55:24 --> 00:55:26: they're they're the regulations haven't caught up to them in
00:55:26 --> 00:55:29: certain jurisdictions and so you have to kind of balance
00:55:29 --> 00:55:30: that timing as well.
00:55:30 --> 00:55:34: So, but I think it's about changing your conversation internally
00:55:34 --> 00:55:37: to you know make sure you have the right processes
00:55:37 --> 00:55:40: and I like Sydney's never get surprised but also about
00:55:40 --> 00:55:43: creating that space for innovation, that space for testing that
00:55:43 --> 00:55:46: space for local teams to kind of identify local suppliers
00:55:46 --> 00:55:49: that then could be really you know part of that
00:55:49 --> 00:55:52: that project at that level and maybe scale across.
00:55:53 --> 00:55:55: In Victoria, if I can just build off of that
00:55:55 --> 00:55:57: too, there's there's just so many Co benefits when you
00:55:58 --> 00:55:59: look at it holistically, right.
00:55:59 --> 00:56:02: I mean and I forgot to mention at the beginning
00:56:02 --> 00:56:04: that we do, we do office and multi family and
00:56:04 --> 00:56:05: a couple of labs.
00:56:06 --> 00:56:09: So for the residential we're you know we're doing the
00:56:09 --> 00:56:13: interiors but for the office we're just doing corn shelf.
00:56:13 --> 00:56:16: So we have opportunities with with both.
00:56:16 --> 00:56:18: But you know I think we can really advocate for
00:56:18 --> 00:56:21: our tenants moving into our office spaces too.
00:56:21 --> 00:56:25: Like we've given them this really beautiful healthy, it's sustainable
00:56:25 --> 00:56:28: corn shell building and really encourage them when they do
00:56:28 --> 00:56:30: their fit outs to to to do it with the
00:56:30 --> 00:56:31: same mindset.
00:56:31 --> 00:56:34: But you know I think when you focus on healthy

00:56:34 --> 00:56:38: materials and when you focus on embodied carbon and and
00:56:38 --> 00:56:41: maybe think about the entire supply chain and who's being
00:56:42 --> 00:56:45: impacted by all of the work that we're doing, There's
00:56:45 --> 00:56:48: just multiple benefits, right As we get off of petroleum
00:56:49 --> 00:56:53: based products and we're healthy natural products, those products have
00:56:53 --> 00:56:55: a lower embodied carbon.
00:56:55 --> 00:56:58: So I think it's just that holistic look and you
00:56:58 --> 00:57:01: know, you know, asking our teams to to to do,
00:57:01 --> 00:57:04: to do the legwork and like Suzanne said, you know,
00:57:04 --> 00:57:07: it's change or so it makes everybody a little bit
00:57:07 --> 00:57:11: uneasy because they're not doing things the way they had
00:57:11 --> 00:57:12: been doing it.
00:57:12 --> 00:57:15: But that's everything we're doing in sustainability is always asking
00:57:15 --> 00:57:17: people to change what they're doing today to to make
00:57:17 --> 00:57:18: it even better for tomorrow.
00:57:19 --> 00:57:21: And I love what you said high to about Co
00:57:21 --> 00:57:23: benefits because I think there were some other kind of
00:57:23 --> 00:57:25: questions in the chat about, you know what are some
00:57:25 --> 00:57:27: of the health impacts of doing mass timber and and
00:57:27 --> 00:57:27: other things.
00:57:27 --> 00:57:30: And I think one thing we've learned through this project
00:57:30 --> 00:57:32: is you know the the next site panels that we
00:57:32 --> 00:57:34: used, they were the the, the wall units that they
00:57:34 --> 00:57:35: had for us.
00:57:35 --> 00:57:37: They were quicker to install.
00:57:37 --> 00:57:39: There were other health benefits and things.
00:57:39 --> 00:57:43: When you think about mass timber, there's you know, research
00:57:43 --> 00:57:46: studies out there with satisfaction from laborers liking to work
00:57:46 --> 00:57:48: there that's safer you know in terms of some of
00:57:48 --> 00:57:50: these other pieces sometimes.
00:57:50 --> 00:57:53: So I think really you might make a decision based
00:57:53 --> 00:57:56: on sustainability and you find it helps your time to
00:57:56 --> 00:57:56: build.
00:57:56 --> 00:57:58: It helps on some of your other metrics as well.
00:57:59 --> 00:58:02: I'm sorry to piggyback again, but then you just reminded
00:58:02 --> 00:58:05: me of something that on 1550 on the green, because
00:58:05 --> 00:58:07: we were so focused on the embodied carbon, we asked
00:58:07 --> 00:58:10: our engineer well to be more to really kind of
00:58:10 --> 00:58:13: find any opportunities to reduce and not oversize the structure.

00:58:13 --> 00:58:16: And so they were able to shave off I think
00:58:17 --> 00:58:20: 3/8 of an inch on the floor system on every
00:58:20 --> 00:58:22: single of those 28 floors.
00:58:22 --> 00:58:25: And that was equivalent to 700 cubic yards of concrete
00:58:25 --> 00:58:28: and 70 truckloads of concrete in and out of the
00:58:28 --> 00:58:29: neighbourhood.
00:58:29 --> 00:58:32: So even just thinking of all of the X, you
00:58:32 --> 00:58:35: know, all of that noise and traffic and you know,
00:58:35 --> 00:58:39: combustion from those trucks and the air quality impacts to
00:58:39 --> 00:58:41: the neighbourhood, reducing that.
00:58:41 --> 00:58:43: So 3/8 of an inch might not sound like a
00:58:43 --> 00:58:46: lot, but it had significant positive impacts.
00:58:47 --> 00:58:49: Amazing, wonderful.
00:58:49 --> 00:58:52: We're coming right up against the top of the hour
00:58:52 --> 00:58:54: and I'm so sorry that we weren't able to address
00:58:54 --> 00:58:56: all of the wonderful questions that came in through the
00:58:56 --> 00:58:57: chat.
00:58:57 --> 00:59:00: I want to thank the panelists so much for joining
00:59:00 --> 00:59:04: this conversation, for presenting and sharing about their impressive projects
00:59:04 --> 00:59:06: and for engaging in this discussion.
00:59:06 --> 00:59:09: We're so thrilled to be able to watch this change
00:59:09 --> 00:59:13: happen in the industry towards a better sustainable and healthy
00:59:13 --> 00:59:17: materials and we're glad that you were able to join
00:59:17 --> 00:59:18: this webinar.
00:59:18 --> 00:59:18: So thanks.
00:59:18 --> 00:59:21: Thanks for joining us today, Audience.
00:59:22 --> 00:59:24: We dropped a link for a short survey in the
00:59:24 --> 00:59:28: chat and we'd be grateful for your feedback If you
00:59:28 --> 00:59:30: might be able to share your thoughts.
00:59:31 --> 00:59:34: And again, keep an eye out for the recording of
00:59:34 --> 00:59:36: this webinar as well as a link to the Materials
00:59:37 --> 00:59:39: movement report which is coming out very soon.
00:59:40 --> 00:59:42: Thanks again and I hope you all have a wonderful
00:59:42 --> 00:59:42: day.
00:59:43 --> 00:59:43: Take care.
00:59:43 --> 00:59:43: Thank.
00:59:45 --> 00:59:45: You.