

Webinar

ULI Europe: C Change Carbon Pricing

Date: December 06, 2024

00:01:23 --> 00:01:27:

00:00:04 --> 00:00:06: Good afternoon, everyone. 00:00:06 --> 00:00:10: Thank you so much for joining us today for this 00:00:10 --> 00:00:12: ULI webinar on carbon pricing. 00:00:12 --> 00:00:13: I'm Sophie Chick. 00:00:13 --> 00:00:17: I run the ESG programs for the Urban Land Institute 00:00:17 --> 00:00:17: in Europe. 00:00:18 --> 00:00:21: And I'm going to be your moderator today, and I'm 00:00:21 --> 00:00:24: also going to be starting the session with a quick 00:00:24 --> 00:00:27: presentation on some of the work that we at ULI 00:00:27 --> 00:00:32: and other industry organisations have been doing on carbon pricing. 00:00:32 --> 00:00:34: And giving you a bit of a summary of a couple of reports that we've put out recently before being 00:00:34 --> 00:00:37: 00:00:37 --> 00:00:40: joined by a panel of experts have all gone through 00:00:40 --> 00:00:44: the process themselves of implementing a carbon price internally. 00:00:44 --> 00:00:47: So really excited to get to that conversation. 00:00:55 --> 00:00:58: For those of you who aren't from who aren't familiar 00:00:58 --> 00:01:01: with ULI and this is your first time engaging with 00:01:01 --> 00:01:01: 00:01:02 --> 00:01:05: Our mission is to shape the future of the built 00:01:05 --> 00:01:09: environment for transformative impact in communities worldwide. 00:01:10 --> 00:01:12: The we're a membership organization. 00:01:12 --> 00:01:16: We have close to 50,000 members and we're active across 00:01:16 --> 00:01:17: the value chain. 00:01:17 --> 00:01:22: So we have members that are investors, developers, architects, public 00:01:22 --> 00:01:23: sector, etcetera.

If you're involved in real estate, then there's a membership

00:01:27> 00:01:28:	role for you at ULI.
00:01:29> 00:01:31:	And we do many things as part of the organization,
00:01:32> 00:01:35:	but one of those is thought leadership and education.
00:01:35> 00:01:38:	And that's what we're here to focus on today.
00:01:39> 00:01:42:	So I'm going to be talking about carbon pricing, but
00:01:42> 00:01:45:	actually I just want to start by giving you a
00:01:45> 00:01:48:	quick overview of the Sea Change program that we run
00:01:48> 00:01:51:	at ULI, which is where the carbon pricing work has
00:01:51> 00:01:51:	come from.
00:01:52> 00:01:55:	So this is a program that started three years ago,
00:01:55> 00:01:58:	and we set it up to mobilize the real estate
00:01:58> 00:02:03:	industry to speed up and scale up decarbonisation in Europe.
00:02:03> 00:02:05:	And there's three kind of principles that we work with.
00:02:05> 00:02:08:	The first is that we focus on systems change.
00:02:08> 00:02:11:	So we're looking at specific intervention points that can really
00:02:11> 00:02:12:	make a difference.
00:02:13> 00:02:14:	We collaborate.
00:02:14> 00:02:17:	So everything that we do, we're working with our members
00:02:18> 00:02:21:	and the wider industry across the value chain to make
00:02:21> 00:02:24:	sure that we've got buy in from the industry and
00:02:24> 00:02:27:	we Co create solutions with that, with those members, with
00:02:27> 00:02:29:	those that wider industry.
00:02:29> 00:02:31:	And that solutions part is really important to us.
00:02:31> 00:02:35:	We're not just reiterating the problem, but we are coming
00:02:35> 00:02:38:	up with solutions that can help that decarbonisation.
00:02:40> 00:02:44:	The program is sponsored by the partners and supporters, the
00:02:44> 00:02:47:	companies that you can see on the screen now.
00:02:47> 00:02:50:	And a huge thank you to those, to them, because
00:02:50> 00:02:52:	without them this program wouldn't be possible.
00:02:53> 00:02:56:	And see see Change is a very collaborative as I
00:02:56> 00:02:56:	just said.
00:02:56> 00:02:59:	So come on board and join the movement.
00:02:59> 00:03:02:	If you are interested in getting involved with Sea Change,
00:03:02> 00:03:07:	whether that's the sponsorship, partnership opportunities or just taking part,
00:03:07> 00:03:09:	please do send me an e-mail, get in touch and
00:03:09> 00:03:12:	let me know and we can discuss some options.
00:03:15> 00:03:17:	So on to carbon pricing.
00:03:17> 00:03:20:	And this is one of the, we've got quite a
00:03:20> 00:03:24:	few work streams going on looking at solutions for
00.00.04	decarbonisation,
00:03:24> 00:03:27:	but this is one that we've really focused on within

00:03:27> 00:03:29:	Sea Change over the last year.
00:03:30> 00:03:33:	And what we wanted to do is we really feel
00:03:33> 00:03:37:	like carbon pricing presents a really big opportunity for the
00:03:37> 00:03:41:	real estate industry to do that decarbonisation.
00:03:41> 00:03:43:	But before we kind of get into the how that
00:03:43> 00:03:46:	is done and, and how you would implement a carbon
00:03:46> 00:03:49:	price, I think it's really important to take a step
00:03:49> 00:03:52:	back and, and look at why companies might be interested
00:03:52> 00:03:53:	in this.
00:03:54> 00:03:56:	And actually to do that, I think we need to
00:03:56> 00:03:58:	take a step back even further and have a look
00:03:58> 00:04:00:	at that big picture.
00:04:01> 00:04:03:	So I've just got some charts on the side here
00:04:03> 00:04:06:	that are taken from the 2024 State of the Climate
00:04:06> 00:04:08:	report, Perilous Times on Earth.
00:04:09> 00:04:12:	And the key thing is here we're moving in the
00:04:12> 00:04:13:	wrong direction.
00:04:13> 00:04:16:	If you look at all of these charts, they're all
00:04:16> 00:04:17:	going in the wrong direction.
00:04:17> 00:04:21:	And this quote from the chairman of the IPCC saying
00:04:21> 00:04:24:	we are potentially headed towards the three degrees of global
00:04:24> 00:04:27:	warming by the end of the century if we carry
00:04:27> 00:04:30:	on with the policies that we have at the moment.
00:04:31> 00:04:34:	So change needs to happen and we actually think carbon
00:04:34> 00:04:37:	pricing is a really powerful way that that change can
00:04:37> 00:04:38:	happen.
00:04:38> 00:04:41:	But at the moment we're seeing a really low adoption
00:04:41> 00:04:45:	of carbon price, carbon pricing in the real estate industry,
00:04:45> 00:04:48:	especially when you compare it to other industries that are
00:04:48> 00:04:49:	high emitters.
00:04:50> 00:04:52:	If you have a look at this chart, you can
00:04:52> 00:04:56:	see energy materials, much higher percentage of companies using a
00:04:56> 00:05:00:	carbon price already compared to with real estate second last
00:05:00> 00:05:01:	on this chart.
00:05:02> 00:05:04:	So there's this big opportunity now.
00:05:05> 00:05:08:	And I think that opportunity was something that we recognized
00:05:08> 00:05:10:	at the beginning of the year.
00:05:10> 00:05:14:	And we also were fortunate to join forces with these
00:05:14> 00:05:18:	six other industry organisations to create a task force to

00:05:18> 00:05:19:	look at this.
00:05:19> 00:05:22:	So EPPRA Green I, I GCC in Rev, RCS and
00:05:22> 00:05:26:	WBCSD, a lot of acronyms, but I'm sure you're all
00:05:26> 00:05:28:	familiar with these groups.
00:05:29> 00:05:32:	And we really see the opportunity to set some guidance
00:05:32> 00:05:35:	now as to how carbon pricing, how you can get
00:05:36> 00:05:37:	started with carbon pricing.
00:05:38> 00:05:42:	So as an industry, we're approaching this in a consistent
00:05:42> 00:05:46:	way unlike some of the other ESG tools etcetera that
00:05:46> 00:05:47:	you might see.
00:05:48> 00:05:51:	We're at the beginning of the journey within the sector
00:05:51> 00:05:54:	and and we can come together and make sure we're
00:05:54> 00:05:56:	on the same page as we go forward.
00:05:58> 00:06:01:	So that's all very well in terms of big picture
00:06:01> 00:06:05:	why, but why would individual companies want to implement a
00:06:05> 00:06:06:	carbon price?
00:06:06> 00:06:08:	And this is the first report that we put out
00:06:08> 00:06:11:	at the Sea Change Summit in Barcelona in the middle
00:06:11> 00:06:11:	of October.
00:06:12> 00:06:16:	It's called accelerating accountability, the case for carbon
•••••	pricing.
00:06:16> 00:06:19:	And I believe we're going to have the link put
00:06:19> 00:06:21:	in the chat so you can access it if you
00:06:21> 00:06:22:	haven't seen it already.
00:06:23> 00:06:26:	And what this report does is have a look at
00:06:26> 00:06:26:	why.
00:06:27> 00:06:29:	It's got a lot of case studies in from companies
00:06:29> 00:06:32:	who have implemented one, but talks a lot about those
00:06:32> 00:06:34:	reasons of of why it's important.
00:06:34> 00:06:37:	And there's three things here to think about.
00:06:38> 00:06:39:	First is responsibility.
00:06:39> 00:06:42:	So carbon has a societal cost.
00:06:42> 00:06:45:	We're just not as an industry of the real estate
00:06:45> 00:06:49:	industry necessarily paying for it directly, but society is
	paying
00:06:49> 00:06:53:	already when we think about the carbon being emitted, whether
00:06:53> 00:06:58:	that's through health, physical, economic, etcetera with the with the
00:06:58> 00:06:59:	that carbon emissions.
00:07:00> 00:07:02:	And then as I said earlier, we need to see
00:07:02> 00:07:06:	change and there's a responsibility of an, of an of
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00:07:06> 00:07:08:	us as the industry to change.
00:07:08> 00:07:12:	And just to take one specific example, the average annual
00:07:12> 00:07:16:	rate of energy efficiency improvements needs to double by 20-30.
00:07:16> 00:07:18:	So that is quite a big ask.
00:07:18> 00:07:21:	And we do think carbon pricing is a tool that
00:07:21> 00:07:24:	can help achieve achieve these changes.
00:07:25> 00:07:26:	We then have redressed.
00:07:26> 00:07:29:	So at least 230 new climate cases were filed against
00:07:29> 00:07:34:	governments and companies and 30 companies are being held accountable
00:07:34> 00:07:38:	for climate related harm in those polluter paid cases.
00:07:38> 00:07:41:	So this is something that companies within the real estate
00:07:41> 00:07:42:	industry need to be aware of.
00:07:43> 00:07:45:	And then finally, we've got regulation.
00:07:45> 00:07:48:	So it's not confirmed yet, but there is talk of
00:07:48> 00:07:52:	the EU emissions trading scheme to potentially covering buildings.
00:07:53> 00:07:55:	If this did come in, that's coming in the next
00:07:56> 00:07:58:	couple of years and that will mean you will be
00:07:58> 00:08:00:	paying a carbon price anyway.
00:08:00> 00:08:04:	So there's a big opportunity to get ahead of regulation.
00:08:04> 00:08:07:	We're also seeing local level carbon taxes emerging.
00:08:08> 00:08:10:	I think the best example or probably the most high
00:08:10> 00:08:12:	profile example of that is in New York.
00:08:12> 00:08:15:	But we are seeing other examples from around the world.
00:08:17> 00:08:19:	But it's not just those sort of why and that
00:08:19> 00:08:22:	those driving forces why, but there's also a lot of
00:08:22> 00:08:25:	company and industry level benefits.
00:08:25> 00:08:27:	And I'm hoping we hear a lot more about this
00:08:27> 00:08:28:	today from our panelists.
00:08:29> 00:08:32:	But just to run through a few, you have reputation
00:08:32> 00:08:33:	and market leadership.
00:08:33> 00:08:36:	This can really help your company stand out.
00:08:36> 00:08:39:	There's cultural shifts both within the company itself.
00:08:40> 00:08:43:	You know, suddenly everyone is needing to think about their
00:08:43> 00:08:46:	carbon consumption with every decision they make.
00:08:46> 00:08:49:	Not just your ESG teams, for example, but also those
00:08:49> 00:08:53:	cultural shifts and influencing the wider value chain around
AA AA F4 : 22 22 ==	you.
00:08:54> 00:08:55:	There's economic incentives.
00:08:55> 00:08:58:	There's an opportunity for innovation and growth.
00:08:58> 00:09:01:	And of course, there's that regulation and risk management

side

00:09:01 --> 00:09:02: of things as well. 00:09:04 --> 00:09:07: So I started this presentation by saying we're at a 00:09:07 --> 00:09:09: very low adoption at the moment of a carbon price 00:09:09 --> 00:09:11: within the real estate industry. 00:09:11 --> 00:09:14: So a couple of months ago, we did a survey 00:09:14 --> 00:09:16: of our members in the wider industry. 00:09:16 --> 00:09:19: And one of the questions we asked them was what 00:09:19 --> 00:09:22: do you see as the main next steps that could 00:09:22 --> 00:09:26: best support organizations to explore carbon pricing further? 00:09:26 --> 00:09:29: And the top 2 answers here, the first one was 00:09:29 --> 00:09:31: to better understand the carbon pricing mechanisms. 00:09:32 --> 00:09:34: Now a lot of that is covered in our accelerating 00:09:34 --> 00:09:36: accountability report. 00:09:36 --> 00:09:40: And the second is industry guidance to set best practice. 00:09:41 --> 00:09:45: So this is where our carbon pricing principles really come 00:09:45 --> 00:09:45: into play. 00:09:46 --> 00:09:49: And to give you a sort of high level overview 00:09:49 --> 00:09:50: of these. 00:09:50 --> 00:09:52: And again, you'll be able to find this document on 00:09:52 --> 00:09:54: the link that's just been shared in the chat. 00:09:55 --> 00:09:57: These are voluntary principles. 00:09:57 --> 00:10:01: They're high level and indicative and they're a first step. 00:10:01 --> 00:10:03: So just to give you an idea that they're meant 00:10:03 --> 00:10:05: for the entire value chain of real estate. 00:10:05 --> 00:10:08: So we're not getting into the nitty gritty detail of 00:10:08 --> 00:10:08: it. 00:10:08 --> 00:10:12: And it's very much a starting point for companies looking 00:10:12 --> 00:10:15: to implement a carbon price so that we can do 00:10:15 --> 00:10:16: this in a consistent way. 00:10:18 --> 00:10:21: Just to give you a quick overview of the principles, 00:10:21 --> 00:10:22: we have 7 in total. 00:10:22 --> 00:10:25: The 1st is to take a whole life carbon approach. 00:10:26 --> 00:10:30: The second is take responsibility for all decisions to spend 00:10:30 --> 00:10:30: carbon. 00:10:31 --> 00:10:32: So what we mean by this is if you are 00:10:33 --> 00:10:35: the decision maker, you are also the one who pays, 00:10:35 --> 00:10:36: the decision maker pays. 00:10:36 --> 00:10:41: So for embodied carbon, that's the capital providers, the developers 00:10:41 --> 00:10:44: and in some cases the tenants, and for operational carbon 00:10:44 --> 00:10:48: that's the tenants and the building owners and managers

who 00:10:48 --> 00:10:51: have that responsibility for the carbon pricing. 00:10:52 --> 00:10:56: Principle 3 is where there is no responsibility for decisions 00:10:57 --> 00:11:02: to spend carbon, commit to influencing and educating stakeholders who 00:11:02 --> 00:11:02: do so. 00:11:03 --> 00:11:06: This is really important when we think that these principles 00:11:06 --> 00:11:07: are for the entire value chain. 00:11:07 --> 00:11:10: If you are not one of the decision makers, you 00:11:10 --> 00:11:13: can still play a really important part in that influencing 00:11:13 --> 00:11:13: an education. 00:11:15 --> 00:11:18: Principle 4 is to engage all stakeholders, starting with senior 00:11:19 --> 00:11:20: leadership by and 1st. 00:11:21 --> 00:11:24: So carbon pricing needs to be addressed as a strategic 00:11:24 --> 00:11:24: priority. 00:11:25 --> 00:11:28: And that ensuring senior leadership by and from the outset 00:11:28 --> 00:11:29: is really important. 00:11:29 --> 00:11:32: And hopefully we'll hear a bit more about that from 00:11:32 --> 00:11:33: our panellists today. And then time and attention is also required for the 00:11:34 --> 00:11:37: 00:11:37 --> 00:11:40: education and engagement of the value chain. 00:11:40 --> 00:11:42: So this isn't just about your company. 00:11:42 --> 00:11:46: This is wider than that as well #5 use a 00:11:46 --> 00:11:48: uniform internal price. 00:11:48 --> 00:11:49: 00:11:50 --> 00:11:53: Take action before reaching a perfect data set. 00:11:53 --> 00:11:55: So this is really important. 00:11:55 --> 00:11:57: I think often when we were talking to people about 00:11:57 --> 00:12:00: carbon pricing, there was a view that they didn't have 00:12:00 --> 00:12:01: the right data needed. 00:12:01 --> 00:12:04: They couldn't decide on what price to use, for example. 00:12:05 --> 00:12:07: And actually, it's better to just get started. 00:12:07 --> 00:12:10: You're not going to get 100% of the way there. 00:12:10 --> 00:12:14: If you've got 80% of the data, you can get 00:12:14 --> 00:12:15: started. 00:12:15 --> 00:12:17: If you've got an idea of what the carbon price 00:12:17 --> 00:12:18:

should be, try it out.

00:12:18 --> 00:12:19: You can always adjust it.

00:12:19 --> 00:12:22: It's sort of if you wait for perfect action won't

00:12:22 --> 00:12:22: happen.

00:12:22 --> 00:12:25: And then finally commit to transparency. 00:12:27 --> 00:12:32: So on that, I'm really excited to be joined by 00:12:36 --> 00:12:39: I'm going to ask them to turn their cameras on 00:12:39 --> 00:12:42: and their microphones on and join me on the screen 00:12:42 --> 00:12:42: now. 00:12:43 --> 00:12:47: And yes, just a reminder, please do submit your questions 00:12:47 --> 00:12:49: for our panelists by the Q&A. 00:12:49 --> 00:12:51: We will do our best to get to all of 00:12:51 --> 00:12:51: them today. 00:12:51 --> 00:12:54: If not, we will respond to you separately after the 00:12:54 --> 00:12:57: webinar if we have your contact details. 00:12:57 --> 00:13:00: So yes, please do as you, as we go through 00:13:00 --> 00:13:05: these conversations, if you have more burning questions, let 00:13:05 --> 00:13:05: know. 00:13:06 --> 00:13:09: So thank you so much, all three of you for 00:13:09 --> 00:13:09: joining me. 00:13:10 --> 00:13:11: It's great to see you here. 00:13:11 --> 00:13:14: I would just like to kick us off by asking 00:13:14 --> 00:13:18: you to introduce yourselves and your company and also what 00:13:18 --> 00:13:22: your company's take on carbon pricing is at the moment. 00:13:22 --> 00:13:24: So perhaps, Janine, we could start with you. 00:13:26 --> 00:13:26: Yeah. 00:13:26 --> 00:13:28: Good afternoon, everybody. 00:13:28 --> 00:13:32: So I'm Janine and I am Sustainability and Social Impact 00:13:33 --> 00:13:35: Director for Great Portland Estates. 00:13:35 --> 00:13:40: It does say Great Poland Estates on on the screen. 00:13:40 --> 00:13:42: So it's Great Portland Estates PLC. 00:13:43 --> 00:13:47: So we are a commercial property developer and landlord with 00:13:47 --> 00:13:50: all of our buildings being based in London. 00:13:51 --> 00:13:55: In terms of internal carbon price, we set our first 00:13:55 --> 00:13:59: internal carbon price in 2020 as part of completing our 00:13:59 --> 00:13:59: Rd. 00:13:59 --> 00:14:00: maps net zero. 00:14:02 --> 00:14:05: It is a we so, so we use a price 00:14:05 --> 00:14:06: mechanism. 00:14:07 --> 00:14:10: The money goes into decarbonisation funds and I'm sure 00:14:10 --> 00:14:11: get into that later. 00:14:12 --> 00:14:17: And we recently upped our internal carbon price to ??150 00:14:17 --> 00:14:18: per tonne. 00:14:18 --> 00:14:20: So that's sort of in the last 12 months. 00:14:22 --> 00:14:22: Great. 00:14:22 --> 00:14:23: Thank you.

these expert group of panelists.

00:12:32 --> 00:12:36:

00:14:23> 00:14:25:	Johann, would you like to go next?
00:14:26> 00:14:26:	Yes.
00:14:26> 00:14:28:	Good afternoon everybody.
00:14:28> 00:14:29:	My name is Johann Mason.
00:14:30> 00:14:34:	I head up our decarbonisation efforts at Urban Partners and
00:14:35> 00:14:39:	Urban Partners is an investment platform and we focus on
00:14:39> 00:14:42:	solving problems in the urban environment.
00:14:43> 00:14:49:	Urban Partners is Housing 3 investment strategies, a private
	equity
00:14:49> 00:14:53:	real estate business called ENREP and a credit real estate
00:14:54> 00:14:59:	business, Velo Capital and a venture capital business 2150 and
00:14:59> 00:15:03:	we introduced an internal carbon price back in May 2022.
00:15:05> 00:15:08:	It's a shadow price in our underwriting model.
00:15:08> 00:15:13:	It covers the total operational and embodied footprint of our
00:15:13> 00:15:17:	real estate investments and is really to sort of create
00:15:17> 00:15:20:	transparency for our investment decisions.
00:15:22> 00:15:22:	Thank you.
00:15:23> 00:15:24:	And finally, Martin.
00:15:25> 00:15:26:	Yeah.
00:15:26> 00:15:27:	Thank you for introducing me.
00:15:28> 00:15:29:	I'm Martin Horsman.
00:15:29> 00:15:33:	I work as a sustainable Development Manager at Redefco.
00:15:33> 00:15:37:	Redefco is managing a PEN European platform offering services in
00:15:37> 00:15:39:	real estate asset management.
00:15:39> 00:15:43:	So we have client management, transaction management,
	asset and development
00:15:43> 00:15:48:	management, investment management and finance and risk management over the
00:15:48> 00:15:50:	purpose to be a force for good in a built
00:15:50> 00:15:55:	environment, contributing to liveable cities through impactful real estate outcomes
00:15:55> 00:15:56:	for all stakeholders.
00:15:57> 00:16:02:	And therefore we recently introduced carbon pricing in our developments
00:16:02> 00:16:06:	investment proposals making it part of decision making and and
00:16:06> 00:16:08:	we will be starting that in January 25.
00:16:08> 00:16:12:	So it's it's really recent at a level of ???120
00:16:12> 00:16:13:	per ton.
00:16:14> 00:16:14:	Thank you.
00:16:15> 00:16:16:	Well, thank you.

00:16:16 --> 00:16:19: I think I'd like to start off this conversation sort 00:16:19 --> 00:16:22: of going right back to the beginning and thinking about 00:16:22 --> 00:16:25: why you decided to introduce a carbon price, whether that 00:16:25 --> 00:16:27: was you and the individuals on the screen or or 00:16:28 --> 00:16:28: your company. 00:16:28 --> 00:16:30: And how did you start? 00:16:30 --> 00:16:33: What were the sort of first steps that you took? 00:16:33 --> 00:16:36: And perhaps, Martin, you've done this most recently, so I'm 00:16:36 --> 00:16:38: sure it's in your memory. 00:16:38 --> 00:16:40: Would you like to kick us off? 00:16:41 --> 00:16:41: Yeah, sure. 00:16:41 --> 00:16:41: Thank you. 00:16:43 --> 00:16:48: It's basically because we have a, a holding which which 00:16:48 --> 00:16:52: owns a lot of companies among which is Redefco and 00:16:52 --> 00:16:58: the whole thing decided to have a carbon impact assessment 00:16:58 --> 00:17:02: of all the different types of industries that are in 00:17:02 --> 00:17:04: their possession. 00:17:04 --> 00:17:05: So also for Redefco. 00:17:05 --> 00:17:09: So the, the business for good is really something that, 00:17:09 --> 00:17:12: that, that makes us probably walk a little bit faster 00:17:12 --> 00:17:15: in, in certain topics than than others. 00:17:15 --> 00:17:18: It's, it's driven by purpose, which is really great. 00:17:19 --> 00:17:22: And we think that carbon pricing is, is one of 00:17:22 --> 00:17:27: the tools that you could use for taking different decisions. 00:17:27 --> 00:17:31: Because in, in real estate developments, you, you will be, 00:17:31 --> 00:17:36: you will always be working with stakeholders and you will 00:17:36 --> 00:17:40: be always looking in terms of the sort of short 00:17:40 --> 00:17:43: haul effects of, of, of projects. 00:17:43 --> 00:17:45: While I, I think we are in for the long 00:17:45 --> 00:17:48: haul, but you still need to be within the same 00:17:48 --> 00:17:51: limits and budgets as every other projects. 00:17:51 --> 00:17:54: So you've got to be creative and you've got to 00:17:54 --> 00:17:58: set some sort of framework to be able to, to, 00:17:58 --> 00:18:01: to, to, to, to look at different options and to, 00:18:01 --> 00:18:04: to price in the effects of these options. 00:18:04 --> 00:18:08: Even if it's not a generally accepted way of working 00:18:08 --> 00:18:11: it, it makes you clear what your impact is and 00:18:11 --> 00:18:14: and on what how you make your decisions. 00:18:16 --> 00:18:19: And what were the first steps that you sort of 00:18:19 --> 00:18:21: took in in terms of implementing it? 00:18:22 --> 00:18:25: Well, first we, we started where the impact would be. 00:18:26 --> 00:18:29: So would it be in, in the projects themselves?

00:18:30> 00:18:33:	Would it just be a shadow price on the development
00:18:34> 00:18:37:	case or would we just have a carbon price for
00:18:37> 00:18:41:	all the not all the activities in in development and,
00:18:41> 00:18:43:	and, and management?
00:18:44> 00:18:48:	And that made clear that in the projects you could
00:18:48> 00:18:52:	certainly make different decisions if you if you pricing the
00:18:53> 00:18:56:	impacts and that is from what is carbon.
00:18:56> 00:19:00:	And then the operational carbon, on the other hand, gives
00:19:00> 00:19:04:	you an idea of the, you know, actually a stranding
00:19:04> 00:19:09:	risk indicator for having probably operating this an, an asset
00:19:09> 00:19:11:	for maybe for the whole life.
00:19:11> 00:19:14:	For instance, it's 50 years, but there will be times
00:19:14> 00:19:18:	that you redevelop and maybe improve the, the performance
	of
00:19:18> 00:19:18:	the asset.
00:19:18> 00:19:22:	But then for at least 10 years, you'll be, you'll
00:19:22> 00:19:25:	be stuck with your decisions until you have a next
00:19:25> 00:19:26:	chance.
00:19:26> 00:19:29:	So these ten years are really indicative of what your,
00:19:29> 00:19:33:	your performance will be in the next coming years.
00:19:33> 00:19:37:	And well, knowing that there will be carbon taxing probably
00:19:37> 00:19:41:	by 27 somewhere, there is a possibility that if you
00:19:41> 00:19:45:	are underperforming that there might be some tax and taxes
00:19:45> 00:19:47:	cash out, which is a waste.
00:19:47> 00:19:50:	So if you can avoid that, then I think it's
00:19:50> 00:19:51:	it's a good trigger.
00:19:52> 00:19:53:	Yeah, great.
00:19:53> 00:19:56:	Perhaps Danine, we can come to you and and I
00:19:56> 00:19:59:	know you've been doing this the longest of anyone on
00:19:59> 00:20:02:	the panel, but yeah, really keen to hear about how
00:20:02> 00:20:04:	like some why that decision was made.
00:20:04> 00:20:07:	You talked a bit about it was part of your
00:20:07> 00:20:08:	strategy and again how you.
00:20:09> 00:20:10:	Kind of started what?
00:20:10> 00:20:11:	What was the first steps that you took?
00:20:12> 00:20:12:	Sure.
00:20:12> 00:20:16:	So we set our internal carbon price as part of
00:20:16> 00:20:19:	establishing our road map to net zero.
00:20:19> 00:20:22:	So we first set that out in 2020.
00:20:22> 00:20:26:	And I think the reason the conversation started around
	setting
00:20:26> 00:20:30:	an internal carbon price was because when we sort of
00:20:30> 00:20:33:	did a forward look on what the impact of our

00:20:33> 00:20:37:	energy and carbon targets would be on our total carbon
00:20:37> 00:20:40:	footprint and what we would need to offset at the
00:20:40> 00:20:43:	end to get to net zero, we were quite surprised
00:20:43> 00:20:46:	at how much of our carbon was left.
00:20:47> 00:20:49:	And so the view was, well, OK, we need a
00:20:50> 00:20:54:	different approach to actually bring this down further and faster.
00:20:55> 00:20:58:	And so we'd sort of we'd seen some talk about
00:20:58> 00:21:02:	internal carbon price more broadly in the, in the in
00:21:02> 00:21:06:	the market and in other industries in particular.
00:21:07> 00:21:09:	And so we looked at whether it would work for
00:21:09> 00:21:12:	us as a business and actually really captured the imagination
00:21:13> 00:21:13:	of our board.
00:21:15> 00:21:18:	And So what, what we we did really is think
00:21:18> 00:21:20:	about what would we apply it to.
00:21:22> 00:21:25:	And we also needed to think hard about how we
00:21:25> 00:21:28:	got buying for it across the business and also what
00:21:28> 00:21:29:	the mechanism would be.
00:21:30> 00:21:33:	And so, so we apply our internal carbon price to
00:21:33> 00:21:37:	our the embodied carbon of our development up to and
00:21:37> 00:21:42:	that's upfront carbon and also to our operational emissions.
00:21:43> 00:21:44:	We calculate it.
00:21:45> 00:21:48:	So we calculate it every year and the funds go
00:21:49> 00:21:50:	into a decarbonisation fund.
00:21:50> 00:21:52:	And the reason we wanted to use it to push
00:21:53> 00:21:53:	it to go faster.
00:21:55> 00:21:57:	So we use the proceeds of the decarbonisation fund to
00:21:57> 00:22:00:	bring forward energy efficiency projects and the rest of the
00:22:00> 00:22:01:	portfolio.
00:22:01> 00:22:03:	So that was sort of the the sort of mechanism
00:22:03> 00:22:04:	we decided to create.
00:22:06> 00:22:09:	And as far as sort of sort of setting price
00:22:09> 00:22:12:	and all that sort of thing that was that was
00:22:12> 00:22:16:	about sort of research and working with our boards to
00:22:16> 00:22:19:	see what would be appropriate for us as a business.
00:22:21> 00:22:22:	Yeah, great.
00:22:22> 00:22:22:	Thank you.
00:22:22> 00:22:25:	And Johan, same, same question to you.
00:22:26> 00:22:29:	Yes, I, I think for us this was very much
00:22:29> 00:22:32:	sort of a purpose driven decision.
00:22:33> 00:22:36:	And we do believe that climate change is among the
00:22:36> 00:22:39:	biggest challenges that cities face and we see a big

00:22:39> 00:22:43:	opportunity and basically help cities solve this problem.
00:22:44> 00:22:47:	And, and I think we never saw a carbon fee
00:22:47> 00:22:51:	or carbon price sort of a stand alone tool needs
00:22:51> 00:22:55:	to be part of a, a bigger toolbox with reduction
00:22:55> 00:22:58:	targets, quotas and so forth.
00:22:59> 00:23:04:	But we did see some important features in one, creating
00:23:04> 00:23:11:	a financial incentive in our underwriting of investments, both development
00:23:11> 00:23:17:	projects and acquisition of standing assets and really pricing, pricing
00:23:17> 00:23:22:	carbon in that both to reveal the the underlying risk.
00:23:24> 00:23:27:	But but really as first and foremost to create an
00:23:27> 00:23:33:	incentive to invest in mitigation solutions like low carbon materials
00:23:33> 00:23:38:	on the embodied side and energy efficiency technology on, on
00:23:38> 00:23:39:	the operational side.
00:23:40> 00:23:44:	And and like Janine, we also applied to upfront embodied
00:23:44> 00:23:49:	emissions and operational emissions of all of our direct investments
00:23:49> 00:23:50:	in real estate.
00:23:52> 00:23:57:	And we started basically by applying it in our underwriting
00:23:57> 00:24:02:	model that brings the cost really upfront to our investment
00:24:02> 00:24:03:	committee.
00:24:03> 00:24:07:	So a very sort of effective place to, to, to
00:24:07> 00:24:07:	use it.
00:24:08> 00:24:11:	And we, we also do sort of bookkeeping of what
00:24:12> 00:24:16:	we call a carbon abatement reserve, but without sort of
00:24:16> 00:24:18:	physical funds moving.
00:24:19> 00:24:24:	So it's more bookkeeping within the fund where we also
00:24:24> 00:24:29:	try and sort of funnel that towards projects with a
00:24:29> 00:24:31:	positive carbon impact.
00:24:33> 00:24:33:	Right.
00:24:34> 00:24:36:	And it, it sort of sounds like a lot of
00:24:36> 00:24:40:	the this for for several of you has kind of
00:24:40> 00:24:44:	been driven by Martin for you like wider company's strategy.
00:24:44> 00:24:47:	And Janine, it sounds like you're board were very much
00:24:47> 00:24:50:	on board with the idea of of carbon pricing.
00:24:50> 00:24:52:	But I just want to delve into a bit more
00:24:52> 00:24:56:	about that kind of stakeholder buy in and particularly with
00:24:56> 00:24:59:	the senior leaders across the business because it it is
00:24:59> 00:24:59:	a big change.
00:25:00> 00:25:03:	And sort of whether that's done as a as an
3.20.00	

00:25:03> 00:25:05:	underwriting sort of accounting tool.
00:25:05> 00:25:10:	And have you come up with any come across any
00:25:10> 00:25:15:	difficulties or any sort of issues and how, how did
00:25:15> 00:25:18:	you overcome those anyone?
00:25:20> 00:25:21:	So I can jump in.
00:25:22> 00:25:26:	So in terms of the accounting issues that that we
00:25:26> 00:25:29:	have to an extent learn as we went.
00:25:30> 00:25:33:	So we were very much the we and the board
00:25:33> 00:25:36:	very much with the view that we should sort of,
00:25:36> 00:25:39:	if we believed in the principle and we believed we
00:25:39> 00:25:42:	were sort of about in the right place at ??95
00:25:42> 00:25:45:	per term, which is where we started in 2020, then
00:25:45> 00:25:48:	we should just sort of get on with it and
00:25:48> 00:25:50:	and kind of learn as we went.
00:25:50> 00:25:53:	In terms of the challenges, some of the challenges we've
00:25:53> 00:25:55:	we've come up with is things.
00:25:55> 00:25:58:	So for one of our buildings, we've done a huge
00:25:58> 00:26:01:	steel reuse project where it where one of our buildings
00:26:01> 00:26:03:	has been a, a donor building.
00:26:03> 00:26:05:	And so one of the things we've had, we're sort
00:26:05> 00:26:07:	of starting to think around is how do we deal
00:26:07> 00:26:10:	with that with the internal carbon prices concerned, How do
00:26:10> 00:26:12:	we deal with that from an embodied carbon perspective?
00:26:14> 00:26:16:	We also had to think about how do we deal
00:26:16> 00:26:20:	with joint ventures and actually that's been more of a
00:26:20> 00:26:24:	consideration when we've been thinking about our decarbonisation fund as
00:26:24> 00:26:24:	well.
00:26:24> 00:26:28:	So when we forward fund energy efficiency projects, do we
00:26:28> 00:26:31:	ask our JV partner to put in a sort of
00:26:31> 00:26:32:	comparable amount?
00:26:33> 00:26:34:	How does sort of that mechanism work?
00:26:35> 00:26:38:	We've also had to think around, so for a service
00:26:38> 00:26:41:	charge and service charging our tenants is something we needed
00:26:41> 00:26:42:	to think about.
00:26:42> 00:26:46:	So would we be prepared to forward fund the projects
00:26:46> 00:26:49:	and then recoup the cost by the service charge?
00:26:49> 00:26:51:	So bit later on when, when, when we've been able
00:26:51> 00:26:53:	to kind of budget for it, when it was something
00:26:53> 00:26:56:	that perhaps our customers could have been paying for.
00:26:56> 00:26:59:	So all of those sorts of mechanisms we've had to

00:27:01 --> 00:27:03: But I think what we've tried to do and I 00:27:03 --> 00:27:06: and in some respects it's helpful that we are the 00:27:06 --> 00:27:09: size business that we are, we've been able to just 00:27:09 --> 00:27:12: sort of be quite nimble about it and and and 00:27:12 --> 00:27:14: work it through as we've gone. 00:27:16 --> 00:27:17: Yeah. 00:27:18 --> 00:27:21: I'd say it's probably not a really big deal for 00:27:21 --> 00:27:26: everyone working in the design teams because they are familiar 00:27:26 --> 00:27:28: with life cycle analysis calculation. 00:27:28 --> 00:27:31: So actually all the information that you need for carbon 00:27:31 --> 00:27:32: pricing is there. 00:27:33 --> 00:27:35: It's just that you need to make sure that you 00:27:35 --> 00:27:38: have a standard on how to how to, how to 00:27:38 --> 00:27:41: calculate which part of the calculation you you would like 00:27:41 --> 00:27:43: to have for your carbon pricing. 00:27:43 --> 00:27:47: So and, and to be deliberate in that and to 00:27:48 --> 00:27:50: have it as a benchmark. 00:27:50 --> 00:27:52: So never change the recipe. 00:27:52 --> 00:27:54: Stick to the information that you have. 00:27:54 --> 00:27:58: And it, it definitely starts with getting your information to 00:27:58 --> 00:28:01: be able to be transparent and, and to be, to 00:28:01 --> 00:28:03: be able to report on it. 00:28:04 --> 00:28:07: Because if you, if you start today and you will 00:28:07 --> 00:28:11: have like 3 or 4 major developments starting that year, 00:28:11 --> 00:28:15: you know that you will be harvesting your information, your 00:28:15 --> 00:28:17: S build information in about 3 years. 00:28:17 --> 00:28:23: So we are committed to net net 0 carbon 2040 00:28:23 --> 00:28:28: by the Green Building Council commitment. 00:28:28 --> 00:28:32: And then it says in 20-30 you need to sort 00:28:32 --> 00:28:37: of half your emissions and these three projects starting next 00:28:37 --> 00:28:41: year will then deliver what it's only three projects. 00:28:42 --> 00:28:44: So if that's the data you need to do your 00:28:44 --> 00:28:48: analysis on and and change your, your way of working, 00:28:48 --> 00:28:52: then it's good to know that every year there's being 00:28:52 --> 00:28:53: projects added. 00:28:53 --> 00:28:55: But this is definitely the time to start with it because tomorrow will be too late because 20-30 is about 00:28:56 --> 00:28:59: 00:28:59 --> 00:29:01: in 5 minutes and 2040 will be in two days. 00:29:01 --> 00:29:05: So it's, it doesn't make a difference. 00:29:05 --> 00:29:08: Don't go through perfect solution.

00:26:59 --> 00:26:59:

work through.

00:29:08> 00:29:10:	I think you've, you've got to Start learning and, and
00:29:11> 00:29:12:	that's what we're going to do.
00:29:12> 00:29:16:	So it, it's, it just takes some steps.
00:29:17> 00:29:19:	So we, we, we have written a strategy and we
00:29:19> 00:29:22:	have the strategy approved by the board and membership, the
00:29:22> 00:29:24:	leadership team and the, and the board.
00:29:25> 00:29:27:	And therefore we can now start doing this, which is
00:29:27> 00:29:30:	really great that everyone is on the same page.
00:29:30> 00:29:33:	And, but I'm, I'm really aware of the fact that
00:29:33> 00:29:36:	people are maybe a bit scared in, in, in the
00:29:36> 00:29:40:	development part of our organization because they are not really
00:29:40> 00:29:41:	used to it.
00:29:41> 00:29:44:	But it's, it's just using the figures that you've always
00:29:44> 00:29:47:	used, but then taking some of them in a highlighted
00:29:47> 00:29:49:	position and, and, and put a price on it for,
00:29:49> 00:29:52:	for shadow pricing to see if you've taken the right
00:29:52> 00:29:55:	decision or if you could have taken a different decision
00:29:55> 00:29:57:	and what the impact would then change.
00:29:58> 00:30:02:	But then again, it, it should show value at the
00:30:02> 00:30:02:	same time.
00:30:02> 00:30:06:	So that's that's probably the the most important hurdle to
00:30:06> 00:30:06:	take.
00:30:09> 00:30:09:	Yeah.
00:30:10> 00:30:14:	I would say from our perspective sort of senior management
00:30:14> 00:30:18:	buy in was was sort of never an issue because
00:30:18> 00:30:22:	this was always very aligned with with our overall direction
00:30:22> 00:30:25:	where we have seen challenges.
00:30:25> 00:30:28:	I think 1 is sort of the in the say
00:30:28> 00:30:32:	physical transfer of of cash that creates a lot of
00:30:32> 00:30:33:	complexity.
00:30:34> 00:30:39:	So something that that we're sort of still considering sort
00:30:39> 00:30:42:	of benefits versus the complexity it adds.
00:30:43> 00:30:47:	And and then of course, a very important stakeholder group
00:30:47> 00:30:49:	for us is our investors.
00:30:49> 00:30:53:	And, and we have investors from all over the globe
00:30:53> 00:30:57:	and, and our investors have different views on, on, on,
00:30:57> 00:31:01:	on climate change and, and how to, to tackle it.
00:31:02> 00:31:06:	So we got a lot of important feedback there and
00:31:06> 00:31:10:	sort of the principles, for example, around reinvesting the proceeds
00:31:10> 00:31:13:	within the fund where the proceeds are collected.

00:31:14> 00:31:18:	And that's an important principle and but, but sort of
00:31:18> 00:31:21:	taking that feedback, I think we we managed to to
00:31:22> 00:31:23:	make it an effective tool.
00:31:26> 00:31:26:	Yeah, great.
00:31:26> 00:31:27:	Thank you.
00:31:27> 00:31:30:	And I just want to to pick up as well
00:31:30> 00:31:34:	on that fee paying versus shadow price for for a
00:31:34> 00:31:35:	carbon price.
00:31:35> 00:31:39:	And Janine, you mentioned earlier that you pay the money
00:31:39> 00:31:43:	into a pot specifically for decarbonisation metrics.
00:31:43> 00:31:45:	Is this, is this the case, is that it, does
00:31:45> 00:31:47:	all that money go towards it?
00:31:47> 00:31:49:	Perhaps you could just elaborate on that a little bit
00:31:49> 00:31:50:	more.
00:31:50> 00:31:50:	Yep, sure.
00:31:50> 00:31:53:	So, so we decided that we wanted it to be
00:31:53> 00:31:56:	fee paying because we wanted it to hurt a bit.
00:31:58> 00:32:02:	And and I kind of emphasized the bit because I
00:32:02> 00:32:06:	think it again, we started at 95 lbs, but we're
00:32:06> 00:32:07:	now ??150 per tonne.
00:32:08> 00:32:10:	And in effect, what we did is we plagued the
00:32:10> 00:32:14:	number through our development appraisals to work out what
	would
00:32:14> 00:32:17:	would be the outcome on that development appraisal were we to
00:32:14> 00:32:17: 00:32:17> 00:32:19:	
	be the outcome on that development appraisal were we to
00:32:17> 00:32:19:	be the outcome on that development appraisal were we to charge the internal carbon price.
00:32:17> 00:32:19: 00:32:21> 00:32:24:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's jut the carbon
00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to
00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27: 00:32:27> 00:32:30:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to executive committee and to the board. So what that means is immediately when development
00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27: 00:32:27> 00:32:30: 00:32:30> 00:32:34:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to executive committee and to the board. So what that means is immediately when development decisions are
00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27: 00:32:27> 00:32:30: 00:32:30> 00:32:34:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to executive committee and to the board. So what that means is immediately when development decisions are being made, there is a sort of price of carbon
00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27: 00:32:27> 00:32:30: 00:32:30> 00:32:34: 00:32:35> 00:32:38: 00:32:38> 00:32:39:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to executive committee and to the board. So what that means is immediately when development decisions are being made, there is a sort of price of carbon as part of the discussion.
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00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27: 00:32:27> 00:32:30: 00:32:30> 00:32:34: 00:32:35> 00:32:38: 00:32:38> 00:32:39: 00:32:40> 00:32:42: 00:32:43> 00:32:46:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to executive committee and to the board. So what that means is immediately when development decisions are being made, there is a sort of price of carbon as part of the discussion. What that also means is that every time a design change or a significant design change is made, the team
00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27: 00:32:27> 00:32:30: 00:32:30> 00:32:34: 00:32:35> 00:32:38: 00:32:38> 00:32:39: 00:32:40> 00:32:42: 00:32:43> 00:32:46: 00:32:46> 00:32:49:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to executive committee and to the board. So what that means is immediately when development decisions are being made, there is a sort of price of carbon as part of the discussion. What that also means is that every time a design change or a significant design change is made, the team will always calculate the carbon at the same time.
00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27: 00:32:27> 00:32:30: 00:32:30> 00:32:34: 00:32:35> 00:32:38: 00:32:38> 00:32:39: 00:32:40> 00:32:42: 00:32:40> 00:32:42: 00:32:43> 00:32:46: 00:32:46> 00:32:49: 00:32:49> 00:32:51:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to executive committee and to the board. So what that means is immediately when development decisions are being made, there is a sort of price of carbon as part of the discussion. What that also means is that every time a design change or a significant design change is made, the team will always calculate the carbon at the same time. Because what they have to do then is go back
00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27: 00:32:27> 00:32:30: 00:32:30> 00:32:34: 00:32:35> 00:32:38: 00:32:38> 00:32:39: 00:32:40> 00:32:42: 00:32:40> 00:32:42: 00:32:45> 00:32:49: 00:32:49> 00:32:51: 00:32:51> 00:32:54:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to executive committee and to the board. So what that means is immediately when development decisions are being made, there is a sort of price of carbon as part of the discussion. What that also means is that every time a design change or a significant design change is made, the team will always calculate the carbon at the same time. Because what they have to do then is go back and sort of look at, OK, what's, what's the impact
00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27: 00:32:27> 00:32:30: 00:32:30> 00:32:34: 00:32:35> 00:32:38: 00:32:38> 00:32:39: 00:32:40> 00:32:42: 00:32:40> 00:32:42: 00:32:45> 00:32:49: 00:32:49> 00:32:51: 00:32:51> 00:32:54:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to executive committee and to the board. So what that means is immediately when development decisions are being made, there is a sort of price of carbon as part of the discussion. What that also means is that every time a design change or a significant design change is made, the team will always calculate the carbon at the same time. Because what they have to do then is go back and sort of look at, OK, what's, what's the impact in terms of what we have to pay into the
00:32:17> 00:32:19: 00:32:21> 00:32:24: 00:32:25> 00:32:27: 00:32:27> 00:32:30: 00:32:30> 00:32:34: 00:32:35> 00:32:38: 00:32:38> 00:32:39: 00:32:40> 00:32:42: 00:32:40> 00:32:46: 00:32:46> 00:32:49: 00:32:49> 00:32:51: 00:32:51> 00:32:54: 00:32:54> 00:32:57: 00:32:57> 00:32:59:	be the outcome on that development appraisal were we to charge the internal carbon price. Ultimately what that's done is it's it's put the carbon price at the centre of a paper that goes to executive committee and to the board. So what that means is immediately when development decisions are being made, there is a sort of price of carbon as part of the discussion. What that also means is that every time a design change or a significant design change is made, the team will always calculate the carbon at the same time. Because what they have to do then is go back and sort of look at, OK, what's, what's the impact in terms of what we have to pay into the decarbonisation fund at the end of the projects.

00:33:11> 00:33:12:	are concerned.
00:33:12> 00:33:15:	And that's just, you know, from a behavioural change
	perspective,
00:33:15> 00:33:17:	it's, it's been very helpful.
00:33:18> 00:33:22:	So yes, the funds from the decarbonization fund go into
00:33:23> 00:33:25:	energy efficiency projects.
00:33:25> 00:33:29:	So to give you a bit of colour on that,
00:33:29> 00:33:33:	it's being used for LED systems, it's being used to
00:33:33> 00:33:38:	renew building management systems where we weren't, where where they
00:33:38> 00:33:42:	weren't sort of really up to the standards that we
00:33:42> 00:33:46:	needed to be to really give us a granular information
00:33:47> 00:33:47:	we needed.
00:33:48> 00:33:51:	It's also been used to fund a metering project as
00:33:51> 00:33:54:	well so that we could start to bring the metering
00:33:54> 00:33:58:	of our buildings in line with the Neighbours ratings metering
00:33:58> 00:34:02:	specification, again, because that helps us bring down carbon from
00:34:02> 00:34:06:	our operational buildings with those sorts of projects we've been
00:34:06> 00:34:08:	able to use the money to fund.
00:34:08> 00:34:11:	So again, what that's then driving is our technical services
00:34:11> 00:34:15:	team going out and looking for energy efficiency projects that
00:34:15> 00:34:19:	they think will be quite impactful that would not have
00:34:19> 00:34:20:	otherwise have been funded.
00:34:21> 00:34:23:	So that's where it's been particularly helpful.
	Veel it's really interesting particularly that cultural shift that
00:34:24> 00:34:28:	Yeah, it's really interesting, particularly that cultural shift that you've
00:34:24> 00:34:28: 00:34:28> 00:34:29:	
	you've
00:34:28> 00:34:29:	you've seen in in the company. That's definitely something we here and could have having
00:34:28> 00:34:29: 00:34:29> 00:34:33:	you've seen in in the company. That's definitely something we here and could have having everyone
00:34:28> 00:34:29: 00:34:29> 00:34:33: 00:34:33> 00:34:36:	you've seen in in the company. That's definitely something we here and could have having everyone on board, not just the the SG teams thinking about
00:34:28> 00:34:29: 00:34:29> 00:34:33: 00:34:33> 00:34:36: 00:34:36> 00:34:38:	you've seen in in the company. That's definitely something we here and could have having everyone on board, not just the the SG teams thinking about this, it's it's so powerful.
00:34:28> 00:34:29: 00:34:29> 00:34:33: 00:34:33> 00:34:36: 00:34:36> 00:34:38: 00:34:39> 00:34:42:	you've seen in in the company. That's definitely something we here and could have having everyone on board, not just the the SG teams thinking about this, it's it's so powerful. Martin and Johan, have you got any plans to transition
00:34:28> 00:34:29: 00:34:29> 00:34:33: 00:34:33> 00:34:36: 00:34:36> 00:34:38: 00:34:39> 00:34:42: 00:34:42> 00:34:44:	you've seen in in the company. That's definitely something we here and could have having everyone on board, not just the the SG teams thinking about this, it's it's so powerful. Martin and Johan, have you got any plans to transition from a shadow to a fee paying price?
00:34:28> 00:34:29: 00:34:29> 00:34:33: 00:34:33> 00:34:36: 00:34:36> 00:34:38: 00:34:39> 00:34:42: 00:34:42> 00:34:44: 00:34:44> 00:34:46:	you've seen in in the company. That's definitely something we here and could have having everyone on board, not just the the SG teams thinking about this, it's it's so powerful. Martin and Johan, have you got any plans to transition from a shadow to a fee paying price? Is that in consideration?
00:34:28> 00:34:29: 00:34:29> 00:34:33: 00:34:33> 00:34:36: 00:34:36> 00:34:38: 00:34:39> 00:34:42: 00:34:42> 00:34:46: 00:34:46> 00:34:48:	you've seen in in the company. That's definitely something we here and could have having everyone on board, not just the the SG teams thinking about this, it's it's so powerful. Martin and Johan, have you got any plans to transition from a shadow to a fee paying price? Is that in consideration? Yeah, for sure.
00:34:28> 00:34:29: 00:34:29> 00:34:33: 00:34:33> 00:34:36: 00:34:36> 00:34:38: 00:34:39> 00:34:42: 00:34:42> 00:34:44: 00:34:46> 00:34:48: 00:34:48> 00:34:53:	you've seen in in the company. That's definitely something we here and could have having everyone on board, not just the the SG teams thinking about this, it's it's so powerful. Martin and Johan, have you got any plans to transition from a shadow to a fee paying price? Is that in consideration? Yeah, for sure. The one of our actually our main investor has agreed
00:34:28> 00:34:29: 00:34:29> 00:34:33: 00:34:33> 00:34:36: 00:34:36> 00:34:38: 00:34:39> 00:34:42: 00:34:42> 00:34:44: 00:34:44> 00:34:46: 00:34:48> 00:34:53: 00:34:53> 00:34:58:	you've seen in in the company. That's definitely something we here and could have having everyone on board, not just the the SG teams thinking about this, it's it's so powerful. Martin and Johan, have you got any plans to transition from a shadow to a fee paying price? Is that in consideration? Yeah, for sure. The one of our actually our main investor has agreed on making it the fee for the for their 100%
00:34:28> 00:34:29: 00:34:29> 00:34:33: 00:34:33> 00:34:36: 00:34:36> 00:34:38: 00:34:39> 00:34:42: 00:34:42> 00:34:44: 00:34:44> 00:34:46: 00:34:46> 00:34:48: 00:34:48> 00:34:53: 00:34:53> 00:34:58: 00:34:58> 00:35:02:	you've seen in in the company. That's definitely something we here and could have having everyone on board, not just the the SG teams thinking about this, it's it's so powerful. Martin and Johan, have you got any plans to transition from a shadow to a fee paying price? Is that in consideration? Yeah, for sure. The one of our actually our main investor has agreed on making it the fee for the for their 100% owned assets, which is part of the portfolio.
00:34:28> 00:34:29: 00:34:29> 00:34:33: 00:34:33> 00:34:36: 00:34:36> 00:34:38: 00:34:39> 00:34:42: 00:34:42> 00:34:44: 00:34:44> 00:34:46: 00:34:46> 00:34:48: 00:34:48> 00:34:53: 00:34:53> 00:34:58: 00:34:58> 00:35:02: 00:35:04> 00:35:07:	you've seen in in the company. That's definitely something we here and could have having everyone on board, not just the the SG teams thinking about this, it's it's so powerful. Martin and Johan, have you got any plans to transition from a shadow to a fee paying price? Is that in consideration? Yeah, for sure. The one of our actually our main investor has agreed on making it the fee for the for their 100% owned assets, which is part of the portfolio. We're still working on how to deal with that because

00:35:12> 00:35:16: 00:35:16> 00:35:20: 00:35:20> 00:35:24: 00:35:24> 00:35:29:	So it's good to hear from Janine that there's lots of opportunities to spend it in the right way to spend it on decarbonisation of scope 3 emissions that that might be initiated by, by, by sort of funding through
00:35:29> 00:35:33:	this, this, this bit of money because the tenants might
00:35:33> 00:35:35:	not be able to do so or do it in
00:35:35> 00:35:37:	a different way.
00:35:37> 00:35:38:	So, yeah, for sure.
00:35:38> 00:35:41:	And then of course, if we've got to start to
00:35:41> 00:35:44:	talk to our other joint fancy clients to, to see
00:35:44> 00:35:48:	if, if they are, if they have an appetite to
00:35:48> 00:35:49:	do it as well.
00:35:49> 00:35:53:	So yeah, it's, it's exciting times with I've got sometimes
00:35:53> 00:35:57:	because we just started so we haven't built a fund
00:35:57> 00:35:57:	yet.
00:36:00> 00:36:00:	Yeah.
00:36:00> 00:36:05:	And I would say from our side, we are running
00:36:05> 00:36:10:	a branch green program which is sort of multi million
00:36:10> 00:36:11:	funded.
00:36:12> 00:36:16:	We're doing metering and projects and and the like.
00:36:16> 00:36:20:	And I would say we haven't made sort of the
00:36:20> 00:36:25:	physical payment from carbon fee proceeds to those projects.
00:36:26> 00:36:30:	And again the carbon fee sort of it works together
00:36:30> 00:36:35:	with our strategy including quotas, including reduction plans on each
00:36:35> 00:36:36:	asset.
00:36:36> 00:36:40:	So, so for the moment, we don't see a need
00:36:40> 00:36:45:	to to sort of funnel those sort of physical funds
00:36:45> 00:36:48:	from from one project to another.
00:36:48> 00:36:52:	Sort of we do see that that those projects,
00:36:52> 00:36:55:	they get funded without that connection.
00:36:55> 00:36:55:	Yeah.
00:36:57> 00:36:57:	Interesting.
00:36:57> 00:36:59:	And I also wanted to pick up with you, Johan
00:36:59> 00:37:01:	and perhaps Martin can touch on it as well.
00:37:02> 00:37:07:	You obviously operate across multiple countries and has that presented
00:37:07> 00:37:13:	any challenges with different legislation or different issues coming up?
00:37:14> 00:37:14:	Yes.
00:37:16> 00:37:18:	Again, sort of one of the purposes for for us
00:37:18> 00:37:21:	in introducing this was to create an incentive.

00:37:22> 00:37:26:	And we have found that a say ???100 per tonne
00:37:26> 00:37:33:	incentive and it it's really, really powerful in for example,
00:37:33> 00:37:37:	in one country, it could be in, in Poland or
00:37:37> 00:37:43:	Germany, but in in other countries, say Norway or Sweden,
00:37:43> 00:37:46:	it has much less impact.
00:37:46> 00:37:49:	And that both has to do with sort of different
00:37:49> 00:37:54:	in emission intensities across countries, but also sort of different
00:37:54> 00:37:56:	construction costs across countries.
00:37:57> 00:38:00:	So in some countries we see that a carbon fee
00:38:00> 00:38:05:	takes up less than 1% of construction costs, whereas in
00:38:05> 00:38:09:	other countries it might take up more than two, 3%
00:38:09> 00:38:10:	of construction costs.
00:38:11> 00:38:14:	So it really creates sort of a much stronger incentive
00:38:14> 00:38:18:	and sometimes it becomes almost sort of prohibitive to, to,
00:38:18> 00:38:22:	to, to business and and there you could say then
00:38:22> 00:38:24:	it it really starts to work.
00:38:24> 00:38:29:	Whereas in especially on the operational side in countries with
00:38:29> 00:38:33:	very low emission intensities from the grid, it's, it's sort
00:38:33> 00:38:35:	of, it becomes neglectable.
00:38:35> 00:38:38:	So we do see a need to, to sort of
00:38:39> 00:38:44:	differentiate also instead of taxing the full emissions, what we,
00:38:45> 00:38:49:	what we see as sort of a next iteration could
00:38:49> 00:38:54:	be to, to basically only tax everything above the quota
00:38:54> 00:38:58:	that could be a 1.5?? pathway and then tax that
00:38:58> 00:39:03:	much higher to really create that incentive to sort of
00:39:03> 00:39:06:	be on the on the 1.5 pathway of, of the
00:39:06> 00:39:08:	Paris Agreement.
00:39:09> 00:39:14:	So yeah, huge differences working across countries and of course
00:39:14> 00:39:18:	very different maturities across countries in sort of low carbon
00:39:18> 00:39:22:	building materials, all of the technologies for for the operational
00:39:23> 00:39:23:	side.
00:39:23> 00:39:26:	So, but, but what it creates is really that sort
00:39:26> 00:39:30:	of central awareness and it really sort of brings this
00:39:30> 00:39:34:	to the forefront of the development teams, the investment teams.
00:39:34> 00:39:37:	So everyone sort of works with it on in their
00:39:37> 00:39:38:	in their daily work.
00:39:38> 00:39:40:	And I think that's that's the biggest benefit.
00:39:42> 00:39:42:	Yeah.

00:39:42> 00:39:47:	We, I think in our operation, which concerns about Western
00:39:47> 00:39:52:	Europe, we do not see these large differences as you
00:39:52> 00:39:53:	encounter your own.
00:39:53> 00:39:58:	But it's, it's definitely interesting because I, I didn't think
00:39:58> 00:40:00:	of that before I met you.
00:40:00> 00:40:05:	And we had this, this discussion before because it's, it's
00:40:05> 00:40:09:	interesting to see what I think is necessary is that
00:40:09> 00:40:13:	you, you, you aim for going beyond legislation.
00:40:13> 00:40:17:	So that I think everything we we are aiming for
00:40:17> 00:40:20:	on 1 1/2 degree pathway is.
00:40:20> 00:40:24:	Is way beyond or beyond any legislation in any country,
00:40:24> 00:40:27:	because if you would just follow the legislation in the
00:40:27> 00:40:32:	Netherlands, for instance, you would easily cruise towards the 4??
00:40:32> 00:40:35:	global warming, even though we are committed to to to
00:40:35> 00:40:36:	reach 1 1/2 degrees.
00:40:37> 00:40:40:	So you've got to go beyond and I think a
00:40:40> 00:40:44:	lot of EU regulations that that have been and that
00:40:44> 00:40:49:	so during 24 and will be established in 25 will
00:40:49> 00:40:53:	really help us when it comes to carbon storage when
00:40:53> 00:40:55:	it comes to EPDB.
00:40:55> 00:40:58:	So it's, I think it's really that, that we are
00:40:58> 00:41:02:	now in, in, in an interesting time that there's, there's
00:41:02> 00:41:06:	coming support from legislation that really helps you to give
00:41:06> 00:41:10:	yourself, even if it's a voluntarily basis to, to, to
00:41:10> 00:41:13:	get carbon in your cases and to, to really work
00:41:13> 00:41:14:	with it.
00:41:14> 00:41:17:	And, and to have a framework so that it's, it's,
00:41:17> 00:41:20:	it's, you can benchmark it to, to all the countries
00:41:20> 00:41:23:	that are in, in the European Union and, and the
00:41:23> 00:41:27:	UK is actually following as well, sometimes leading, sometimes following.
00:41:27> 00:41:31:	So I think it's really interesting times and there's lots
00:41:31> 00:41:32:	of opportunities there.
00:41:32> 00:41:34:	And there's, there's nothing to be scared of.
00:41:34> 00:41:37:	It's just that you, you can have some brave moves
00:41:38> 00:41:40:	and there's plenty of room to exercise.
00:41:40> 00:41:43:	But we've, we've got to speed up as as we
00:41:43> 00:41:44:	already know, yeah.
00:41:46> 00:41:50:	Yeah, that's interesting thinking about the kind of tax and
00:41:50> 00:41:53:	and legislation side of it, because one of the things
00:41:53> 00:41:56:	we hear when we talk to the industry is how
	•

00:41:56> 00:41:59:	the sort of potential for the tax coming down the
00:41:59> 00:42:02:	line with ETS2 potentially has been a bit of a
00:42:02> 00:42:02:	driver.
00:42:02> 00:42:05:	But from what you've all said, that's not been mentioned
00:42:05> 00:42:08:	yet as a as an incentive for introducing it yourselves.
00:42:08> 00:42:11:	And I wonder is that coming up in conversation perhaps
00:42:11> 00:42:15:	with other other colleagues or other industry peers or is
00:42:15> 00:42:18:	it just not, not so much of A consideration for
00:42:18> 00:42:18:	you?
00:42:20> 00:42:21:	Yeah, I did it.
00:42:21> 00:42:24:	It does come across sometimes with peers.
00:42:27> 00:42:30:	It it's, it's a taxonomy is coming our way.
00:42:30> 00:42:33:	So you've got you, you just know that it will
00:42:33> 00:42:37:	be entered 262728 somewhere, maybe it gets postponed a little
00:42:37> 00:42:40:	bit, but it will be there in the end.
00:42:40> 00:42:44:	So every development that you touch today will be will
00:42:44> 00:42:47:	be affected by it and you will have a 10
00:42:47> 00:42:51:	year operation probably as I said it before, before you
00:42:51> 00:42:54:	have another opportunity to, to change.
00:42:54> 00:42:59:	So it's you better just make sure that you you
00:42:59> 00:43:04:	hit these future fit targets in your energy intensity for,
00:43:04> 00:43:06:	for your assets.
00:43:06> 00:43:09:	And then you should be safe for, for carbon emissions.
00:43:09> 00:43:14:	And then you've got to know that the embodied carbon
00:43:14> 00:43:17:	in the life cycle will be half the carbon.
00:43:17> 00:43:20:	So around half will be the operational carbon.
00:43:20> 00:43:22:	And then I think about half of the what is
00:43:22> 00:43:25:	carbon will be in your initial process for development.
00:43:26> 00:43:29:	And then the other two quarters will be spent during
00:43:29> 00:43:31:	the operation and at the end of life.
00:43:31> 00:43:34:	So it's it's something that you need to take into
00:43:34> 00:43:34:	account.
00:43:34> 00:43:36:	It's not just operational.
00:43:38> 00:43:41:	And I would say to a great extent it's already
00:43:41> 00:43:41:	here.
00:43:42> 00:43:46:	It's just not hitting us directly as asset managers or
00:43:46> 00:43:50:	asset owners, but it hits our value chain and the
00:43:50> 00:43:55:	the building materials are already subject to emission schemes and
00:43:55> 00:43:58:	carbon tax in in many countries.
00:43:59> 00:44:02:	So it's already here when it comes to especially embodied

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00:44:02> 00:44:05:	emissions and on operational emissions.
00:44:05> 00:44:08:	We also do see it sort of at the, at
00:44:08> 00:44:11:	the at the source when it, when it comes to
00:44:11> 00:44:12:	energy generation.
00:44:14> 00:44:16:	So it's, it's, it's hitting us and it's going to
00:44:16> 00:44:17:	continue to do that.
00:44:18> 00:44:21:	But but in the near future, we don't see sort
00:44:21> 00:44:24:	of us as a as a building owner sort of
00:44:24> 00:44:25:	being taxed directly.
00:44:26> 00:44:29:	But of course this helps us always keeping track of
00:44:29> 00:44:33:	our exposure if if that would be the case, right?
00:44:35> 00:44:38:	And actually Janine, someone's just asked in the in the
00:44:38> 00:44:40:	question about how it sits with the UK given it's
00:44:40> 00:44:41:	but not part of the EU.
00:44:42> 00:44:42:	Yeah.
00:44:42> 00:44:43:	So I've just seen that.
00:44:43> 00:44:48:	So UK, the consultation for the UK green taxonomy was
00:44:48> 00:44:51:	released a couple of weeks ago.
00:44:51> 00:44:54:	So let's see what happens with that consultation.
00:44:56> 00:45:00:	I mean, we've always seen this as being about de
00:45:00> 00:45:05:	risking as opposed to sort of responding to potential taxes
00:45:05> 00:45:08:	or, you know, looking for incentives.
00:45:08> 00:45:11:	And so we saw it as a way of making,
00:45:11> 00:45:17:	I guess, our portfolio more climate resilient because of having
00:45:17> 00:45:22:	the actual internal carbon price and actually sort of driving
00:45:22> 00:45:26:	a better outcome in terms of how close to, let's
00:45:26> 00:45:29:	call it, net zero for now, net 0 carbon.
00:45:29> 00:45:31:	Our buildings were that we were developing.
00:45:31> 00:45:32:	And so it was.
00:45:32> 00:45:35:	So for us, it's very much, it was much more
00:45:35> 00:45:40:	around de risking climate resilience, driving down our embodied carbon
00:45:40> 00:45:46:	emissions, driving down our carbon footprint more generally
	and behavioural
00:45:46> 00:45:46:	change.
00:45:46> 00:45:50:	Because actually what we found with it was that the
00:45:50> 00:45:53:	internal comp prices had a huge impact on our supply
00:45:53> 00:45:57:	chain because it means that when they're bringing proposals to
00:45:57> 00:46:01:	us, they are having to actually calculate the carbon impact
00:46:01> 00:46:01:	upfront.
00:46:02> 00:46:04:	So the legislation is there.
00:46:04> 00:46:06:	It's, it's something to think about.

00:46:07> 00:46:10:	It's so it's something that we have to take into
00:46:10> 00:46:15:	account when we're making decisions, but it is absolutely not
00:46:15> 00:46:17:	and never has been a driver for us.
00:46:18> 00:46:22:	So but, but ultimately, and as has already been said,
00:46:22> 00:46:26:	you know, indirectly EU taxonomy also impacts us because we
00:46:26> 00:46:31:	have investors who are investing in businesses across the EU
00:46:31> 00:46:32:	as well as the UK.
00:46:32> 00:46:36:	So essentially they're using many of the same thought processes
00:46:36> 00:46:38:	to look at us as they are for our EU
00:46:38> 00:46:39:	peers.
00:46:39> 00:46:42:	So, so I don't think there's a huge differentiation actually
00:46:42> 00:46:46:	between how you would look at it from AUK perspective
00:46:46> 00:46:48:	to that of an EU perspective.
00:46:49> 00:46:52:	Yeah, thank you and thanks to everyone who's submitting in
00:46:52> 00:46:53:	questions.
00:46:53> 00:46:55:	We're just going to get through go through a few
00:46:55> 00:46:56:	of those now.
00:46:56> 00:46:58:	So appreciate you sending it in.
00:46:59> 00:47:02:	One of the ones I thought was quite interesting is
00:47:02> 00:47:05:	we've talked about interactions with value chains.
00:47:05> 00:47:09:	Deneen, you were, you were just mentioning it there, but
00:47:09> 00:47:12:	someone's asking, have you seen interest in this topic from
00:47:12> 00:47:16:	the building building users, so the tenants and the occupier
00:47:16> 00:47:17:	side of things?
00:47:19> 00:47:22:	So what we found with our with our building occupiers
00:47:22> 00:47:25:	is it very much depends upon the occupier as to
00:47:25> 00:47:29:	what the what the conversation, how the conversation works on
00:47:29> 00:47:30:	sustainability.
00:47:31> 00:47:35:	So Clifford Chance, who have taken space at our two
00:47:35> 00:47:41:	Oldhambury Square development, they have been very engaged in what
00:47:41> 00:47:47:	we've been doing from a sustainability perspective more generally on
00:47:47> 00:47:50:	the net 0 carbon buildings agenda.
00:47:50> 00:47:52:	And so in turn, the internal carbon price was part
00:47:52> 00:47:53:	of that conversation.
00:47:54> 00:47:57:	But I do think it's been more effective with our
00:47:57> 00:47:59:	supply chain than perhaps it has been with our customers.
00:47:59> 00:48:02:	And the conversation is slightly different from our customer

perspective. 00:48:02 --> 00:48:04: That would be my observation. 00:48:04 --> 00:48:07: It also depends on the size of the business that 00:48:07 --> 00:48:11: we're working with from our building occupiers as to whether 00:48:11 --> 00:48:16: when the conversation happens and, and and what questions they're 00:48:16 --> 00:48:16: asking. 00:48:22 --> 00:48:23: Any thoughts? 00:48:23 --> 00:48:26: Johann Martin from the occupier side or not seen much 00:48:26 --> 00:48:27: yet? 00:48:27 --> 00:48:28: Not really. 00:48:28 --> 00:48:34: We, we work with obviously retail and residents, so not 00:48:34 --> 00:48:35: much offices. 00:48:35 --> 00:48:39: I think for offices it's, it's really a game changer 00:48:39 --> 00:48:43: because everyone understands that you need a really well performing 00:48:44 --> 00:48:47: office because it's, it's the showcase of your company. 00:48:47 --> 00:48:51: So it's, it has much more reputational damage issues than 00:48:51 --> 00:48:56: than, than, than than residential or retail because residential retail 00:48:56 --> 00:49:01: are basically still driven by location, location, location that of 00:49:01 --> 00:49:06: course there's, there's there's large companies in retail that, that 00:49:06 --> 00:49:09: do have an obligation for CSOD as well. 00:49:09 --> 00:49:11: So there will be in the end chasing the same 00:49:11 --> 00:49:13: information as we are. 00:49:13 --> 00:49:16: So there there is a way to to work together 00:49:16 --> 00:49:20: and to see how we can change behavior or get 00:49:20 --> 00:49:22: more energy efficient. 00:49:22 --> 00:49:23: So yeah, for sure. 00:49:25 --> 00:49:29: And then someone's asking a question directly about the suppliers 00:49:29 --> 00:49:33: and how you sort of how carbon pricing is discussed 00:49:33 --> 00:49:33: with them. 00:49:34 --> 00:49:37: Do you include it in the context of contractual agreements? 00:49:37 --> 00:49:39: Is it does it go that far or is it 00:49:39 --> 00:49:40: more of a a general discussion? 00:49:42 --> 00:49:49: Well, we've just issued new requirements. 00:49:49 --> 00:49:52: So in in our design brief, which also takes the 00:49:52 --> 00:49:56: carbon case into account, which makes them clear that what 00:49:56 --> 00:49:59: to what amount or to what extent we need the

And that will then be translated in in their designs

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information on the bodies carbon through our design teams.

00:49:59 --> 00:50:02:

00:50:03 --> 00:50:06:

00:50:07> 00:50:10:	and and their requests to the to the suppliers as
00:50:10> 00:50:10:	well.
00:50:13> 00:50:16:	I mean, I think from our perspective, we've been pretty
00:50:16> 00:50:20:	clear from the off that we have the internal carbon
00:50:20> 00:50:23:	price and the implications on our development, excuse me, on
00:50:24> 00:50:25:	our development schemes.
00:50:26> 00:50:30:	It helps that it's an actual price, whether that's concerned
00:50:30> 00:50:34:	because ultimately it does impact where the development lands at
00:50:34> 00:50:37:	the end in terms of, you know, whether it's on
00:50:37> 00:50:38:	budget or not.
00:50:38> 00:50:42:	And our project teams work quite hard to actually bring
00:50:42> 00:50:46:	down what they're going to be paying in internal carbon
00:50:46> 00:50:47:	price.
00:50:47> 00:50:50:	And in in a way that's what's driven the behavioural
00:50:50> 00:50:53:	change because they make it their business to reduce the
00:50:53> 00:50:56:	amount that they're putting into our decarbonisation fund
	because it
00:50:56> 00:51:00:	essentially allows them to spend their contingency in other
	places.
00:51:01> 00:51:04:	So that's a that's a sort of really helpful mechanism
00:51:04> 00:51:04:	for us.
00:51:04> 00:51:08:	So yeah, it's discussed upfront and as part of calculating
00:51:08> 00:51:11:	what the target and body carbon is going to be
00:51:11> 00:51:13:	for that particular development as well.
00:51:14> 00:51:18:	But in terms of sort of clauses in contracts, we're
00:51:18> 00:51:22:	not at the point yet where we're holding our development
00:51:22> 00:51:27:	partners to delivering a particular in body carbon target because
00:51:27> 00:51:31:	actually we're preferring to take the approach where you know
00:51:32> 00:51:34:	much more and the word gets overused.
00:51:34> 00:51:35:	But I'm going to use it anyway.
00:51:35> 00:51:39:	A much more collaborative approach with our supply chain where
00:51:39> 00:51:43:	we come to the table with different sort of potential
00:51:43> 00:51:47:	solutions to to a problem and work around it together.
00:51:49> 00:51:54:	I would say among the building material producers and
	manufacturers,
00:51:54> 00:51:57:	there's already a very high awareness of this.
00:51:57> 00:52:03:	They are sort of increasingly delivering products to market that
00:52:03> 00:52:07:	are sort of far advanced in, in, in decarbonisation.
00.02.00 00.02.07.	are sort or far advanced in, in, in decarbonisation.

00:52:09> 00:52:13:	Then with our contractors, we have used the price actively
00:52:13> 00:52:17:	and and sometimes we've even had sort of mechanisms with
00:52:17> 00:52:21:	contractors where we could actually sort of pay them a
00:52:21> 00:52:25:	bonus payment if they would be able to decrease the
00:52:25> 00:52:28:	whole life footprint of a building.
00:52:28> 00:52:32:	And so sort of passing that financial incentive on to
00:52:32> 00:52:36:	our contractors, which has been been been helpful, but always
00:52:36> 00:52:40:	sort of in connection with the with the targets and
00:52:40> 00:52:44:	sort of setting a quota basically for the contractor to
00:52:44> 00:52:48:	hit, whether it being sort of an upfront embodied target
00:52:48> 00:52:51:	with a whole life emissions target as well.
00:52:52> 00:52:55:	And just touching on the Occupy, I would say, yeah,
00:52:55> 00:52:59:	we haven't really gotten any attention from occupiers on the
00:52:59> 00:53:01:	on the carbon price in particular.
00:53:01> 00:53:05:	They are much more focused on getting information about the
00:53:05> 00:53:10:	actual emissions of the building, mainly operational, in some cases
00:53:10> 00:53:13:	embodied, but in order to be able to do their
00:53:13> 00:53:17:	own reporting, to showcase their own sort of pathway.
00:53:17> 00:53:22:	But but yeah, the mechanism works much better towards sort
00:53:22> 00:53:24:	of the supply chain.
00:53:22> 00:53:24: 00:53:25> 00:53:26:	Thank you.
00:53:25> 00:53:26: 00:53:27> 00:53:30:	Thank you. Someone is asking what are the benefits, sort of additional
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon.
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00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:37:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying.
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40: 00:53:41> 00:53:43:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40: 00:53:41> 00:53:43: 00:53:44> 00:53:46:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving to that shadow carbon price on top of just measuring
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40: 00:53:41> 00:53:43: 00:53:44> 00:53:46: 00:53:47> 00:53:48:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving to that shadow carbon price on top of just measuring what carbon is being used?
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40: 00:53:41> 00:53:43: 00:53:44> 00:53:46: 00:53:47> 00:53:48: 00:53:49> 00:53:52:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving to that shadow carbon price on top of just measuring what carbon is being used? I would say it does make a difference if you
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:37: 00:53:41> 00:53:40: 00:53:44> 00:53:46: 00:53:47> 00:53:48: 00:53:49> 00:53:52: 00:53:52> 00:53:55:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving to that shadow carbon price on top of just measuring what carbon is being used? I would say it does make a difference if you have your business case and in the end the profits.
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40: 00:53:41> 00:53:43: 00:53:44> 00:53:46: 00:53:47> 00:53:48: 00:53:49> 00:53:52: 00:53:52> 00:53:55: 00:53:56> 00:54:00:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving to that shadow carbon price on top of just measuring what carbon is being used? I would say it does make a difference if you have your business case and in the end the profits. And then there's this figure that says, but minus because
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40: 00:53:41> 00:53:43: 00:53:44> 00:53:46: 00:53:47> 00:53:48: 00:53:49> 00:53:52: 00:53:52> 00:53:55: 00:53:56> 00:54:00: 00:54:00> 00:54:04:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving to that shadow carbon price on top of just measuring what carbon is being used? I would say it does make a difference if you have your business case and in the end the profits. And then there's this figure that says, but minus because of your carbon impacts, which should actually move people to,
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40: 00:53:41> 00:53:43: 00:53:44> 00:53:46: 00:53:47> 00:53:48: 00:53:49> 00:53:52: 00:53:52> 00:53:55: 00:53:56> 00:54:00: 00:54:04> 00:54:07:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving to that shadow carbon price on top of just measuring what carbon is being used? I would say it does make a difference if you have your business case and in the end the profits. And then there's this figure that says, but minus because of your carbon impacts, which should actually move people to, to to want to make that, that, that figure as
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40: 00:53:41> 00:53:43: 00:53:44> 00:53:46: 00:53:47> 00:53:48: 00:53:49> 00:53:52: 00:53:52> 00:53:55: 00:53:56> 00:54:00: 00:54:04> 00:54:07: 00:54:07> 00:54:09:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving to that shadow carbon price on top of just measuring what carbon is being used? I would say it does make a difference if you have your business case and in the end the profits. And then there's this figure that says, but minus because of your carbon impacts, which should actually move people to, to to want to make that, that, that figure as small as possible.
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40: 00:53:41> 00:53:43: 00:53:44> 00:53:46: 00:53:47> 00:53:48: 00:53:49> 00:53:52: 00:53:56> 00:54:00: 00:54:00> 00:54:07: 00:54:07> 00:54:09: 00:54:10> 00:54:14:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving to that shadow carbon price on top of just measuring what carbon is being used? I would say it does make a difference if you have your business case and in the end the profits. And then there's this figure that says, but minus because of your carbon impacts, which should actually move people to, to to want to make that, that, that figure as small as possible. But then of course, probably the, the building costs in
00:53:25> 00:53:26: 00:53:27> 00:53:30: 00:53:30> 00:53:34: 00:53:34> 00:53:35: 00:53:35> 00:53:37: 00:53:37> 00:53:40: 00:53:41> 00:53:43: 00:53:44> 00:53:46: 00:53:47> 00:53:48: 00:53:49> 00:53:52: 00:53:52> 00:53:55: 00:53:56> 00:54:00: 00:54:04> 00:54:07: 00:54:07> 00:54:09:	Thank you. Someone is asking what are the benefits, sort of additional benefits of using a carbon price rather than just measuring your carbon. And I suppose we've heard a bit about the fee paying. But on the the shadow accounting side of things, have you seen a sort of additional benefits of of moving to that shadow carbon price on top of just measuring what carbon is being used? I would say it does make a difference if you have your business case and in the end the profits. And then there's this figure that says, but minus because of your carbon impacts, which should actually move people to, to to want to make that, that, that figure as small as possible.

00:54:20> 00:54:24:	not the only are not well determining everything in the
00:54:24> 00:54:25:	business case.
00:54:25> 00:54:29:	So it is challenging so because you still got to
00:54:29> 00:54:31:	be within these margins.
00:54:33> 00:54:37:	And, and in our experience there sort of to make
00:54:38> 00:54:42:	the real impactful choices, a carbon fee of say 90,
00:54:42> 00:54:46:	even maybe ???200 per tonne is, is not enough or
00:54:47> 00:54:48:	has not been enough.
00:54:48> 00:54:53:	Like for example, to replace a concrete construction with a
00:54:53> 00:54:57:	timber construction at least sort of in the past couple
00:54:57> 00:55:01:	of years that had has had has had a much
00:55:01> 00:55:02:	higher price.
00:55:02> 00:55:05:	And we are, we have seen that price coming down.
00:55:05> 00:55:08:	But sort of to be first mover on some of
00:55:08> 00:55:12:	these sort of more heavy levers in the in the
00:55:12> 00:55:12:	toolbox.
00:55:13> 00:55:16:	A carbon fee of this level is not always enough
00:55:16> 00:55:17:	to incentivize that.
00:55:17> 00:55:19:	And that's when you need sort of the the targets
00:55:19> 00:55:20:	and the quota as well.
00:55:24> 00:55:29:	Yeah, I think it's, it's interesting these these targets we've
00:55:29> 00:55:33:	seen, I think the, the province of Itrecht in the
00:55:33> 00:55:37:	Netherlands used 1200 or so or 900, I don't know.
00:55:37> 00:55:40:	And, and no, 875 I think.
00:55:40> 00:55:44:	And Amsterdam moved towards for 80 or so something, well
00:55:44> 00:55:49:	half, half of Itrecht, which is interesting because they they
00:55:49> 00:55:52:	have tried to make a true, true price.
00:55:53> 00:55:56:	But there's also people saying, well, this is definitely not
00:55:56> 00:55:57:	a true price.
00:55:57> 00:56:00:	If you take everything in the chain into consideration, it,
00:56:00> 00:56:02:	it might as well be 1500.
00:56:02> 00:56:06:	So yeah, there's it's, I think most people stick to
00:56:07> 00:56:11:	around 100 because that makes a bit more sense to
00:56:11> 00:56:14:	relating it to your business case.
00:56:15> 00:56:19:	We took the International Energy Agency figure, they have
	drawn
00:56:20> 00:56:22:	a graph where they expected to be going.
00:56:22> 00:56:26:	So it's around 120, maybe slightly higher already, but that's
00:56:26> 00:56:30:	why we started with 120 and the experience will then
00:56:30> 00:56:33:	learn if if we need to tweak the figures or
00:56:33> 00:56:33:	not.
00:56:35> 00:56:35:	Thank you.

00:56:36 --> 00:56:39: Unfortunately, we are quickly running out of time and there's 00:56:39 --> 00:56:41: been some great questions sent in mostly towards the end. 00:56:41 --> 00:56:43: So I'm sorry we didn't have a chance to address 00:56:43 --> 00:56:44: all of them. 00:56:44 --> 00:56:46: Please do e-mail them to me. I'm not sure we can see exactly who you are 00:56:46 --> 00:56:48: 00:56:48 --> 00:56:51: via Zoom and we will do our best to get 00:56:51 --> 00:56:52: back to you on those. 00:56:52 --> 00:56:55: I have a final question for the panel and that 00:56:55 --> 00:56:58: is we've seen a great amount of interest in carbon 00:56:58 --> 00:57:00: pricing just from this webinar alone. 00:57:01 --> 00:57:04: Very quickly perhaps in a sentence or two, could you 00:57:04 --> 00:57:07: give us what your what advice you would give for 00:57:07 --> 00:57:10: those looking at implementing a carbon price? 00:57:12 --> 00:57:14: Martin, would you like to start? 00:57:14 --> 00:57:19: Yeah, I would definitely say start registering recording your embodied 00:57:19 --> 00:57:22: carbon emissions just for the sake of it to have 00:57:22 --> 00:57:25: the data even if you if you are struggling to 00:57:25 --> 00:57:28: introduce any carbon pricing tool or whatsoever you need the 00:57:29 --> 00:57:29: data. 00:57:29 --> 00:57:31: So I'm now looking back at at projects that we 00:57:31 --> 00:57:33: started two years ago. If if I can get a grip on this day 00:57:33 --> 00:57:35: 00:57:35 --> 00:57:37: of on this data. 00:57:37 --> 00:57:39: So to have a little bit more than have to 00:57:39 --> 00:57:40: having to wait for three years. 00:57:40 --> 00:57:44: So definitely start start collecting. 00:57:45 --> 00:57:46: Thank you, Janine. 00:57:47 --> 00:57:49: So yeah, get started. 00:57:50 --> 00:57:53: And I think the other thing is, is get everybody 00:57:53 --> 00:57:55: you need on board. 00:57:56 --> 00:58:00: Behavioural change can only happen if you talk to everybody 00:58:00 --> 00:58:04: impacted by what you're, what you're, what you're doing and 00:58:04 --> 00:58:06: make sure that you get their buy in. 00:58:06 --> 00:58:06: Thank. You and Johan. 00:58:07 --> 00:58:08: 00:58:09 --> 00:58:09: Yeah. 00:58:09 --> 00:58:12: I would say sort of consider the purpose real carefully 00:58:12 --> 00:58:16: and because that will inform your decisions on whether you 00:58:16 --> 00:58:19: need a physical payment or a shadow price. 00:58:19 --> 00:58:22: And if you're going down the road of a physical

00:58:22> 00:58:24:	payment, sort of, you need to get your CFO on
00:58:24> 00:58:25:	board very quickly.
00:58:27> 00:58:29:	Amazing, really, really powerful advice there.
00:58:29> 00:58:32:	And I feel like we could have continued this conversation
00:58:32> 00:58:34:	on, but really appreciate that for our attendees.
00:58:34> 00:58:37:	We do have a quick poll for you to fill
00:58:37> 00:58:39:	in, just a quick bit of feedback.
00:58:40> 00:58:43:	It should just take you literally 30 seconds to fill
00:58:43> 00:58:44:	in three questions.
00:58:44> 00:58:47:	We'd really appreciate your feedback on that.
00:58:48> 00:58:51:	And while you're doing that, I'd just like to tell
00:58:51> 00:58:54:	you about another webinar that we have happening at ULI
00:58:54> 00:58:55:	tomorrow.
00:58:56> 00:59:00:	So this is showcasing the awards for excellent winners.
00:59:00> 00:59:04:	You can see the the five projects on the screen
00:59:04> 00:59:04:	there.
00:59:05> 00:59:06:	Please do join us.
00:59:07> 00:59:09:	We can you'll be able to find the link etcetera
00:59:10> 00:59:10:	on our website.
00:59:11> 00:59:13:	And finally, I just want to say a huge thank
00:59:13> 00:59:15:	you to the panelists.
00:59:15> 00:59:16:	Thank you to everyone for joining us.
00:59:17> 00:59:19:	I think I'm allowed to say Merry Christmas, but I'm
00:59:19> 00:59:21:	I'm not sure, but I'm going to do it.
00:59:21> 00:59:24:	Merry Christmas to everyone and see you next time.
00:59:24> 00:59:25:	Thank you very much.
00:59:28> 00:59:28:	Thank you.
00:59:28> 00:59:28:	Thanks.

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