Webinar

State of Green: Leading Real Estate Voices on the Business Case for Sustainability
Date: October 11, 2023

00:00:07 --> 00:00:10: OK, we're a minute past the hour, so we'll go
00:00:10 --> 00:00:11: ahead and get started.
00:00:11 --> 00:00:12: Good afternoon.
00:00:12 --> 00:00:16: Welcome to today's webinar titled State of Green, Leading Real
00:00:16 --> 00:00:19: Estate Voices on the Business Case for Sustainability.
00:00:20 --> 00:00:22: My name is Blakely Jarrett.
00:00:22 --> 00:00:26: I'm a Senior director with the Urban Land Institute and
00:00:26 --> 00:00:28: the global Lead for Uli Greenprint.
00:00:29 --> 00:00:32: I'm delighted to welcome all of you here today and
00:00:32 --> 00:00:35: I will be serving as your moderator for the next
00:00:35 --> 00:00:36: hour next slide.
00:00:38 --> 00:00:41: So let me quickly introduce our speakers and then I'll
00:00:41 --> 00:00:44: give you some quick background on Uli Greenprint.
00:00:45 --> 00:00:48: So from Pembroke on the left, I'm joined by Caroline
00:00:48 --> 00:00:53: Johns, the Director of Sustainability and Joe Williams, the Development
00:00:53 --> 00:00:54: Director.
00:00:55 --> 00:00:58: And then I'm also joined by Kelsey Rose, the Senior
00:00:58 --> 00:01:02: Manager of Embodied Carbon at Heinz, as well as Becca
00:01:02 --> 00:01:05: Thames, the Director of ESG at Jamestown, LP.
00:01:07 --> 00:01:11: So Heinz, Jamestown and Pembroke all participate in Uli Greenprint,
00:01:11 --> 00:01:15: which is a global alliance of more than 120 real
00:01:15 --> 00:01:19: estate owner, developer and investor firms, all with a shared
00:01:19 --> 00:01:21: commitment to decarbonization.
00:01:22 --> 00:01:26: So these firms have committed to cost, effectively reducing their
00:01:26 --> 00:01:29: energy, water, waste and carbon emissions.

00:01:29 --> 00:01:33: And we help those members make progress on these decarbonization

00:01:33 --> 00:01:37: goals through knowledge sharing, benchmarking and member driven resources.

00:01:38 --> 00:01:42: So every year since 2009 Green perm members have reported

00:01:42 --> 00:01:46: their asset level environmental performance data to us which we

00:01:46 --> 00:01:47: roll up.

00:01:47 --> 00:01:51: We publish in the state of green annual performance report

00:01:51 --> 00:01:54: to show our community's progress on on their decarbonization and

00:01:54 --> 00:01:55: net zero goals.

00:01:56 --> 00:01:59: So the purpose of today's webinar is we will share

00:01:59 --> 00:02:01: a few results from the this year's State of Green

00:02:01 --> 00:02:02: report.

00:02:03 --> 00:02:05: The report itself will be published in the next couple

00:02:05 --> 00:02:05: of weeks.

00:02:07 --> 00:02:11: After we share those high level results, we'll have each

00:02:11 --> 00:02:14: of these three sets of speakers present a short project

00:02:14 --> 00:02:18: profile and all of the all of the profiles this

00:02:18 --> 00:02:21: year are focused on reducing embodied carbon.

00:02:21 --> 00:02:24: So we will have one in North America, one in

00:02:25 --> 00:02:27: Europe and one in Asia Pacific.

00:02:28 --> 00:02:28: Next slide.

00:02:32 --> 00:02:35: So this year for the first time, we piloted voluntary

00:02:35 --> 00:02:37: embodied carbon data collection.

00:02:38 --> 00:02:42: So this was in recognition that tracking and reducing embodied

00:02:42 --> 00:02:45: carbon is a critical step in real estate reaching net

00:02:45 --> 00:02:45: zero.

00:02:46 --> 00:02:49: We recognize that many firms are just beginning to wrap

00:02:49 --> 00:02:51: their heads around the complexities of embodied carbon.

00:02:52 --> 00:02:55: Maybe some firms haven't even gotten to that step yet,

00:02:55 --> 00:02:57: but we needed to start somewhere.

00:02:57 --> 00:03:00: So we're really excited to be able to pilot this

00:03:00 --> 00:03:03: data collection, even more excited to work with our members

00:03:04 --> 00:03:07: and collect even more embodied carbon data for state of

00:03:07 --> 00:03:08: green next year.

00:03:09 --> 00:03:11: So just to level this up briefly, what is embodied

00:03:11 --> 00:03:11: carbon?

00:03:12 --> 00:03:17: Embodied carbon is commonly defined as the emissions resulting from

00:03:17 --> 00:03:23: the manufacturing, transportation, installation, maintenance

and disposal of building materials.

00:03:23 --> 00:03:26: In case you can see the full spectrum on the

00:03:26 --> 00:03:26: slide here.

00:03:27 --> 00:03:30: So think of the emissions associated with extracting a raw

00:03:30 --> 00:03:34: material, the manufacturing process to convert those raw materials into

00:03:34 --> 00:03:38: a secondary product, trans the emissions associated with transporting that

00:03:38 --> 00:03:39: product to a construction site.

00:03:40 --> 00:03:41: You get the picture.

00:03:41 --> 00:03:44: All of the emissions that occur before a building is

00:03:44 --> 00:03:44: is operational.

00:03:46 --> 00:03:50: You're probably all familiar with the stat that buildings account

00:03:50 --> 00:03:53: for about 39% of global carbon emissions annually.

00:03:54 --> 00:03:56: What you may not know is that nearly a third

00:03:56 --> 00:03:59: of those emissions from buildings come from embodied carbon.

00:04:01 --> 00:04:05: With global floor area continue continuing to grow globally, now

00:04:05 --> 00:04:07: is the time for real estate to act on embodied

00:04:07 --> 00:04:08: carbon.

00:04:09 --> 00:04:12: If you're new to this topic, I highly recommend utilize

00:04:12 --> 00:04:13: Report.

00:04:13 --> 00:04:16: It's titled Embodied Carbon and Building Materials for Real Estate.

00:04:17 --> 00:04:19: You can do more of a deep dive in what

00:04:19 --> 00:04:22: embodied carbon is, why it matters to real estate and

00:04:22 --> 00:04:25: what you can do about it to begin reducing it

00:04:25 --> 00:04:26: in your portfolio.

00:04:28 --> 00:04:30: So I am now going to pass the this deck

00:04:30 --> 00:04:33: off to my colleague Morgan Maloney, who is a manager

00:04:33 --> 00:04:34: with ULI.

00:04:34 --> 00:04:38: Morgan LED this year's state of Green data collection effort,

00:04:38 --> 00:04:41: which is quite a massive undertaking and she's going to

00:04:41 --> 00:04:44: share a few results from that from that data.

00:04:45 --> 00:04:45: Morgan.

00:04:46 --> 00:04:47: Thanks, Blakely.

00:04:47 --> 00:04:50: I'm happy to present this year's ULI Green Print Environmental

00:04:50 --> 00:04:51: Performance data.

00:04:52 --> 00:04:57: Despite an ongoing pandemic recovery and global conflicts destabilizing energy

00:04:57 --> 00:05:02: prices, hole building energy consumption in 2021 to 2022

decreased

00:05:02 --> 00:05:05: by 1.6%, which is in line with the downward trend

00:05:05 --> 00:05:08: that we saw leading up to 2020 for energy use.

00:05:09 --> 00:05:13: Notably, hole building carbon emissions dropped by 6.6%, which we

00:05:13 --> 00:05:17: believe reflects the continued growth in renewable energy investments by

00:05:17 --> 00:05:18: our members.

00:05:19 --> 00:05:24: Whole building water consumption dropped by 1% and landfill waste

00:05:24 --> 00:05:25: dropped by 7.7%.

00:05:27 --> 00:05:30: So, as Blakely mentioned, this year also marks the start

00:05:30 --> 00:05:34: of ULI Green Prints incorporation of embodied carbon benchmarking.

00:05:34 --> 00:05:38: Members reported their total metric tons of CO2 produced in

00:05:38 --> 00:05:43: the creation and transportation of materials and the construction process.

00:05:43 --> 00:05:46: So in that chart that Blakely showed earlier, and if

00:05:46 --> 00:05:50: you're familiar, these are categories A1 through A5 of embodied

00:05:50 --> 00:05:50: carbon.

00:05:51 --> 00:05:55: The table that I'm showing here include the assets that

00:05:55 --> 00:05:59: were reported this year using tools like Tally EC3 and

00:05:59 --> 00:06:00: One Click LCA.

00:06:01 --> 00:06:03: As the saying goes, you can't manage what you don't

00:06:03 --> 00:06:07: measure, and we see this inaugural Embodied carbon reporting from

00:06:07 --> 00:06:09: members as an important step in the path to reducing

00:06:09 --> 00:06:12: embodied carbon in future projects, which we'll also hear a

00:06:13 --> 00:06:15: bit more about from our presenters shortly.

00:06:17 --> 00:06:22: This data below represents all of the committed member companies

00:06:22 --> 00:06:26: to ULI Green Prints net 0 carbon operations by 2050

00:06:26 --> 00:06:26: goal.

00:06:27 --> 00:06:29: So you can see on the left we have the

00:06:29 --> 00:06:33: carbon emissions broken out by scope and then we have

00:06:33 --> 00:06:37: the total of renewable energy both on site and off

00:06:37 --> 00:06:41: site, purchased green power and then the total carbon offsets.

00:06:41 --> 00:06:44: For the scopes, we have the intensities here.

00:06:44 --> 00:06:48: Scope one intensity dropped by about 2/3 from the previous

00:06:48 --> 00:06:51: year, which is very exciting.

00:06:51 --> 00:06:54: And then scope 2 intensities have increased slightly.

00:06:54 --> 00:06:57: And then this year is the first time that we're

00:06:57 --> 00:07:00: presenting Scope 310 and emissions, which is very exciting.
00:07:01 --> 00:07:04: For renewable energy, we also, as I noted, saw a
00:07:04 --> 00:07:07: dramatic uptick in renewable energy this year.
00:07:07 --> 00:07:11: And then as expected, carbon offsets remain relatively flat, which
00:07:11 --> 00:07:12: is what we expect.
00:07:13 --> 00:07:15: So the there will be a full deep dive into
00:07:15 --> 00:07:18: the numbers that I've referenced and the embodied carbon data
00:07:18 --> 00:07:21: in our State of Green report, which we'll be releasing
00:07:21 --> 00:07:22: in the next few weeks.
00:07:22 --> 00:07:23: So look out for that.
00:07:23 --> 00:07:26: And with that, I hand it back to you Blakely.
00:07:26 --> 00:07:27: Thanks, Morgan.
00:07:28 --> 00:07:31: So we have a quick, just a two question poll
00:07:31 --> 00:07:33: to kind of get a sense of where our audience
00:07:33 --> 00:07:36: is coming from today with respect to embodied carbon.
00:07:37 --> 00:07:39: So you should see that pull up right now.
00:07:39 --> 00:07:43: You can answer both questions at once and click submit.
00:08:03 --> 00:08:05: OK, Morgan, do you want to go ahead and close
00:08:05 --> 00:08:06: that poll?
00:08:08 --> 00:08:12: All right.
00:08:12 --> 00:08:16: So first we asked about your professional background and it
00:08:16 --> 00:08:20: looks like we have quite the spread got about 1/4
00:08:20 --> 00:08:26: consultants, about 20% developers, about 20% urban planners, 20% architects
00:08:26 --> 00:08:30: or designers and then the rest is a spread across
00:08:30 --> 00:08:35: academics, engineers, investors and public officials.
00:08:37 --> 00:08:39: It's great to know they've got such a a diversity
00:08:39 --> 00:08:40: in the audience.
00:08:41 --> 00:08:43: And then we ask you all to to rate yourselves
00:08:43 --> 00:08:45: on a scale of 1 to 10 in terms of
00:08:45 --> 00:08:46: your knowledge of embodied carbon.
00:08:47 --> 00:08:50: And it looks like the the leading category is intermediate.
00:08:51 --> 00:08:53: So about 60% of you are are somewhere in the
00:08:53 --> 00:08:55: middle in terms of your knowledge.
00:08:55 --> 00:08:55: That's great.
00:08:55 --> 00:08:59: Hopefully the information that we present today will be understandable
00:08:59 --> 00:09:02: to you, but also you can walk away with some
00:09:02 --> 00:09:05: new takeaways and information that you didn't have at the
00:09:05 --> 00:09:06: start of the hour.
00:09:07 --> 00:09:09: One thing I realized, I got too excited in the

00:09:09 --> 00:09:11: beginning of the webinar and I forgot some of our
00:09:11 --> 00:09:12: housekeeping items.
00:09:13 --> 00:09:15: So this webinar is being recorded.
00:09:16 --> 00:09:19: So both the slides and the recording will be available
00:09:19 --> 00:09:22: on Utilized Knowledge Finder in the next week or so.
00:09:23 --> 00:09:25: And the other thing I meant to mention is please
00:09:25 --> 00:09:28: submit your questions using the Q&A function as we go.
00:09:28 --> 00:09:31: We will reserve some time at the end to address
00:09:31 --> 00:09:34: as many of those questions as we can, so I've
00:09:34 --> 00:09:35: done enough talking.
00:09:36 --> 00:09:38: I'm delighted to pass it off today to our first
00:09:38 --> 00:09:41: speaker, who is Becca Timms from Jamestown.
00:09:41 --> 00:09:41: Becca.
00:09:44 --> 00:09:45: Thanks, Blakely.
00:09:46 --> 00:09:49: Really excited to be here this morning and talk about
00:09:49 --> 00:09:53: this case study 619 Ponce, which is the building located
00:09:53 --> 00:09:55: in Atlanta, GA You can go to the first slide
00:09:55 --> 00:09:56: Blakely.
00:09:57 --> 00:10:00: For those of you that don't know Jamestown, I'll introduce
00:10:00 --> 00:10:02: the company just briefly.
00:10:02 --> 00:10:06: Jamestown is a global design focused real estate investment and
00:10:06 --> 00:10:07: management firm.
00:10:07 --> 00:10:11: And as of June 30, 2023, Jamestown has about 12.3
00:10:11 --> 00:10:14: billion in assets under management.
00:10:14 --> 00:10:17: And our mission is to create places that inspire.
00:10:17 --> 00:10:20: And one of the things that I love about this
00:10:20 --> 00:10:22: mission is that a lot of our kind of ESG
00:10:22 --> 00:10:25: and placemaking efforts really fall right within that.
00:10:26 --> 00:10:29: So the the property that you're looking at is a
00:10:29 --> 00:10:32: property called Pot City Market.
00:10:32 --> 00:10:36: You can see a 1925 historic structure, the large brick
00:10:36 --> 00:10:40: structure and that was a former Sears and Roebuck regional
00:10:40 --> 00:10:42: distribution center.
00:10:42 --> 00:10:45: At one point it was the largest brick building east
00:10:45 --> 00:10:47: of the Mississippi.
00:10:47 --> 00:10:51: And so, since 2015, Jamestown redeveloped.
00:10:52 --> 00:10:56: And now manages the 2.1 million square foot main building
00:10:56 --> 00:10:59: and over the last couple of years has been working
00:10:59 --> 00:11:02: on some infill which you see on on the right
00:11:02 --> 00:11:04: hand side of that image.
00:11:04 --> 00:11:07: So 619 Ponce is the the low rise building.

00:11:07 --> 00:11:10: It's a four story mass timber loft office building.
00:11:11 --> 00:11:16: It includes 8087 thousand square feet of office space and
00:11:16 --> 00:11:19: 27,000 square feet of retail.
00:11:19 --> 00:11:22: And we're very proud to say that it's being constructed
00:11:23 --> 00:11:26: with local Georgia grown timber and it's targeting Net 0
00:11:26 --> 00:11:30: carbon operations, lead V4 core and shell certification as well
00:11:30 --> 00:11:32: as Fit Well certification.
00:11:32 --> 00:11:34: You can go to the next slide, Blakely.
00:11:35 --> 00:11:38: This is a rendering of of the project and one
00:11:38 --> 00:11:42: of the things that I wanted to to mention here
00:11:42 --> 00:11:45: is I'm going to talk a lot about embodied carbon
00:11:45 --> 00:11:46: today, but.
00:11:47 --> 00:11:50: I would say that for this particular project, there's been
00:11:50 --> 00:11:52: a really deep focus on materials in general.
00:11:53 --> 00:11:56: For the first time, we're piloting a kind of material
00:11:56 --> 00:12:00: decision tree, so we can really prioritize human health and
00:12:00 --> 00:12:04: minimize chemicals of concern with a special focus on interior
00:12:04 --> 00:12:06: high touch elements.
00:12:06 --> 00:12:10: We found that process and the conversation around materials, both
00:12:10 --> 00:12:13: from an embodied carbon as well as the health perspective,
00:12:13 --> 00:12:16: to be really, really educational for for the entire team.
00:12:17 --> 00:12:21: And in addition, we're also aiming to support the local
00:12:21 --> 00:12:25: economy by sourcing materials from within 100 miles wherever possible.
00:12:26 --> 00:12:27: You can go to the next slide.
00:12:29 --> 00:12:31: So I wanted to back up a little bit.
00:12:31 --> 00:12:36: You you saw the first image which was looking South.
00:12:36 --> 00:12:39: This site plan is looking N so you can see
00:12:39 --> 00:12:43: parcel B is where the 619 Ponce structure is located.
00:12:44 --> 00:12:46: But what led us to this final design?
00:12:46 --> 00:12:49: You can see on this, this block we had a
00:12:49 --> 00:12:51: couple of different infill parcels.
00:12:52 --> 00:12:54: That we were working with and really trying to find
00:12:54 --> 00:12:56: a home for this mass timber building.
00:12:56 --> 00:12:58: I'm going to talk a little bit in a second
00:12:58 --> 00:13:00: about Jamestown's timber business.
00:13:00 --> 00:13:02: But I think the idea of a mass timber building
00:13:02 --> 00:13:05: has has been something that it was an idea that's
00:13:05 --> 00:13:07: been cooking for a while.
00:13:07 --> 00:13:10: And I think it really took kind of the the
00:13:10 --> 00:13:14: perfect swirl of you know timing, alignment of partners as

00:13:14 --> 00:13:18: well as interest and I would say prioritizing on from
00:13:18 --> 00:13:20: both our development team.
00:13:20 --> 00:13:23: But also our, our timber fund.
00:13:24 --> 00:13:26: And so the the vision for phase two of Pont
00:13:26 --> 00:13:30: City Market was really a mix of housing and hospitality
00:13:30 --> 00:13:31: and office and retail.
00:13:32 --> 00:13:34: But it was really important that all of the new
00:13:35 --> 00:13:37: structures complement the existing building.
00:13:37 --> 00:13:41: So there's a huge focus on site circulation and connectivity.
00:13:41 --> 00:13:44: We wanted to do mass timber for the ESG reasons
00:13:44 --> 00:13:46: for general kind of innovation.
00:13:46 --> 00:13:48: We love the aesthetic.
00:13:48 --> 00:13:51: There are also some less voluntary factors or things that
00:13:51 --> 00:13:53: were a little bit more outside of our control.
00:13:54 --> 00:13:57: So you see Parcel F which is right along the
00:13:57 --> 00:14:00: Atlanta Beltline which is a rails to trail, rails to
00:14:00 --> 00:14:03: trail trail that goes around the the center of the
00:14:04 --> 00:14:04: city.
00:14:05 --> 00:14:08: Ideally we wanted to locate the Mast timber building there.
00:14:08 --> 00:14:12: There's a lot of pedestrian traffic, you know, future light
00:14:12 --> 00:14:14: rail planned, however, that.
00:14:15 --> 00:14:18: The particular trail is not accessible.
00:14:18 --> 00:14:21: It has limited truck access for fire fire trucks and
00:14:21 --> 00:14:24: so the fire department did not like the idea of
00:14:24 --> 00:14:27: a mass timber building along the Beltline, regardless of how
00:14:27 --> 00:14:30: fire safe mass timber is and has proven to be.
00:14:30 --> 00:14:34: And then we also had some restrictions related to preserving
00:14:34 --> 00:14:35: the view shed.
00:14:35 --> 00:14:38: So we ended up doing was splitting Parcel B and
00:14:38 --> 00:14:42: putting a high rise building to the South and then
00:14:42 --> 00:14:45: the low rise which is 619 Ponce closer to the
00:14:45 --> 00:14:46: Ponce de Leon.
00:14:46 --> 00:14:47: You can go to the next slide, Blakely.
00:14:50 --> 00:14:54: So one of the most interesting aspects of this type
00:14:54 --> 00:14:58: of project is what I like to call our ecosystem
00:14:58 --> 00:14:59: of providers.
00:14:59 --> 00:15:02: And I think when it comes to embodied carbon, one
00:15:02 --> 00:15:05: of the biggest themes that I've picked up on is
00:15:05 --> 00:15:09: that there really are a variety of, you know, formal
00:15:09 --> 00:15:13: and informal relationships both in terms of, you know, knowledge
00:15:13 --> 00:15:17: and information exchange anecdotes, stories from from the

trenches, so
00:15:17 --> 00:15:18: to speak.
00:15:19 --> 00:15:21: And that's really, really been interesting.
00:15:21 --> 00:15:22: We've learned a ton.
00:15:22 --> 00:15:24: My colleagues have learned a lot that way.
00:15:24 --> 00:15:28: So for this particular project we the team, you can
00:15:28 --> 00:15:31: see you know kind of the, the full team outline
00:15:31 --> 00:15:32: on the slide.
00:15:32 --> 00:15:36: But basically the way that the material flowed was we
00:15:36 --> 00:15:40: had saw timber that was transported to Georgia Pacific Sawmill
00:15:40 --> 00:15:44: in Albany, GA and at that sawmill the timber.
00:15:45 --> 00:15:48: Much of which was grown on Jamestown own forest was
00:15:48 --> 00:15:49: converted into lumber.
00:15:50 --> 00:15:53: That lumber was then transported to smart lambs mass timber
00:15:53 --> 00:15:57: facility in Dothan AL so right across the border between
00:15:57 --> 00:16:00: Georgia and Alabama and that's where it was manufactured into
00:16:00 --> 00:16:02: cross laminated timber or CLT panels.
00:16:03 --> 00:16:07: Then those panels were erected on site at Ponce City
00:16:07 --> 00:16:10: Market by Structure Craft and JE Dunn and we expect
00:16:10 --> 00:16:14: the the full building to be completed next year.
00:16:15 --> 00:16:20: What's really interesting about mass timber is no one is,
00:16:20 --> 00:16:23: I I would say no one has been doing this
00:16:23 --> 00:16:28: for a super long time, especially when you're trying to
00:16:28 --> 00:16:31: focus on a regional supply chain.
00:16:32 --> 00:16:36: And so you know, there's a lot of different variables
00:16:36 --> 00:16:39: and factors in terms of where your timber comes from,
00:16:39 --> 00:16:43: what type of mass timber you're building with and so.
00:16:43 --> 00:16:47: We've just found it incredibly valuable to to have dialogue
00:16:47 --> 00:16:50: with these partners and it's been, I would say, a
00:16:50 --> 00:16:53: really, really valuable learning experience for everyone involved.
00:16:54 --> 00:16:58: One of the product kind of factors that's listed here
00:16:58 --> 00:16:58: is cost.
00:16:58 --> 00:17:02: And I wanted to mention this just because it was
00:17:02 --> 00:17:06: a surprising part of the project when we were pricing
00:17:06 --> 00:17:10: this project during the SD phase in January of 2020.
00:17:12 --> 00:17:17: Between 2020 and May of 2021, timber prices jumped and
00:17:17 --> 00:17:19: we're at an all time high.
00:17:19 --> 00:17:22: So they more than doubled and it was really kind
00:17:22 --> 00:17:24: of putting a wrench in our plans to do mass

00:17:24 --> 00:17:26: timber for this project.
00:17:26 --> 00:17:30: Luckily timber prices came back down and by the time
00:17:30 --> 00:17:33: we were ready for procurement in May of 2022, prices
00:17:33 --> 00:17:36: were closer to to that 2020 starting point.
00:17:37 --> 00:17:40: But I just wanted to mention that pricing was a
00:17:40 --> 00:17:42: key component of this project.
00:17:42 --> 00:17:45: Go to the next slide, Blakely and I'll kind of
00:17:45 --> 00:17:45: wrap up.
00:17:46 --> 00:17:49: One of the other interesting parts of this project was
00:17:50 --> 00:17:52: that I mentioned this regional supply chain.
00:17:53 --> 00:17:56: So we were excited to reduce the transportation emissions and
00:17:56 --> 00:17:58: the overall environmental impact.
00:17:59 --> 00:18:02: But there's more more factors that we designed for.
00:18:02 --> 00:18:05: So you know, we designed for transportation for example.
00:18:05 --> 00:18:08: One of the interesting things about mass timber projects is
00:18:08 --> 00:18:09: you don't have.
00:18:10 --> 00:18:13: Concrete trucks lined up around the block.
00:18:13 --> 00:18:16: So we felt like the the experience for the in
00:18:16 --> 00:18:18: place tenants in the community was much better.
00:18:19 --> 00:18:22: So as we kind of work through the project life
00:18:22 --> 00:18:26: cycle, we're really considering all phases of the project including
00:18:26 --> 00:18:29: the eventual you know deconstruction and reuse of of the
00:18:29 --> 00:18:30: panels.
00:18:30 --> 00:18:31: You can go to the next slide.
00:18:33 --> 00:18:35: So this is just a final kind of shot as
00:18:35 --> 00:18:38: we were nearing the topping out of the building.
00:18:38 --> 00:18:40: You can go one more slide lately and I'll wrap
00:18:40 --> 00:18:41: on that one.
00:18:42 --> 00:18:42: Great.
00:18:42 --> 00:18:46: I wanted just to spend a couple minutes talking about
00:18:46 --> 00:18:49: what our project looks like in terms of the various
00:18:49 --> 00:18:53: components, so you can see kind of the the different
00:18:53 --> 00:18:56: parts of the CLT structure that you can see.
00:18:57 --> 00:19:00: But I would say the the most interesting thing was
00:19:00 --> 00:19:03: that we worked with Structure Craft to do an LC.
00:19:03 --> 00:19:08: And we compared the carbon footprint of the final structural
00:19:08 --> 00:19:14: design to an equivalent mild reinforced concrete building, which is
00:19:14 --> 00:19:16: common for for the South.
00:19:17 --> 00:19:20: So we really wanted to highlight the difference between the
00:19:20 --> 00:19:23: carbon emissions for the gravity system, which is the beams,

00:19:23 --> 00:19:24: columns and floors.
00:19:24 --> 00:19:27: And we wanted to ignore the building elements that would
00:19:27 --> 00:19:28: be shared between a traditional.
00:19:29 --> 00:19:31: Building and a mass timber building.
00:19:31 --> 00:19:34: We learned that the timber gravity system in the final
00:19:35 --> 00:19:38: design resulted in an almost 75% reduction in carbon emissions
00:19:38 --> 00:19:41: when compared to the equivalent concrete gravity system.
00:19:42 --> 00:19:46: And that's even ignoring the carbon that's captured by the
00:19:46 --> 00:19:47: trees when they grow.
00:19:48 --> 00:19:52: So when you include embedded carbon, the final building has
00:19:52 --> 00:19:56: a net negative of 1266 tons of carbon emissions and
00:19:57 --> 00:20:02: that's the equivalent of eliminating approximately 300 cars from the
00:20:02 --> 00:20:03: road for a year.
00:20:04 --> 00:20:06: We can dig more into those numbers and you know,
00:20:06 --> 00:20:09: kind of how the metrics shake out across these various
00:20:09 --> 00:20:09: projects.
00:20:09 --> 00:20:12: But yeah, thanks for the time and for listening about
00:20:12 --> 00:20:13: the project.
00:20:16 --> 00:20:17: Thank you, Becca.
00:20:17 --> 00:20:20: I'm really impressed by the, the 75% reduction number.
00:20:20 --> 00:20:21: That's amazing.
00:20:22 --> 00:20:24: I I know one of the things we had talked
00:20:24 --> 00:20:26: about when we were prepping for this is that it
00:20:26 --> 00:20:28: was important to you to have data so that you
00:20:28 --> 00:20:30: could tell the story of this project to kind of
00:20:30 --> 00:20:33: present some of those numbers you just talked about about
00:20:33 --> 00:20:35: the embodied carbon reductions and and other benefits.
00:20:36 --> 00:20:39: So I'm curious about what you know with something like
00:20:39 --> 00:20:42: obtaining that data which doesn't have an immediate or obvious
00:20:43 --> 00:20:46: return on investment, what was that like internally to kind
00:20:46 --> 00:20:48: of get by in to to collect the type of
00:20:48 --> 00:20:51: data that maybe you all hadn't collected before?
00:20:52 --> 00:20:54: Really, I think a lot of the credit for this
00:20:54 --> 00:20:56: project goes back to Structure Craft.
00:20:56 --> 00:20:59: They're the ones that took the lead on those calculations.
00:20:59 --> 00:21:02: But you know, our goal for this project was.
00:21:02 --> 00:21:06: To take our learnings from the Embody carbon benchmarking and
00:21:06 --> 00:21:10: really try to scale something that we can do more

00:21:10 --> 00:21:11: portfolio wide.
00:21:11 --> 00:21:16: So we're certainly interested in other ways to calculate this.
00:21:17 --> 00:21:20: And one of the things that I would love to
00:21:20 --> 00:21:22: do is find a tool that I could test out
00:21:22 --> 00:21:25: and compare the results of that tool to the structure
00:21:25 --> 00:21:26: Craft numbers.
00:21:27 --> 00:21:29: You know, I think the biggest thing is that it's
00:21:29 --> 00:21:33: important that you're clear and transparent about you know what
00:21:33 --> 00:21:36: you are counting, what you're not counting and overall what
00:21:36 --> 00:21:37: your approach is.
00:21:37 --> 00:21:40: And I think until the industry kind of settles on
00:21:40 --> 00:21:43: a generally accepted way of doing this and then doing
00:21:43 --> 00:21:47: this accounting, that transparency is probably the most important thing
00:21:47 --> 00:21:50: and we're all learning as we, as we try different
00:21:51 --> 00:21:53: methodologies, totally agree on transparency.
00:21:55 --> 00:21:59: So I believe we're hearing from Pembroke next Caroline and
00:21:59 --> 00:21:59: Joe.
00:22:02 --> 00:22:02: Great.
00:22:02 --> 00:22:03: Thanks, Blakely.
00:22:04 --> 00:22:06: I'm Caroline Johns with Pembroke.
00:22:06 --> 00:22:07: I'm Director of Sustainability.
00:22:07 --> 00:22:10: I'm joined by Joe Williams, Director of Development.
00:22:10 --> 00:22:14: And we're both here to represent two different aspects of
00:22:14 --> 00:22:15: this development.
00:22:15 --> 00:22:18: It's a slightly different story from Becca's in that it's
00:22:18 --> 00:22:19: it's a redevelopment.
00:22:20 --> 00:22:24: Before we get started, Pembroke is an international real estate
00:22:24 --> 00:22:28: advisor and we're across 13 markets in in key markets
00:22:28 --> 00:22:29: around the world.
00:22:30 --> 00:22:32: And so this one is in London.
00:22:32 --> 00:22:35: And my role on it was I was previously Director
00:22:35 --> 00:22:38: of Development, I was in the development team for about
00:22:38 --> 00:22:42: 10 years before this role was created as Director of
00:22:42 --> 00:22:43: Sustainability.
00:22:43 --> 00:22:47: And so I oversaw the planning approvals and internal investment
00:22:47 --> 00:22:49: approvals for this project.
00:22:50 --> 00:22:54: And then stepped away and Joe delivered the actual construction
00:22:54 --> 00:22:56: of this building in 2022.

00:22:56 --> 00:22:59: So Morgan, if you go to the next slide, please,
00:23:00 --> 00:23:01: this is 25 Cannon Street.
00:23:02 --> 00:23:04: It is in the heart of the City of London.
00:23:04 --> 00:23:06: As you might be able to see from the reflection,
00:23:06 --> 00:23:08: it's right across the garden from Saint Paul's Cathedral.
00:23:09 --> 00:23:12: And so it's a really beautiful prime location.
00:23:12 --> 00:23:16: And we Pembroke, had developed the original building.
00:23:17 --> 00:23:20: About 20 years prior to this project.
00:23:20 --> 00:23:24: And so the equipment in the building was reaching into
00:23:24 --> 00:23:27: useful life and there was a really great opportunity with
00:23:28 --> 00:23:32: leasing to reposition the building for the modern office tenants.
00:23:33 --> 00:23:35: And if you go to the next slide, it'll give
00:23:35 --> 00:23:37: you another indication of the location.
00:23:37 --> 00:23:40: This is from our rooftop terrace that we developed for
00:23:40 --> 00:23:44: the tenants and it's an island site, so it's really
00:23:44 --> 00:23:45: clear on all sides.
00:23:45 --> 00:23:46: It has beautiful views.
00:23:47 --> 00:23:51: And because of this prime location, it was also under
00:23:51 --> 00:23:54: close scrutiny by the planners in the City of London.
00:23:56 --> 00:24:01: And so there were really three unique features that determined
00:24:01 --> 00:24:06: much of the final product, the high profile location, the
00:24:06 --> 00:24:11: structural facade and the MEP strategy which had a lot
00:24:11 --> 00:24:12: of value creation.
00:24:12 --> 00:24:14: So if you go to the next slide, I'll show.
00:24:15 --> 00:24:19: The original building that we delivered was on the left
00:24:19 --> 00:24:23: and you know, I had this neoclassical facade, really heavy
00:24:23 --> 00:24:25: structural features.
00:24:25 --> 00:24:28: The pediment at the top actually blocked views from the
00:24:28 --> 00:24:30: top floor of the cathedral.
00:24:30 --> 00:24:33: And so there was a lot that we were, we
00:24:34 --> 00:24:38: were looking to change about the building, but we were
00:24:38 --> 00:24:42: constrained in a few ways the the location was both
00:24:42 --> 00:24:44: an opportunity and a challenge.
00:24:45 --> 00:24:49: Because of the proximity to Saint Paul's there was no
00:24:49 --> 00:24:53: opportunity to build up and and there was also a
00:24:53 --> 00:24:58: lot of sensitivity and preference for keeping the existing building
00:24:58 --> 00:25:04: character somewhat similar and unrecognizable just because of how visible
00:25:04 --> 00:25:07: it is in the in the city from the cathedral.
00:25:08 --> 00:25:12: And so we did look at complete demolition.

00:25:12 --> 00:25:15: And decided against it both from an economic standpoint as
00:25:15 --> 00:25:17: well as a risk standpoint.
00:25:17 --> 00:25:20: This was in 2018 and so Brexit was looming and
00:25:20 --> 00:25:24: we were really eager to deliver a product that was
00:25:24 --> 00:25:25: going to lease.
00:25:26 --> 00:25:31: We looked at completely taking the facade off to create
00:25:31 --> 00:25:36: much bigger windows and similarly it was not viable economically
00:25:36 --> 00:25:39: and so for some really practical.
00:25:40 --> 00:25:45: Honestly, business reasons we set to reposition the existing building,
00:25:45 --> 00:25:50: working with the structural facade to expand the windows as
00:25:50 --> 00:25:54: much as possible and really create a more modern office
00:25:54 --> 00:25:55: experience.
00:25:55 --> 00:25:59: And so the the picture on the right was delivered
00:25:59 --> 00:26:01: last year in 2022 and the MEP strategy that I
00:26:01 --> 00:26:04: mentioned earlier is also kind of a nice.
00:26:05 --> 00:26:09: Aspect of the of embodied carbon and reusing the existing
00:26:09 --> 00:26:12: building as it was and maximizing opportunity.
00:26:12 --> 00:26:15: In the picture on the left below the garden.
00:26:16 --> 00:26:20: That's where the original MEP equipment lived, and our MEP
00:26:20 --> 00:26:24: engineers looked at the project and said there's an opportunity
00:26:24 --> 00:26:28: to relocate this equipment to the roof, convert the building
00:26:28 --> 00:26:29: to be all electric.
00:26:30 --> 00:26:33: Somehow, they kept it under the height restrictions for Saint
00:26:33 --> 00:26:34: Paul's.
00:26:35 --> 00:26:38: And then we wanted to create a light well so
00:26:38 --> 00:26:41: that there would be a space below this garden with
00:26:41 --> 00:26:45: natural light that would that would really be interesting to
00:26:45 --> 00:26:47: occupy for a future tenant.
00:26:47 --> 00:26:50: But of course being in such a high profile location,
00:26:50 --> 00:26:53: we couldn't just cut a hole in the garden and
00:26:53 --> 00:26:56: we worked closely with the city planners to create instead
00:26:56 --> 00:26:57: this pool on the right.
00:26:57 --> 00:27:00: So if you go to the next slide, Morgan, this
00:27:01 --> 00:27:03: reflecting pool now creates.
00:27:03 --> 00:27:06: A nice reflection of of Saint Paul's from above and
00:27:06 --> 00:27:10: below there is there are two skylights that bring natural
00:27:10 --> 00:27:14: light into the space and then there's this beautiful lush
00:27:14 --> 00:27:18: garden that attracts people for for lunchtime and relaxing and
00:27:18 --> 00:27:22: you know photo shoots and Hollywood interests and things like

00:27:22 --> 00:27:23: that.
00:27:23 --> 00:27:27: So the value of reusing the existing building and maximizing
00:27:27 --> 00:27:29: what we had on site was really.
00:27:31 --> 00:27:34: Kind of a a driving importance and and Joe will
00:27:34 --> 00:27:36: get into the embodied carbon that we then calculated later.
00:27:36 --> 00:27:40: But because of the approach of this project, it was
00:27:41 --> 00:27:45: really it was, it was honestly kind of a business
00:27:45 --> 00:27:50: decision that I think aligned nicely with the environmental upside
00:27:50 --> 00:27:54: and I think that's that's very often the case with
00:27:54 --> 00:27:58: with adaptive reuse and and this office space was 100%
00:27:59 --> 00:28:00: pre leased in 2019 so.
00:28:01 --> 00:28:03: I think the the strategy really played out from a
00:28:04 --> 00:28:06: business perspective and I'll hand it over to Joe to
00:28:06 --> 00:28:09: talk about the embodied carbon journey as well.
00:28:11 --> 00:28:12: Thank you.
00:28:12 --> 00:28:13: I think there's what if you go to the next
00:28:13 --> 00:28:14: slide please.
00:28:14 --> 00:28:17: Yeah, this is just one more decision for some, some
00:28:17 --> 00:28:21: low hanging fruit perhaps which was to sort of rationalize
00:28:21 --> 00:28:22: some of the materials.
00:28:22 --> 00:28:24: We had this kind of oak throughout the building and
00:28:25 --> 00:28:27: we had lots of different types of it and we
00:28:27 --> 00:28:29: we consolidated that to be a kind of European oak
00:28:29 --> 00:28:29: and.
00:28:30 --> 00:28:32: This is also just giving you a flavour of the
00:28:32 --> 00:28:34: kind of look and feel on the inside.
00:28:35 --> 00:28:37: So next slide if you can.
00:28:40 --> 00:28:42: So this is a little bit more of a techie
00:28:42 --> 00:28:45: slide, but essentially these are the results.
00:28:45 --> 00:28:48: So on the right is there's a pie chart that
00:28:48 --> 00:28:51: kind of shows where the carbon was spent, and on
00:28:51 --> 00:28:55: the left you've got 2 tables which are showing the
00:28:55 --> 00:28:59: kind of upfront embodied carbon, which is the top one.
00:28:59 --> 00:29:02: Which is everything to construction and then the bottom table
00:29:03 --> 00:29:05: is everything going to be on through through use and
00:29:05 --> 00:29:08: demolition and it makes assumptions over a kind of 60
00:29:08 --> 00:29:09: year time frame.
00:29:10 --> 00:29:14: These are kind of these are produced by a body
00:29:14 --> 00:29:19: here called Letty which stands for the London Energy Transformation
00:29:19 --> 00:29:20: Initiative.
00:29:20 --> 00:29:24: But essentially they're a body that a target setting a

00:29:24 --> 00:29:28: series of step targets for 2030 and 2020 and by.
00:29:29 --> 00:29:29: Asset class.
00:29:30 --> 00:29:34: So against this you know we this building achieved an
00:29:34 --> 00:29:38: A rating for both the kind of upfront embodied carbon
00:29:38 --> 00:29:44: and also the the lifetime embodied carbon partially for obviously
00:29:44 --> 00:29:49: the reasons which which well the reasons that Caroline mentioned
00:29:49 --> 00:29:54: in essentially it's a refurbishment and not to rebuild and
00:29:54 --> 00:29:58: all those little decisions that were made but also.
00:29:59 --> 00:29:59: They did.
00:29:59 --> 00:30:02: The study recognized a few things that we could have
00:30:02 --> 00:30:02: been better.
00:30:03 --> 00:30:05: You know, not all the decisions we made were conscious
00:30:05 --> 00:30:07: and thinking about carbon necessarily.
00:30:09 --> 00:30:13: Some of these larger segments of the pie chart the
00:30:13 --> 00:30:15: frame and internal walls.
00:30:15 --> 00:30:19: But for example, there are some ideas about using electric
00:30:19 --> 00:30:23: arc furnace steel which we didn't do, perhaps could have
00:30:23 --> 00:30:23: done.
00:30:24 --> 00:30:26: Not a lot of steel in the scheme but but
00:30:26 --> 00:30:28: still that would have done something meaningful.
00:30:29 --> 00:30:33: We also had within the glaze facade there were some
00:30:33 --> 00:30:38: ideas around using timber for the internal facing mullions rather
00:30:38 --> 00:30:43: than anodized aluminium and there were kind of other things
00:30:43 --> 00:30:45: like raised floor tiles.
00:30:45 --> 00:30:48: Not every market has the metal pan floor tiles, but
00:30:48 --> 00:30:51: that's common in in the UK and we could have
00:30:51 --> 00:30:52: reused those.
00:30:53 --> 00:30:55: But you know, these are some of the things which
00:30:55 --> 00:30:57: we are pushing forwards and thinking about in our next,
00:30:57 --> 00:30:58: you know, other schemes.
00:30:58 --> 00:31:02: You know, we've got other buildings where we are trying
00:31:02 --> 00:31:06: to keep things like ductwork and pipe work if it
00:31:06 --> 00:31:10: can be, if it can be surveyed and validated, which
00:31:10 --> 00:31:15: is interesting and a challenge, but but yeah, definitely some
00:31:15 --> 00:31:18: lessons, lessons learned from from this.
00:31:18 --> 00:31:20: But we're happy, we're happy with the results.
00:31:21 --> 00:31:23: And I think that's I'll hand back.
00:31:23 --> 00:31:24: Thank you.
00:31:26 --> 00:31:27: Great.
00:31:27 --> 00:31:27: Thank you all.

00:31:28 --> 00:31:31: I love that you shared, Caroline, that this was an

00:31:31 --> 00:31:34: example of a repositioning where your business objectives are really

00:31:34 --> 00:31:36: well aligned with your environmental objectives.

00:31:37 --> 00:31:40: You know, I'd be curious to hear if there were

00:31:40 --> 00:31:43: any considerations you can share that you all faced when

00:31:43 --> 00:31:47: you were going all electric or embody carbon trade-offs that

00:31:47 --> 00:31:50: you faced when you were repositioning this building.

00:31:51 --> 00:31:51: Sure.

00:31:51 --> 00:31:55: So the all electric decision was was a really interesting

00:31:55 --> 00:31:55: one.

00:31:55 --> 00:32:01: It was actually an opportunity raised by our MEP engineers.

00:32:01 --> 00:32:06: They proactively said, look, this is coming to London as

00:32:06 --> 00:32:11: a regulation for residential and we see it as the

00:32:11 --> 00:32:12: future of.

00:32:12 --> 00:32:15: Of office space is something that tenants are going to

00:32:15 --> 00:32:18: be demanding once it becomes regulation and and tenants who

00:32:19 --> 00:32:21: are more aligned with environmental considerations.

00:32:23 --> 00:32:26: You know you don't want to miss this opportunity to

00:32:26 --> 00:32:29: really do the right thing for the environment and align

00:32:29 --> 00:32:31: with with future market expectations and requirements.

00:32:33 --> 00:32:35: And so we we took that advice, we we looked

00:32:35 --> 00:32:39: at it really carefully and found that it actually was

00:32:39 --> 00:32:40: going to take up.

00:32:41 --> 00:32:44: Less space in our plant room and less space in

00:32:44 --> 00:32:47: the chase ways up to the roof and it was

00:32:47 --> 00:32:49: going to be more efficient.

00:32:49 --> 00:32:53: And so we we again you know made the right

00:32:53 --> 00:32:57: business decision that also prioritized the environment.

00:32:58 --> 00:33:03: We really try to do that whenever possible and in

00:33:03 --> 00:33:06: terms of embodied carbon, that.

00:33:06 --> 00:33:08: You know, kind of played in nicely.

00:33:08 --> 00:33:10: We were replacing all of the equipment anyway.

00:33:10 --> 00:33:12: It was the end of useful life and so it

00:33:12 --> 00:33:14: was net neutral from that perspective.

00:33:16 --> 00:33:16: Great.

00:33:17 --> 00:33:18: Thank you both.

00:33:19 --> 00:33:19: Sure.

00:33:20 --> 00:33:21: Thank you, Kelsey.

00:33:21 --> 00:33:21: You're up next.

00:33:25 --> 00:33:26: Awesome.

00:33:27 --> 00:33:30: Thank you, Blakely, and thanks again to Uli for the
00:33:30 --> 00:33:32: opportunity to participate on this panel.
00:33:33 --> 00:33:36: I said at the beginning, my name is Kelsey Rose,
00:33:36 --> 00:33:39: I am the Senior Manager of Embodied Carbon Strategy at
00:33:39 --> 00:33:39: Heinz.
00:33:40 --> 00:33:42: If you're not familiar with Heinz, Heinz is a global
00:33:42 --> 00:33:45: real estate investment development and property manager.
00:33:45 --> 00:33:49: We are headquartered in Houston, TX, but we have a
00:33:49 --> 00:33:52: global presence with over 90 billion in assets.
00:33:53 --> 00:33:56: And the project that I'd like to speak to today
00:33:56 --> 00:33:59: is one of our T3 projects, T3 Collingwood and it's
00:33:59 --> 00:34:01: located in Melbourne, Australia.
00:34:02 --> 00:34:06: Our T3 projects standing for timber transit and technology started
00:34:07 --> 00:34:11: with the first location in Minneapolis, MN, which was completed
00:34:11 --> 00:34:12: in 2016.
00:34:12 --> 00:34:16: The T3 projects are mass timber office buildings aimed at
00:34:16 --> 00:34:19: creating comfortable and inspiring work locations.
00:34:19 --> 00:34:23: They contain not only high quality office elements and amenities
00:34:23 --> 00:34:26: that you would find in any new office building, right,
00:34:26 --> 00:34:29: But also a biophilic experience that comes from the mass
00:34:29 --> 00:34:32: timber and that provides its own unique type of benefits
00:34:32 --> 00:34:33: for for its occupants.
00:34:34 --> 00:34:37: So since the first one in 2016 completed in 2016,
00:34:38 --> 00:34:42: the T3 project type has been replicated across the United
00:34:42 --> 00:34:42: States.
00:34:42 --> 00:34:46: We've got one in Denver, Atlanta, Nashville, others and outside
00:34:46 --> 00:34:48: of the US as well, so.
00:34:48 --> 00:34:53: Overall, we have 26 of them planned, under construction or
00:34:53 --> 00:34:54: completed right now.
00:34:55 --> 00:34:59: So next slide, Morgan T3, Collingwood is our first T3
00:35:00 --> 00:35:01: project in Australia.
00:35:02 --> 00:35:04: And it's actually the first ground up development for Heinz
00:35:04 --> 00:35:05: in Australia.
00:35:05 --> 00:35:09: We've done refurbishments and we've done large renovation projects there.
00:35:09 --> 00:35:12: So we've definitely done work in Australia before, but I'm
00:35:12 --> 00:35:14: really excited that our first ground up one is, is
00:35:14 --> 00:35:16: actually a mass timber project.
00:35:16 --> 00:35:19: I think that's a really exciting kind of opportunity there.

00:35:20 --> 00:35:24: It's over 18,000 square meters, which is about 200,000 square

00:35:24 --> 00:35:24: feet.

00:35:24 --> 00:35:28: And it consists of glue, laminated glue, lamb column and

00:35:28 --> 00:35:32: beam construction with cross laminated CLT flooring.

00:35:33 --> 00:35:36: It just finished construction on Friday, this last Friday.

00:35:36 --> 00:35:40: So the team is is really excited about that and

00:35:40 --> 00:35:44: for now T3 Collingwood is the tallest mass timber building

00:35:44 --> 00:35:46: in Australia There.

00:35:46 --> 00:35:48: I think there are two other projects that are coming

00:35:48 --> 00:35:51: for that title right now, but for right now it's

00:35:51 --> 00:35:53: the it's the tallest in mass in in Australia.

00:35:53 --> 00:35:54: Next slide.

00:35:56 --> 00:36:00: So because of its master restructure, T3 Callingwood was able

00:36:00 --> 00:36:03: to reduce its carbon footprint by over 10% as compared

00:36:03 --> 00:36:06: to a normal concrete or steel building in Australia.

00:36:07 --> 00:36:10: We're still waiting for the final life cycle assessment or

00:36:10 --> 00:36:14: LCA report from the team because we've seen closer to

00:36:14 --> 00:36:16: 30% reductions with our other T3 projects.

00:36:16 --> 00:36:19: So we'll hopefully update these numbers as as more information

00:36:19 --> 00:36:22: comes in, going back to data and data transparency.

00:36:23 --> 00:36:26: That I think Becca was talking about earlier, but in

00:36:26 --> 00:36:29: a in a business as usual case, this project would

00:36:29 --> 00:36:32: have consisted of a concrete structural system.

00:36:33 --> 00:36:36: So to realize this project as mass timber, the team

00:36:36 --> 00:36:40: faced challenges with navigating the national construction code and getting

00:36:40 --> 00:36:44: the local jurisdiction on board with a mass timber building

00:36:44 --> 00:36:45: of this size.

00:36:45 --> 00:36:48: So just like we faced with the 1st T3 project

00:36:48 --> 00:36:50: in Minneapolis about a decade ago is when it was

00:36:50 --> 00:36:53: going through design and and permitting and whatnot.

00:36:54 --> 00:36:56: A lot of the work had to be a lot

00:36:56 --> 00:36:59: of work had to be done to convince the local

00:36:59 --> 00:37:02: jurisdiction for T3, Collingwood and in this case actually the

00:37:02 --> 00:37:05: fire brigade, to allow the use of a mass timber

00:37:05 --> 00:37:07: structural system.

00:37:08 --> 00:37:12: As an example, this included this convincing included special fire

00:37:12 --> 00:37:13: testing.

00:37:13 --> 00:37:17: Heinz commissioned 6 different fire tests from a private

company
00:37:17 --> 00:37:21: to prove the resilience and the structural integrity of the
00:37:21 --> 00:37:24: mass timber connections that were used in T3 Collingwood and
00:37:24 --> 00:37:28: and because of all of these challenges there was actually
00:37:28 --> 00:37:30: a good chance at one point kind of a pivotal
00:37:30 --> 00:37:33: moment for the Heinz team, the good chance that the
00:37:33 --> 00:37:36: mass timber aspect would have to have been scrapped.
00:37:37 --> 00:37:39: And the project would have had to go back to
00:37:39 --> 00:37:41: your typical concrete construction.
00:37:42 --> 00:37:45: Thankfully the team was really persistent and and steadfast in
00:37:46 --> 00:37:49: its vision to make mass timber, a mass timber project
00:37:49 --> 00:37:52: work, something that I really commend them for given all
00:37:52 --> 00:37:53: of the challenges.
00:37:54 --> 00:37:58: And eventually approval was given to move forward with the
00:37:58 --> 00:38:02: master restructural frame by the local authorities, which allows us
00:38:02 --> 00:38:05: to tell a great embodied carbon story and also a
00:38:05 --> 00:38:09: story of pushing the market, the local market from a
00:38:09 --> 00:38:14: code and jurisdiction perspective towards allowing master reconstruction.
00:38:15 --> 00:38:16: Next slide.
00:38:17 --> 00:38:17: Thank you.
00:38:18 --> 00:38:21: So even with the approval to go mask Timber, the
00:38:21 --> 00:38:24: challenges with getting that approval did leave their mark on
00:38:24 --> 00:38:25: T3 Collingwood.
00:38:25 --> 00:38:28: If you were to visit our T Threes in Minneapolis
00:38:28 --> 00:38:31: or in Denver, you'd see a lot more exposed mask
00:38:31 --> 00:38:34: timber than you would see in Collingwood unfortunately.
00:38:34 --> 00:38:38: And that's because the team in Collingwood wasn't able to
00:38:38 --> 00:38:41: convince the local authorities the cladding of the underside of
00:38:41 --> 00:38:43: the floor system wasn't necessary.
00:38:43 --> 00:38:45: So you can see in in the picture on the
00:38:45 --> 00:38:46: right.
00:38:46 --> 00:38:50: There is drywall covering the underside of the CLT floor,
00:38:50 --> 00:38:53: Saabs, and that's because of fire concerns.
00:38:53 --> 00:38:58: Drywall does add another protection of of another layer of
00:38:58 --> 00:39:00: Fire Protection to the CLT.
00:39:00 --> 00:39:03: And so this covering, you know, it's it's really a
00:39:03 --> 00:39:07: shame from a biophilic perspective, obviously from an aesthetic perspective.
00:39:08 --> 00:39:11: I had the chance in September of last year to

00:39:11 --> 00:39:14: hang out around some CLT vertical panels for a few
00:39:14 --> 00:39:16: days and they're just gorgeous.
00:39:16 --> 00:39:18: You you just kind of want to reach out and
00:39:18 --> 00:39:18: touch them.
00:39:18 --> 00:39:20: So, so obviously it's an ex.
00:39:21 --> 00:39:24: It's a shame from both both of those perspectives, but
00:39:24 --> 00:39:28: it's also a shame from the carbon perspective because you
00:39:28 --> 00:39:31: have all this beautiful wood and then you you close
00:39:31 --> 00:39:34: it up with drywall and adding drywall just adds more
00:39:34 --> 00:39:35: in body carbon.
00:39:36 --> 00:39:39: And so although we're really, really proud of this project
00:39:39 --> 00:39:43: and really proud of the work that the Heinz team
00:39:43 --> 00:39:46: did to push the local mark market towards accepting mass
00:39:46 --> 00:39:50: timber construction, a take away here is that the local
00:39:50 --> 00:39:53: code and authorities can have a really big impact on
00:39:53 --> 00:39:56: any project but mass timber in particular.
00:39:57 --> 00:39:59: So I think it's nice that Heinz has been doing
00:39:59 --> 00:40:00: T3 projects for almost a decade.
00:40:02 --> 00:40:04: And we'll continue to to to build and grow our
00:40:04 --> 00:40:07: knowledge and use it to push the envelope wherever we
00:40:07 --> 00:40:08: do decide to build.
00:40:08 --> 00:40:10: But it's just kind of a note that there's always
00:40:10 --> 00:40:11: more work to be done.
00:40:11 --> 00:40:14: And we hope the work done on this project and
00:40:14 --> 00:40:16: the other T threes continues to pave the way for
00:40:17 --> 00:40:19: more mass timber construction in the future.
00:40:19 --> 00:40:21: With that, I'll hang back to you lately.
00:40:23 --> 00:40:26: Thank you Kelsey, I really appreciated kind of the the
00:40:26 --> 00:40:29: detail and the flavour that you gave us about working
00:40:29 --> 00:40:29: with.
00:40:30 --> 00:40:32: Permitting officials and with the fire brigade and kind of
00:40:32 --> 00:40:35: their level of comfort and and some of the trade-offs
00:40:35 --> 00:40:36: that you had to make in your design as a
00:40:36 --> 00:40:37: result of that.
00:40:38 --> 00:40:41: One thing I'm also curious about is the the local
00:40:41 --> 00:40:41: workforce.
00:40:42 --> 00:40:46: So did you run into limited workforce availability because you
00:40:46 --> 00:40:50: know, lack of familiarity or skills working with these materials?
00:40:51 --> 00:40:53: Yeah, that's that's a great question and that's that's a
00:40:54 --> 00:40:56: good question that could be asked for any of our
00:40:56 --> 00:40:56: T3 projects.

00:40:57 --> 00:41:00: So just like there's an education aspect when it comes
00:41:00 --> 00:41:04: to the local jurisdictions or fire brigade authorities in general,
00:41:04 --> 00:41:07: there's also a level of education that's required for the
00:41:07 --> 00:41:08: construction team.
00:41:08 --> 00:41:12: So the T3 Collingwood Heinz team had challenges finding a
00:41:12 --> 00:41:16: local company in Melbourne that specialized in mass timber construction,
00:41:16 --> 00:41:18: not design but construction.
00:41:19 --> 00:41:22: And the group they originally went with actually went through,
00:41:22 --> 00:41:25: went into liquidation halfway through the project.
00:41:26 --> 00:41:26: Yeah.
00:41:27 --> 00:41:29: So thankfully that portion of the labor was folded into
00:41:29 --> 00:41:32: another organization that allowed them to continue that work through
00:41:32 --> 00:41:34: the GC, through the general contractor.
00:41:35 --> 00:41:37: And I think they only lost two days they said
00:41:37 --> 00:41:39: because of that of of work on site.
00:41:40 --> 00:41:43: But but the team, the Heinz team noted that they
00:41:43 --> 00:41:46: couldn't just go back out to the labor market because
00:41:46 --> 00:41:49: there's so few folks that, that had the right skill
00:41:49 --> 00:41:51: set to do this construction.
00:41:51 --> 00:41:54: So that's kind of one of the challenges that you
00:41:54 --> 00:41:56: face, but they they do know that there's, there's positives,
00:41:56 --> 00:41:59: there's positives to mass timber construction, a lot of them
00:41:59 --> 00:42:02: and one of that being the speed of construction.
00:42:02 --> 00:42:06: So because mass timber elements are prefabricated and cut off
00:42:06 --> 00:42:10: site, you can almost literally drive them up to the
00:42:10 --> 00:42:13: construction site and drop them into place and that really
00:42:14 --> 00:42:16: aids with the speed of construction.
00:42:16 --> 00:42:19: You also need less of less amount of folks on
00:42:19 --> 00:42:22: site at any given time for a construction project they
00:42:22 --> 00:42:25: were saying that you need like 50 to 60 folks
00:42:25 --> 00:42:27: where with a mask timber you only need 8 to
00:42:27 --> 00:42:27: 10.
00:42:27 --> 00:42:31: So it's one of those things that again, there's there's
00:42:31 --> 00:42:34: trade-offs and it's all about growing the knowledge for for
00:42:34 --> 00:42:36: everyone involved.
00:42:37 --> 00:42:38: Great.
00:42:38 --> 00:42:38: Thank you.
00:42:40 --> 00:42:42: So I think we can bring the slides down.
00:42:43 --> 00:42:46: We will now open it up to some Q&A.
00:42:46 --> 00:42:48: We had some questions coming in through the the Q&A

00:42:48 --> 00:42:49: function.
00:42:49 --> 00:42:51: Feel free to keep submitting those.
00:42:52 --> 00:42:54: I'd like to start us off with a question for
00:42:54 --> 00:42:55: all of the panelists.
00:42:55 --> 00:42:59: Maybe we can start with you, Becca, since you were
00:42:59 --> 00:43:01: the the 1st to go, which is it was really
00:43:02 --> 00:43:06: interesting to hear about these embody carbon projects across three
00:43:06 --> 00:43:11: really different regions with you know, very different regulations, market
00:43:11 --> 00:43:12: conditions.
00:43:12 --> 00:43:13: Investor demands.
00:43:14 --> 00:43:16: So I'd I'd love to hear from the three of
00:43:16 --> 00:43:19: you and in your respective regions really what's driving a
00:43:19 --> 00:43:22: focus on a body carbon and a willingness to kind
00:43:22 --> 00:43:25: of go up this learning curve and invest and kind
00:43:25 --> 00:43:27: of learn along the way in these projects?
00:43:29 --> 00:43:32: Yeah, I'm happy to kick the conversation off with this
00:43:32 --> 00:43:32: one.
00:43:32 --> 00:43:36: You know, I think embodied carbon has been kind of
00:43:36 --> 00:43:39: gaining momentum over the past five years, I would say.
00:43:40 --> 00:43:44: To be honest, I think it's somewhat underestimated how long
00:43:44 --> 00:43:47: it can take to get good clean data.
00:43:47 --> 00:43:51: I think there's owners and investors that are still struggling
00:43:51 --> 00:43:56: to kind of comprehensively and accurately measure their operational carbon.
00:43:56 --> 00:43:59: And so I would say, as there's been an increased
00:43:59 --> 00:44:04: focus on decarbonization overall, but certainly Scope 3 emissions embodied
00:44:04 --> 00:44:07: carbon has been a natural place to start.
00:44:09 --> 00:44:10: I'll I'll stop there and leave it for some of
00:44:10 --> 00:44:11: the other panelists to chime in.
00:44:14 --> 00:44:16: I'm happy to jump in next.
00:44:16 --> 00:44:17: I agree with everything Becca said.
00:44:17 --> 00:44:20: But in addition, we're seeing in some of our markets
00:44:20 --> 00:44:22: coming from a tenant demand as well.
00:44:23 --> 00:44:26: In some places like Stockholm, there are some global tenants
00:44:26 --> 00:44:29: who only tour buildings if they are reused and they
00:44:29 --> 00:44:33: won't go into a new building just based on environmental
00:44:33 --> 00:44:37: principle and alignment with with their commitments and goals as
00:44:37 --> 00:44:37: company.

00:44:38 --> 00:44:41: And so I think there are strong market and economic
00:44:41 --> 00:44:45: reasons to focus on it as well that's maybe I'll
00:44:45 --> 00:44:49: kind of round that out with there's, there's there's pushing
00:44:49 --> 00:44:53: from all angles, you know there's, there's jurisdictions, right.
00:44:54 --> 00:44:56: So obviously I work in London, there's a lot of
00:44:56 --> 00:44:59: great legislation or you know it has depending on your
00:44:59 --> 00:45:01: viewpoint legislation around embodied carbon.
00:45:02 --> 00:45:05: I know you know California just passed legislation that goes
00:45:05 --> 00:45:07: into effect next year around embodied carbon.
00:45:08 --> 00:45:10: We're seeing it from the policy standpoint.
00:45:10 --> 00:45:13: We're also seeing that at the federal level, but we're
00:45:13 --> 00:45:15: also seeing it from a lot of enthusiasm from consultants.
00:45:15 --> 00:45:18: So I used to be a structural engineer and then
00:45:18 --> 00:45:21: after that I I was working at in tool development
00:45:21 --> 00:45:22: for embody carbon tools.
00:45:22 --> 00:45:25: And so I think it's it's all aspects of the
00:45:25 --> 00:45:29: team as they're starting to get education around this, they're
00:45:29 --> 00:45:31: all pushing it in their own right.
00:45:31 --> 00:45:33: So even if an owner isn't pushing in, it may
00:45:33 --> 00:45:35: be an architect is pushing it or policy is pushing
00:45:35 --> 00:45:36: it.
00:45:36 --> 00:45:38: We're just kind of seeing it from all aspects.
00:45:38 --> 00:45:41: I think tenants, as Caroline said, is a is a
00:45:41 --> 00:45:42: huge one, right so.
00:45:43 --> 00:45:45: So one thing that I did want to tag on
00:45:45 --> 00:45:48: there, and I say this a lot when people are
00:45:48 --> 00:45:51: trying to sell me embodied carbon tracking and management tools,
00:45:51 --> 00:45:54: is that there's a lot of interest, a lot of
00:45:54 --> 00:45:55: kind of chatter.
00:45:56 --> 00:46:00: I haven't had anyone yet demand that I pursue mass
00:46:00 --> 00:46:01: timber.
00:46:01 --> 00:46:04: And so at least for us that's part of why
00:46:04 --> 00:46:06: it's been a little bit of an asset by asset
00:46:06 --> 00:46:07: conversation.
00:46:07 --> 00:46:10: So with 619 points kind of to, to your point
00:46:10 --> 00:46:14: Caroline, we were able to achieve some impressive leasing which
00:46:14 --> 00:46:17: I think was really driven by the mass timber aspect
00:46:17 --> 00:46:21: and by tenants that highly valued that and you know,
00:46:21 --> 00:46:24: wanted to get people out of their pajamas and into
00:46:24 --> 00:46:25: an interesting office.
00:46:26 --> 00:46:29: But I will say that the lack of an investor

00:46:29 --> 00:46:33: specifically demanding it has impacted my willingness to pay and

00:46:33 --> 00:46:36: it's made it a little bit more difficult to justify

00:46:36 --> 00:46:40: paying for some additional tracking tools, which is something that

00:46:40 --> 00:46:42: I'm I'm trying to overcome.

00:46:46 --> 00:46:50: So another thing I'm curious, you know Becca, you mentioned

00:46:50 --> 00:46:53: on on your project a goal of sourcing as many

00:46:53 --> 00:46:55: materials as possible within 100 mile range.

00:46:56 --> 00:46:58: I'm curious if this is a part of anyone else's

00:46:58 --> 00:47:01: strategy you know, whether related to mask, timber or or

00:47:02 --> 00:47:03: materials more broadly.

00:47:06 --> 00:47:09: It's something that we've really started to look at closely.

00:47:09 --> 00:47:13: We have a development currently in Stockholm where our contractor

00:47:13 --> 00:47:17: is tracking materials and and actively looking to make substitutions

00:47:17 --> 00:47:20: where possible throughout the the design and development process.

00:47:21 --> 00:47:25: Haven't set a specific radius the way Jamestown has.

00:47:25 --> 00:47:28: But it's definitely something that that we're starting to look

00:47:28 --> 00:47:30: at more closely on a on a case by case

00:47:30 --> 00:47:30: basis.

00:47:32 --> 00:47:34: I'd say on our end we're weighing the pros and

00:47:34 --> 00:47:37: cons just like you might weigh for operational versus embodied.

00:47:38 --> 00:47:42: Just you know if if there aren't available you know

00:47:42 --> 00:47:46: products or materials within a certain radius then you do

00:47:46 --> 00:47:49: need to look outside of that.

00:47:49 --> 00:47:51: And so it's kind of looking at it holistically, it's

00:47:51 --> 00:47:54: it's taking into account the transportation effects but also the

00:47:54 --> 00:47:55: embodied carbon.

00:47:55 --> 00:47:58: If you can, if you can source lower embodied carbon

00:47:58 --> 00:48:02: materials from the couple states over and the transportation isn't,

00:48:02 --> 00:48:04: isn't so bad, you know, you kind of have to

00:48:04 --> 00:48:06: weigh those two together.

00:48:06 --> 00:48:08: So I I say there's no silver bullet, right.

00:48:08 --> 00:48:11: When it comes to embodied carbon, you can't just say

00:48:11 --> 00:48:13: thou shalt source from X, you know, radius, right.

00:48:13 --> 00:48:16: It has to be a holistic approach, but I think

00:48:16 --> 00:48:19: local sourcing is is great from many different aspects.

00:48:19 --> 00:48:22: It's not just carbon, it's also social community, it's it's

00:48:22 --> 00:48:24: raising the the market within that local context.
00:48:24 --> 00:48:27: So but it it takes a holistic view, you know?
00:48:28 --> 00:48:29: Absolutely.
00:48:30 --> 00:48:32: We're getting a few questions on cost.
00:48:33 --> 00:48:36: So maybe y'all could speak to what you've seen in
00:48:36 --> 00:48:40: terms of any cost differential between a traditional building and
00:48:40 --> 00:48:42: a lower embodied carbon building.
00:48:42 --> 00:48:46: And maybe kind of wrapped into the the discussion on
00:48:46 --> 00:48:48: cost, kind of what benefits are you seeing.
00:48:48 --> 00:48:51: So there are a handful of questions about leasing velocity
00:48:51 --> 00:48:54: or you know, other kind of benefits that you might
00:48:54 --> 00:48:57: get from incorporating lower embodied carbon materials.
00:49:00 --> 00:49:02: You know, I'm going to chime in with just a
00:49:02 --> 00:49:05: broad response because I don't have the the exact numbers,
00:49:05 --> 00:49:07: but I think with any sort of.
00:49:09 --> 00:49:12: Kind of new new technology or new innovation, I think
00:49:12 --> 00:49:15: it really comes down to kind of an integrated planning
00:49:15 --> 00:49:18: and design process so that you can eliminate as many
00:49:18 --> 00:49:20: unknown variables as possible.
00:49:21 --> 00:49:24: I mentioned earlier that some of the global timber prices,
00:49:24 --> 00:49:28: you know, really could have completely sidetracked our goal to
00:49:28 --> 00:49:31: to do mass timber from a cost perspective.
00:49:32 --> 00:49:34: But again there are savings in terms of the amount
00:49:34 --> 00:49:37: of Labor you need on site and how quickly a
00:49:37 --> 00:49:38: building comes together.
00:49:38 --> 00:49:41: Other things like fewer disruptions to in place tenants and
00:49:42 --> 00:49:45: neighbors, things that can be a little bit more difficult
00:49:45 --> 00:49:48: to quantify, but are certainly part of that kind of
00:49:48 --> 00:49:51: overall value prop conversation as well as speed of construction.
00:49:55 --> 00:49:58: I've got something to say about the, you know, the
00:49:58 --> 00:49:59: more refurb end of things.
00:50:00 --> 00:50:04: We on another scheme not the one we just presented,
00:50:04 --> 00:50:08: you know we have gone further with keeping so we've
00:50:08 --> 00:50:12: kept floor tiles, we've kept fire rated ductwork in the
00:50:12 --> 00:50:16: basements and sprinkler systems and actually that saved you know
00:50:16 --> 00:50:21: over 1,000,000 pounds actually of of a substantial number.
00:50:21 --> 00:50:24: But it does bring with it challenges.
00:50:24 --> 00:50:29: So you you know, people like warranties, they like things
00:50:29 --> 00:50:30: wrapped and.

00:50:30 --> 00:50:32: They they you know tenants like that too.
00:50:33 --> 00:50:36: So you kind of you take it on as a
00:50:36 --> 00:50:39: as a as a challenge to sort of make the
00:50:39 --> 00:50:40: old good.
00:50:40 --> 00:50:45: And you know usually standards have moved on.
00:50:46 --> 00:50:48: You know that that might be a 20 year old
00:50:48 --> 00:50:52: system that you're in you're keeping the inanimate objects, you
00:50:52 --> 00:50:53: know a piece of ductwork.
00:50:54 --> 00:50:57: There's nothing necessarily wrong with it, but now you've got
00:50:57 --> 00:50:58: different rules about.
00:50:58 --> 00:51:01: The junctions with with other bits and pieces.
00:51:01 --> 00:51:02: So that's what you know it's worth.
00:51:02 --> 00:51:05: It's actually you can save as you go, but it
00:51:05 --> 00:51:06: does.
00:51:06 --> 00:51:07: It brings challenges.
00:51:09 --> 00:51:10: I appreciate it.
00:51:11 --> 00:51:13: Go ahead, I can add to that from the master
00:51:13 --> 00:51:16: timber and also from a kind of a circularity.
00:51:16 --> 00:51:19: So for for T3 Collingwood the the premium for for
00:51:19 --> 00:51:22: going mass timber was about 5 to 6% and that's
00:51:22 --> 00:51:25: something that the Heinz team just had to decide whether
00:51:25 --> 00:51:27: or not they wanted to pursue that.
00:51:27 --> 00:51:31: And then thankfully they did and they actually looked at
00:51:31 --> 00:51:34: how how to source the CLT panels and I thought
00:51:34 --> 00:51:35: it was cool.
00:51:35 --> 00:51:39: They found that sourcing from local Australia was more cost
00:51:39 --> 00:51:42: effective by by quite a bit from a shipping aspect
00:51:42 --> 00:51:45: which is also a good good for carbon.
00:51:45 --> 00:51:49: So that's some that's a premium on A1 specific project.
00:51:49 --> 00:51:51: I think because of a lot of things that Becca
00:51:51 --> 00:51:54: was saying with with the market, it's really hard to
00:51:54 --> 00:51:57: say that embodied carbon, low embodied carbon is going to
00:51:57 --> 00:52:00: cost you X percent on the project because it's really
00:52:00 --> 00:52:02: a case by case basis.
00:52:03 --> 00:52:05: For one of our fit outs that we did for
00:52:06 --> 00:52:09: a Heinz, A Heinz office, we really, really went for
00:52:09 --> 00:52:10: circularity.
00:52:10 --> 00:52:14: And in that case and that again was at a
00:52:14 --> 00:52:16: premium, maybe a little.
00:52:16 --> 00:52:19: We just had it maybe a different experience than what,
00:52:19 --> 00:52:22: than what Joe said because taking the materials existing,

taking
00:52:22 --> 00:52:25: them out, storing them, changing them so that they actually
00:52:26 --> 00:52:28: worked in the new configuration, all of those things come
00:52:29 --> 00:52:31: at a price And and we found that those were
00:52:31 --> 00:52:33: actually more costly than if we had just bought new,
00:52:34 --> 00:52:35: which is kind of counter intuitive.
00:52:35 --> 00:52:38: I'm hoping that the market goes the other way when
00:52:38 --> 00:52:41: it comes to mass timber and like circularity principles, but
00:52:41 --> 00:52:44: there is a bit of a premium that we're seeing
00:52:44 --> 00:52:44: right now.
00:52:45 --> 00:52:46: Again, it ebbs and flows though.
00:52:49 --> 00:52:53: We're getting several questions about mast timber and multifamily.
00:52:54 --> 00:52:57: So are any of you using mast timber and multifamily
00:52:57 --> 00:52:59: and kind of a follow up that a couple folks
00:52:59 --> 00:53:02: have asked is kind of what height limits you run
00:53:02 --> 00:53:02: into?
00:53:07 --> 00:53:12: We've looked into mast timber for multifamily also kind of
00:53:12 --> 00:53:16: trying to layer in elements of kind of prefab or
00:53:16 --> 00:53:18: modular construction as well.
00:53:19 --> 00:53:22: That project got kind of put on hold, so we
00:53:22 --> 00:53:25: would love to develop some multifamily mass timber.
00:53:26 --> 00:53:29: I would say the, the height restrictions is something that
00:53:29 --> 00:53:30: I've been a little bit less close to.
00:53:31 --> 00:53:33: But you know, I know it varies a ton by
00:53:33 --> 00:53:36: region and I would just put in a plug for
00:53:36 --> 00:53:39: Woodworks, which is just one industry organization that's done a
00:53:39 --> 00:53:42: lot of great work and has a ton of resources
00:53:42 --> 00:53:45: on their website about some of the code work that's
00:53:45 --> 00:53:46: being done.
00:53:46 --> 00:53:48: But I'm sure Kelsey, Caroline, Joey might have more to
00:53:48 --> 00:53:48: say.
00:53:49 --> 00:53:49: On that.
00:53:51 --> 00:53:53: We don't currently have any.
00:53:53 --> 00:53:56: Our portfolio right now is mostly mixed-use commercial office.
00:53:57 --> 00:54:01: We are looking at at other residential opportunities and might
00:54:01 --> 00:54:05: be in our future but not currently and we do
00:54:05 --> 00:54:09: have low and high rise residential in our portfolio.
00:54:09 --> 00:54:13: But I think that it's so far hasn't pencilled out
00:54:13 --> 00:54:15: for them to go mass timber.
00:54:16 --> 00:54:18: I know it's something that we've looked at, but from

00:54:18 --> 00:54:21: a programming standpoint, in the needs of the, the space

00:54:21 --> 00:54:23: for, you know, for living in, I I think so

00:54:23 --> 00:54:25: far it just hasn't hasn't made sense in the same

00:54:25 --> 00:54:28: way that it's made sense for office or mixed-use.

00:54:31 --> 00:54:37: Right, Becca, there's also interest in your embodied Carbon Decision

00:54:37 --> 00:54:37: Treaty.

00:54:39 --> 00:54:43: Yeah, it that was actually more of a a material

00:54:43 --> 00:54:45: decision tree.

00:54:45 --> 00:54:47: So for example, you know we consider just kind of

00:54:47 --> 00:54:50: a full, you know, Red List, Red List free approach,

00:54:50 --> 00:54:51: excuse me.

00:54:51 --> 00:54:54: But basically what we had was a decision tree that

00:54:54 --> 00:54:56: looked at factors such as you know what is the

00:54:56 --> 00:54:59: surface, is it high touch or low touch, is there

00:54:59 --> 00:55:01: a cost premium, are there product alternatives.

00:55:02 --> 00:55:04: And the goal for that was just to have a

00:55:04 --> 00:55:07: very visible process so that everyone on the project team

00:55:07 --> 00:55:09: knew what to escalate and what not to.

00:55:09 --> 00:55:15: And it allowed just for more streamlined communication between ownership

00:55:15 --> 00:55:16: and the the design team.

00:55:18 --> 00:55:19: I see some other questions.

00:55:19 --> 00:55:23: Not to steal your Thunder Blakely on, just the avoided

00:55:23 --> 00:55:27: cost of offsets for this cost impact analysis.

00:55:27 --> 00:55:30: You know, just speaking for Jamestown, I think we've tried

00:55:30 --> 00:55:34: to be really, really conservative, probably overly conservative in all

00:55:34 --> 00:55:35: of our estimates.

00:55:35 --> 00:55:37: You know, we want to make sure that we're being

00:55:37 --> 00:55:38: transparent.

00:55:38 --> 00:55:41: We're not kind of overstating any of our claims.

00:55:41 --> 00:55:43: So we're constantly trying to poke holes in our math

00:55:43 --> 00:55:46: and, you know, kind of compare different ways to consider

00:55:46 --> 00:55:46: the numbers.

00:55:47 --> 00:55:51: Much like when we talk about the the carbon sequestered

00:55:51 --> 00:55:54: by the trees that we grow to date, we're just

00:55:54 --> 00:55:57: counting, you know, annual new growth, not limbs and roots

00:55:57 --> 00:56:00: and things like that that are underground.

00:56:00 --> 00:56:03: So I'd say we're being pretty conservative, but there's lots

00:56:03 --> 00:56:06: of ability to add more components into that formula.

00:56:09 --> 00:56:14: Is anyone else thinking about things like avoided offsets when

00:56:14 --> 00:56:17: you talk about the cost of reducing a body of
00:56:17 --> 00:56:20: carbon for our 2040 target when it which is our
00:56:20 --> 00:56:24: operational net 0 operational target, we are not including offsets
00:56:25 --> 00:56:28: in that and I don't think we would for embodied
00:56:28 --> 00:56:31: as either and so offsets aren't really on our radar
00:56:31 --> 00:56:32: in that sense.
00:56:34 --> 00:56:36: We have a commitment to net 0 carbon by 2050
00:56:36 --> 00:56:39: for the whole life of our assets, including embodied carbon.
00:56:39 --> 00:56:42: So it's definitely part of our discussion for our our
00:56:42 --> 00:56:44: new developments in particular.
00:56:47 --> 00:56:47: Great.
00:56:47 --> 00:56:49: So in the last couple of minutes that we have,
00:56:49 --> 00:56:51: I first of all I just want to say I'm
00:56:51 --> 00:56:52: really impressed.
00:56:52 --> 00:56:54: I appreciate all of your your time and impressed by
00:56:54 --> 00:56:57: what y'all are doing to advance Embody carbon in the
00:56:57 --> 00:56:57: industry.
00:56:58 --> 00:57:01: It's really great and I've appreciated learning from you over
00:57:01 --> 00:57:02: the last hour.
00:57:03 --> 00:57:05: I'm guessing that a few people in the audience might
00:57:05 --> 00:57:08: feel intimidated or unsure where to begin when it comes
00:57:08 --> 00:57:11: to tracking Embody carbon and let alone reducing it in
00:57:11 --> 00:57:12: their portfolios.
00:57:13 --> 00:57:15: So I'd love to hear if you have any closing
00:57:15 --> 00:57:17: words of advice or tips for the audience of where
00:57:17 --> 00:57:18: they could begin.
00:57:19 --> 00:57:21: Maybe we'll start with you Kelsey.
00:57:22 --> 00:57:24: So I used to work for I just came off
00:57:24 --> 00:57:28: working for a non profit called building transparency and they
00:57:28 --> 00:57:29: do a lot of work.
00:57:29 --> 00:57:32: They they actually maintain three tools around embodied carbon but
00:57:32 --> 00:57:34: they also do a lot of education.
00:57:34 --> 00:57:36: I used to educate a lot of architects and do
00:57:36 --> 00:57:37: a lot of lunch and learns as part of that.
00:57:38 --> 00:57:41: So building transparency is 1 organization to look at but
00:57:41 --> 00:57:44: I can't give enough plugs for carbon leadership forum.
00:57:45 --> 00:57:47: If you want to understand more about that, they're probably
00:57:47 --> 00:57:49: the the best resource within the United States.
00:57:50 --> 00:57:53: So both of those are nonprofits and have tons of
00:57:53 --> 00:57:54: resources online.

00:57:54 --> 00:57:56: Becca, you already plugged woodworks.
00:57:56 --> 00:57:58: There are other organizations that are like that, but a
00:57:58 --> 00:58:01: lot of great information coming from the nonprofit space.
00:58:03 --> 00:58:06: The funny thing, you know, when I speak to my
00:58:06 --> 00:58:10: colleagues about embodied carbon is that everyone is really hesitant
00:58:10 --> 00:58:13: to say anything because they feel like they just don't
00:58:13 --> 00:58:14: know enough.
00:58:14 --> 00:58:17: They're not the experts and I try to say like,
00:58:17 --> 00:58:20: no one you know has this 100% figured out.
00:58:20 --> 00:58:23: It is a moving target and you shouldn't be uncomfortable.
00:58:25 --> 00:58:28: About the fact that you don't know everything, you know,
00:58:28 --> 00:58:31: do what homework you can talk to people, ask questions.
00:58:31 --> 00:58:34: I think this is, you know, an area that's going
00:58:34 --> 00:58:35: to continue to develop.
00:58:35 --> 00:58:38: And it is really important that the practitioners that are
00:58:38 --> 00:58:41: kind of on the ground in the field are part
00:58:41 --> 00:58:44: of the conversation because frankly as an ESG director, not
00:58:44 --> 00:58:47: part of a you know, core projects team, I'm probably
00:58:47 --> 00:58:50: not the right person to set arm body carbon strategy.
00:58:50 --> 00:58:51: It's really, you know, my colleagues in the field that
00:58:51 --> 00:58:52: know best.
00:58:53 --> 00:58:53: I agree.
00:58:53 --> 00:58:56: I was going to say something similar about leveraging the
00:58:56 --> 00:58:58: team that you have and the contractors and the engineers
00:58:58 --> 00:58:59: know so much about this.
00:58:59 --> 00:59:01: And if you're intimidated to get started, just start looking
00:59:01 --> 00:59:04: at the structure in the envelope because that's where most
00:59:04 --> 00:59:05: of it's going to come from.
00:59:05 --> 00:59:08: And talking with those teams and and the architects about
00:59:08 --> 00:59:11: what you can do in those two scopes is a
00:59:11 --> 00:59:12: really strong place to start.
00:59:14 --> 00:59:15: Great.
00:59:15 --> 00:59:17: You know, I'd add to that is is just the
00:59:17 --> 00:59:20: idea that maybe take your best building or the one
00:59:20 --> 00:59:22: you think is going to score the best.
00:59:23 --> 00:59:26: And just have it assessed as a good place to
00:59:26 --> 00:59:26: start.
00:59:26 --> 00:59:30: And you start, you start, you know, having a look
00:59:30 --> 00:59:31: at look at what it says.
00:59:31 --> 00:59:32: And there's always surprises.
00:59:33 --> 00:59:34: Every time I look at 1:00, there's always a surprise.

00:59:35 --> 00:59:37: You know, you realize something was much lower.

00:59:37 --> 00:59:39: You thought that was the problem, actually your problems over

00:59:39 --> 00:59:40: here.

00:59:41 --> 00:59:42: So that's what I would say.

00:59:43 --> 00:59:45: Well, thank you all so much again.

00:59:45 --> 00:59:48: We really appreciate your time and your leadership and we

00:59:48 --> 00:59:50: will post the the slides in the recording on Knowledge

00:59:50 --> 00:59:51: Finder.

00:59:51 --> 00:59:52: Thank you all.

00:59:52 --> 00:59:53: Thank you.

00:59:53 --> 00:59:54: Thank you.
