Transcript: Sustainable Places: Climate Adapted Cities

**Speakers**

Blanche Cameron (host), Dusty Gedge, John Little, Drew Davy, Jonathan Wates

**BLANCHE CAMERON:**Good afternoon, everybody. Hello. Welcome to Sustainable Places event series at The Bartlett, the Faculty of the Built Environment at UCL. I'm Blanche Cameron, I'm an Environmental Design Lecturer at The Bartlett School of Architecture and I'll be hosting this session. Sustainable Places is a new monthly online event series led by The Bartlett where we invite leading thinkers in the built environment field to explore all aspects of the climate crisis and how it intersects with the built environment from sustainability and green design to climate adapted cities and housing.

Today you're joining the very first event of the series, Sustainable Places: Climate-adapted cities. This session also relates to the UCL Green Infrastructure Network launching this month with a sharing event coming soon which will be sent out to participants after the event. Before we begin, a little housekeeping: This session is captioned live by a professional human captioner, if you wish to view the captions on a separate browser window, click on the link shared in the chat. This event is being recorded, so the recording and transcript will be added to The Bartlett UCL Faculty of the Built Environment YouTube channel and forwarded to registered attendees after the event. The format for today, I'm going to first welcome our guests to present for the first half of the session and that will be followed by discussion and a Q&A before we end promptly at two o'clock. We encourage you to submit a question for the speakers at any point during this lecture by clicking on the Q&A function at the bottom of the screen and in this Sustainable Places event, we will explore how the built environment sector can help built, manage, implement, care for, maintain biodiverse urban landscapes and the changes needed to get there. We will be discussing new opportunities for employment, training and skills financing mechanisms that account for more than just economic returns, real empowerment of people and communities and organisations and the radical collaborations between health, ecology, planning, design, construction, and stewardship that we need in order to make this happen. We will imagine what scale of change might be possible for healthier, fairer and more resilient societies, and what steps we can take to make all cities nature-based.

Today it's my pleasure to welcome four amazing panelists, very sorry to say that Wendy Allen, award-winning garden designer who works with local communities to implement nature-based solutions can't be with us today but in her place, we are still here with Drew Davy, Senior Sustainability Insights Manager at Grosvenor property UK, Dusty Gedge, president of the European Federation of Green Roof Associations, Founding Director of livingroofs.org, John Little, biodiverse urban public realm landscapes innovator, and owner of Hilldrop wildlife gardens and Jonathan Wates, the Lead Trustee of the Wates Family Enterprise Trustee, philanthropist and social entrepreneur, inspirer. The first part of the session I will be facilitating, and I would like to come to first introducing yourselves as panelists, Dusty Gedge, if we come to you first. Please.

**DUSTY GEDGE:**Hi, thank you very much. I'm going to share my screen, so I get directly into it you know that I'm the president of the European Federation of Green Roof Associations but give me a moment and I'll get my screen up and start my little presentation.

Hopefully you can see that. I thought I would start off with, this is Blackheath where I live, and these are the Blackheath bee rose, that's my starting point because I've been interested in nature all my life and this is where I'm from, the cockle shell beach in east Kent, and I just want you to bear with the blue plants because the blue plant will come up a lot in this short little presentation, and this is a roof up in bishops gate in the city of London and these people work in this building, and it's the first time they've been allowed on the roof, where you've got something similar to the cockle shell beach. And the at some point that we can create landscapes on buildings that are good for biodiversity. And I'm particularly interested in this bird because this bird has collapsed in my lifetime and it's called the linnet and a lot of people don't really think very much of the linnet but it's a very pretty bird and it's collapsed and if we put good biodiverse green roofs up in our cities, wherever they are in the United Kingdom we can deliver for the linnet which I will show you later. We can create landscapes at roof level that people can enjoy, and I would like people to be able to go on green roofs designed for biodiversity, this is a more formal one viewed from the station, as you go into the museum of the home. So we can make places that are of interest to people and wildlife. And obviously with an energy crisis, we can also create renewable energy at roof level while also delivering for biodiversity and this is a roof up in Barnett on a children's hospice which is doing exactly that. These are what are known as bio solar green roofs. Obviously being the president of the European federation, I get to see and witness innovation around Europe and I'm really interested in how we can bring this to the United Kingdom, this roof actually increases the amount of biodiversity but also this particular style of panel usage, which is what is known as bifacial can increase the energy production by 10 percent on a solar roof. I think it's something that needs to go on schools, social housing, everything.

So that's one of the things that I'm up to. And returning to the linnet, I was employed as an ornithologist to study the Greenwich peninsula 20 years ago, and there were seven to ten pairs of birds at the time, and this is a linnet fielding on a green roof on the peninsula, there are now more than there were 20 years ago because all those developments have green roofs designed for biodiversity, I come back to Blackheath, because when I put pictures out Twitter, the number of people saying driving or walking across Blackheath and seeing the wildflowers really enhances their life, so it's about people and wildlife and delivering for climate change. Thank you very much.

**BLANCHE CAMERON:**Thank you, Dusty, wonderful way to start the discussion, and John Little, if you would like to introduce yourself next.

**JOHN LITTLE:** Hello, hello, I'll just share my screen first if I can. Okay.

So, yeah, I don't know, I've been beavering away, I guess, in urban places trying to squeeze in wildlife but as importantly trying to respond to the way people live and I guess what I am very interested in as well as the infrastructure which I'm known for the green roofs and some of the green infrastructure, I'm very interested in how we look after places. So I would like to see money, money, money go into funding time. Money into going into paying people to have the time to look after places properly. These two amazing women lived on my -- the estate that I used to look after, Clapton park estate and they essentially my job was -- started off as a maintenance contractor but as soon as you introduce time and money into urban places to look after them, you don't have to build loads of stuff necessarily, but to look after them and give people the time, then you can talk to Zaynab and people and understand what people want. And it's all about the people. So we adapted the estate really to suit these people. Obviously we did because they lived there. We didn't live there. So I am very keen on trying to move the emphasis slightly away from constant capital investments into revenue, into people, into training, into gardeners, and people that care for places. And these two images I use quite a lot because this kind of sums up what happens at the moment, I feel, certainly when you are looking after public spaces. There's a big investment, for instance, in the photo on the right, a big investment in a stainless steel spade, and that sums up where the money goes. It's in the upfront, towards getting an image, getting a picture taken for the funders, here's a picture and then we all walk away and nothing happens.

And we should take the emphasis from that front end and move it into people who look after places because if you have -- if you invest in the people who look after places, you invest it directly into people's pockets and you also invest in people that understand the place. And we find -- I would say that most people love having people around, love having people looking after a place, having people to talk to, having time. So that's where I would like to see the emphasis shifted. I'm also really fascinated about how we can inject some sort of joy and biodiversity and, of course, all the other benefits that green infrastructure brings but invest it into the everyday stuff. So here's an everyday thing, somewhere to park your bike. It functions to park your bike. But it can do so, so much more, can't it? It's habitat. It's joy. It could be interpretation. It could be all those things. So everyday places, everyday infrastructure. There's such an amazing opportunity to actually make those things function on more than one level. So that's a bike shelter.

I'm obsessing mildly about car parks, very everyday, but they're the places to actually start to make beautiful. These are the places that we have to go to. These are the things that we have to use and we have the opportunity and the skills now to actually make these places an amazing space and a learning space so this is a car park we recently were involved in and we replaced the car park bays with gardens. So they would have had cars on, we have put gardens in. So that's an easy and simple way to say, this is what we should be doing for the future. We should be replacing the hard and the everyday with the joy.

That's what I think. So that about sums up what I'm interested in, people and every day stuff.

**BLANCHE CAMERON:** Lovely. I love the investing in the everyday, John. Perfectly put. Thank you. Our next panelist, Drew Davy at Grosvenor property UK, please.

**DREW DAVY:**Hi everyone, very excited to be here. Thanks to Blanche for the intro. To give you a bit of background about Grosvenor, in case you don't know who we are. We're a 340 year-old company that have a heartland in Mayfair and Belgravia in London with five and a half billion in assets under management, we, and you will find this with all the panelists today, especially from my perspective are very excited about sustainability and biodiversity. I come from a background, I'm an ex-biologist, so I'm excited to be part of the team here. We last year launched our first biodiversity strategy, which was at the time fairly innovative in the market and as I think others will go through, there aren't that many biodiversity strategies out there, and for me, the bit that I'm most passionate about is how to integrate biodiversity into strategic decision-making at the C suite level. I was a strategy consultant for six years, and it's, how do you make it easy for people to make these decisions, and so we in mid-last year set ourselves the target of a 20 percent uplift by 2030 using the DEFRA metric, and I think what would be interesting as part of this discussion is, there are probably two or three things that I think are key. One is, how do you bring people and integrate people in that journey. So we also released our first ever people strategy called people positive earlier this year, and one of the main things coming out of that, which is not unusual for central London, obviously is access to green space which I think all of us realised during COVID is something that we really need and want but I think has been underinvested in in general and so it's how do we match up with that?

And integrate biodiversity which, again, is a very underinvested problem within sustainability.

Then the second thing that I think would be most exciting is how do you integrate that at a strategic level, how do you incentivise people, finance it, how do you ensure that people are brought on and make a cultural shift to value biodiversity, and we at Grosvenor have done many things to try to instill that from the top down in everyone's decision-making and then the last thing is making sure that you are doing the right interventions in the right places. We will get on to this but we work with Dusty, for example, to look at our green roof and where we can best integrate green roofs into our biodiversity uplift but for us, it's sort of a no-brainer that we need to think about biodiversity and for me one of the key interesting stats was that more people go to a royal park or a green space in Lon than visit a national park, which is not surprising given the urbanisation that's going on but it promotes the importance of our urban green spaces. That's me.

**BLANCHE CAMERON:** Great, thanks very much, Drew, yes, making it easy to take action and making it easy to integrate into strategies as well, very interesting.
Finally, to Jonny Wates.

**JONATHAN WATES:** Hello, everyone, I'll pick on the bat straight away from Drew. I spent an hour in Battersea Park playing football with my son. It's a fantastic environment to be in. But there's two or three reasons why I'm really interested and pleased to be here. The first one is, family heritage, there's a pedigree in my family of place making. 2022 was the 125th anniversary of the Wates Group, our family business where I have worked for almost 30 years personally. Since my great grandfather found the business, we believe that business should be a force for good. The built environment has been our place of work, over the years, we have built, repaired and maintained a multitude of buildings, from public housing to prisons, from St. Paul's to currently a [ inaudible ] factory. We have done it in virtually every town and city in are Britain. We care about our legacy, we understand that our survival as a business depends on our ability to deliver social, environmental, and economic outcomes in balance with each other.

Secondly, I believe that climate change and biodiversity loss are two of the greatest threats that humanity has ever faced. 15 years ago, I started a renewable energy services business, my family partners backed the endeavour, wisely or not with capital and for ten years I was chair of that company, then five years ago, I went back to school and studied a masters in sustainability leadership at Cambridge University, and there I learned things that I cannot unlearn.

Sustainability is a broad church, especially nowadays, but what caught my attention was the science around climate and the rate of biodiversity loss. I don't think that I will ever come to terms with the world wildlife fund's estimate that there are 70 percent less animals on the planet compared to when I was born. 70 percent. So humanity is willfully conducting a gigantic and extraordinarily risky experiment with the only place that we can call home. In family business parlance, we are betting the farm. So the third reason to pull those first two technology, really, why am I interested, and what brings me here, this combination of lived experience in the business, and the burden of knowledge have caused me to reorder my personal priorities and to start dedicating resources at my disposal to addressing the twin threats of climate change and biodiversity loss.

I believe the best way that I can do that is to try to reconnect people and cities, where 60 percent of the global population already live with Mother Nature. My belief is that each one of us must take responsibility for addressing the twin threats. We cannot rely solely on others, whether it be government or business or civil society to solve our problems for us. This re[ inaudible ] might make climate change and biodiversity loss seem less abstract and more tang I believe for people. We have been funding work in Manchester, parts of a really good coalition of people with the same belief for three or four year ago, and we have learned a great deal in that time, and now I'm working with Blanche at a very early tage -- stage but also with Dusty and John to develop a plan for massive urban greening, starting with a prototype in the UK, but with a clear demonstrate -- the massive deployment of nature in cities communities at the heart of the process can be done at speed, at scale, and with the creation of immense social, environmental, and economic value.

**BLANCHE CAMERON:**Fantastic, thank you very much, Jonny. That's launched us perfectly into this discussion, and it's great to have you on the panel too.

So if you would all like to share your videos and unmute yourselves, I think that's a great opportunity to get into some of the questions that we want to have a look at today that are part of that discussion. The first of those, just briefly, if we can have a look very quickly as what we mean by nature-based solutions, and as you say, Jonny, a massive move to bring nature into cities with communities at the heart of that process. Why would we be doing that when there is such an economic crisis when some people can't put food on the table or pay for their energy bills, or the prepayment metre, we're facing an economic crisis that's the greatest in a generation and one in four children on average are living in poverty in the UK? So what is it that makes nature such a priority given that people are facing such difficulties, that's the first that I would like to throw out, and maybe Jonny, perhaps you would like to come back straight away on that one.

**JONATHAN WATES:**A hypothesis would be that the distinction between social value, environmental value, and economic value is partially false. One of the thing that I'm on a steep learning curve myself, so I hold my hands up, I come from a different background, I'm not a practitioner in this space, not yet at least, but I spent enough time with you Blanche, and Dusty and John and others and I'm really starting to see that the intertwining of these issues is interesting, the idea of capitals, not just economic capital but social capital and environmental capital, there is value in this activity, there is value in social activity, there is value in environmental activity.

So I wonder whether a reframing or a recasting of these things. I'm a traveller, curious and open-minded but I wonder whether that's a way into this part of the conversation, which is that just to think about cost is -- and just to think in the short term is in some ways, limiting.

**BLANCHE CAMERON:**Absolutely, Dusty?

**DUSTY GEDGE:**Yeah, I think it's always difficult when you have got a cost of living crisis to justify some things but we need to in a pragmatic way understand that some of the things that we need to deal with, renewable energy, people's well-being are actually all interconnected, and quite often we put them in silos, it's an issue that's going on in one government department is we're having no nature, we're having lots of solar panels, because decisions are being made, and we need to blur those boundaries, and people's well-being is as important as what the capital cost is, and it really goes back to what John says, we focus on the capital costs but not about the value over the next ten years.

And back ending the value, and maybe getting slightly off topic, Blanche but everything is so front-loaded and everybody is so front-loaded looking at what does the capital cost, and nobody cares about what happens afterwards. And it's the value of nature-based solutions and sustainable solutions in the mid- and the long-term that is more important than their capital costs.

**BLANCHE CAMERON:**Yeah. Well said, John, I think you've probably got -- would be nice to follow up with some of the things that you are passionate about on that.

**JOHN LITTLE:**Yeah, I guess I would always think that there's a relatively small investment in putting more people in places and that's an immediate and fairly easy investment sometimes and as soon as you do that, not only do you enable and train and give a better life to people in employment, but you also inject people into spaces where often poorer places where there aren't people to be able to lean on, there aren't people to ask to do things, you know, this is what we found the most important thing we did in looking after green space was actually listening to people that lived there, not cutting grass or trimming hedges, those were less important, I would say.

It was the fact that we were allowed the time to do our job and the more important job of understanding what people wanted who lived there.

And that's just a human thing, I think it's always like, why the repair shop is so popular, let's say. Because people love to see people doing things, it's people that do that stuff, there's not bigger capital investment in repairing things, there's not huge capital investment there's time investment and I think if we could have a little mind-set shift into, yes, capital projects, yes, we need obviously lots of things to be done but mindful always of how these thing are going to be looked after and how local people, what local people think about them in the first place, you know?

**BLANCHE CAMERON:**Right, exactly, and I guess when you realise that things are all connected as you were saying, Jonny and Dusty that when you implement nature-based processes, the benefits to people are more than just the obvious, immediate thing in front of them too. They're delivering on all kinds of other levels. I wonder if that's your experience, Drew with Grosvenor, you're coming from a slightly different angle than the community-based but do you have immediate connections with communities through the nature of your business too?

**DREW DAVY:**I definitely would agree with everything that's been said. We are trying to create places with what -- with the work that we are doing and nature is one of the key ways that we can do that.

The thing that I would add, though, is I would question the myth that nature-based solutions are expensive in the grand scheme of things, they're not in terms of the value that they give back to both the places that we manage and all of the other wider benefits so I would definitely say, to pick up on what Dusty was saying that the value that you are bringing to central London, for example, from our perspective is definitely well above the initial capital that we are putting in, and on top of that, for example, if we were to integrate a grey intervention instead to and to be clear by what I mean by that, say, for example, if we are putting in more drainage to drain away rainwater instead of a sud, in the long term, that's usually more expensive because of the maintenance and having to put it in in the first place and with a SUD, or sustainable urban drainage system, we would be getting so many other benefits and bringing on the community, which, therefore, to us, I mean, there are difficulties with putting them in, and where we can put them in, but it's our go to to try to use nature-based solutions.

**BLANCHE CAMERON:**Right. There seems to be a need for this, in terms of climate change and biodiversity loss, climate change, with so many people at risk, we saw 42 degrees in London in the is only, and there are many cities around the world where that's already par for the course, but there are many cities where that's going to be a new phenomenon, how we are going to keep people cool in the heat waves, reduce flood risk, storm water, and so on, that creates a huge disruption to people's lives, the devastation that that can cause to people's lives, disruption to business and services as well, of course. So although I think that's probably not the most important thing in a lot of people's minds in the immediate situation, which is about how am I going to buy shoes for the kids, or get to kill, that's a long-term issue that we need to address as well, isn't it?

**JOHN LITTLE:**I would just say one thing: If you are going to -- any of these solutions, let's take SUDs, for instance, any of those solutions from an engineering point of view, they make sense, from a climate change point of view, they make sense. They won't make sense to people if they're not looked after long-term. If they become a place that is not a place that people want to see or looks cared for or looked after, you're going to lose the support of local people when you want to put your next one in.

So these places can function and need to function from all those other points of view but they also need to function as a place of beauty and joy and that can really only happen long-term with investment in people to look after them.
That's quite an important thing, and they're not sustainable unless they're looked after, I would say.

**BLANCHE CAMERON:** Right. Dusty?

**DUSTY GEDGE:**Yeah, I think when you asked the question about the cost of living crisis and the nature-based solutions, my concern is, don't get me wrong here, Blanche, is it a bunch of experts that actually, the public will always prefer, you know, more money in their pocket than nature-based solutions, it comes back to what Drew was saying, you going out to -- you go and do the people thing.

**DREW DAVY:** People positive.

**DUSTY GEDGE:**And sorry, I'm going back 20 years but when I was living in Lewisham town centre, they said, the thing that people are most worried about in Lewisham is transport, and we forced them as community reps to go out into the town centre and ask the people of Lewisham what their priorities were, and always the experts said, the rivers are the least important thing. The people of Lewisham said that it was the most important thing. It's interesting if you go out and talk to people, I've been to about four or five conferences in the last week, and nearly everyone says, go and talk to people. It's what John says, go and talk to people and ask them and engage them.

And I think that's been a shift because experts have been running the shop for too long and we don't actually go out and ask the public what do they want.

**JOHN LITTLE:** I think the other thing is, when you are asking the public, if you have got people on the ground regularly, you're going to get a much wider demographic, rather than sticking up a gazebo in the town square, you slew the people who walk up to something, but when people are there on the ground every day, it's an everyday conversation where you can pick points up from. So there's another advantage of having people on the ground.

**BLANCHE CAMERON:**Right, and a lot of this is needed across the country, across the world, neighbourhoods that are managed with people, by people, with nature, but how are we going to do that because the report by the landscape institute recently shows something which is known, which is that there is a huge lack of skills, lack of training, we need more people on the ground, we need the investment in people to manage and care long term for our nature and our neighbourhoods. How do we get there. What kind of partnerships do we need, what kind of people need to be involved, and obviously from community groups up.

**DUSTY GEDGE:**I think --

**JOHN LITTLE:**You need paid people, you need paid people to drive the volunteers and drive the people. You need to kind of prop up the volunteer system and all the other wonderful people who come out and give time for free, you need a core of paid people to make that function and make that keep working. That's what I think. Because you want -- we found if you start making the place look good as a paid contractor, then more volunteers obviously -- volunteers come out then because they feel like it's a worthwhile thing. And also if the few very keen volunteers move on, which always happens, then, again, there's that paid staff to prop things up and keep things moving because things can go downhill very quickly when it comes to -- certainly with the aesthetic of a green space.

**BLANCHE CAMERON:** Right, and it's not necessarily an easy thing to do, the sort of how to engage -- get people together to take action. I'm thinking of Pitsy and the situation there where you have the need for nature-based solutions nature is a part of the work happening with community groups there, I think it's trust links and they're doing what they can in their situation I think this is true across a country I think people realise the value of nature locally but that there isn't necessarily the coordinated investment in people to be able to push that forward. I don't know Drew if you would like to unpack that.

**DREW DAVY:**From a business perspective, I definitely think that there needs to be more engagement on skills in the sector but I personally think that there are two or three prong to that. One is the skills need to be valued from the top down, and that's both the solution and the people that are delivering it, they need to be a valued skill, and that needs to be central to businesses' strategies and I think that comes to a second point, which is that we need to start thinking about a simple way of measuring and valuing the nature that we are delivering. So with probably people on the call already know but with the new green infrastructure framework, there's things like the urban greening factor that you can use but also DEFRA's metric to try to quantify what's going on. There definitely needs to be some better data source that we can use and value uplifts and demonstrate strategic sort of decision-making skills. And I think that then comes to the second point, or the last point, which is, in general this is just undervalues at the moment, across the business space and personally I would also put in the public realm as well.

And we definitely need to change that. I mean, with the following COP15 and the new green infrastructure framework things are changing but it needs to accelerate, and that's not just amongst skills, that's across the board.

**BLANCHE CAMERON:**Centralising it, and putting it into strategies at a local authority level, business level, also at the community level but how does that happen, when -- I think what we have been discussing requires more interdisciplinary collaboration, I guess. And this may be something, Jonny that you have had experience in either in this or other walks of life, there are challenges to that, there are challenges to bringing people together from lots of different sectors.

**JONATHAN WATES:**There are. But I think the collaboration and the unconventional collaboration parties that might have not spoken to each other, or thought and operated in silos, often self-interested, I think there is undeniably a growing awareness of the state that we are in. And there is a degree, let's be Frank of enlightened self-interest for business. Society's expectation of business is changing quickly. I wasn't exaggerating when I said in my introductory words that we genuinely think that we won't be around in 20 years' time as an enterprise, whatever our pedigree if we don't grasp the nettle about the importance of shifting our outcomes towards more balance around environment. We're currently extractive, to be frank. And that's deeply uncomfortable, and it should be, it's becoming more uncomfortable.

So the other thing that we are saying is that there is self-evidently, there's more opportunity around carbon for businesses. We have public targets, we have responsibilities. But there is also an economic benefit to businesses who see opportunity in low carbon or in climate adapted cities. The built environment is very carbon intensive. So, you know, this is a huge opportunity as well as a huge risk for business. My sense of it, from being in both -- I'm in both camps in a way, I've got a background in private enterprise but I'm passionate about climate and biodiversity loss. So I'm passionate about places and cities. So I can kind of see things from different perspectives. I think that we need to think all of us, it may sound a bit hackney but we need to think holistically and as what I call the systems level, not in pockets. When you start to do that, for example, the last three or four years, we've been working in Manchester with this coalition that I mentioned, really unconventional group of actors working together that's given the project which is about urban greening with the community at its heart, so we've been learning, made lots of mistakes, I think we are better equipped now for the next turn of the wheel, how to collaborate, which stakeholders we need to get involved, how genuinely tog the community involved and owning it.

I think one of the mistakes that we made at the beginning is that we had this bright idea, and we were very enthusiastic about it, and we wanted to make it work. Actually, that's not -- you can't bring ideas in from the outside like that. In the end, it has to be legitimately, authentically owned by the community.

So we have learned some methods about how we might do that next time. Learning through practice. So my final thought is that actually, we're not the first to have this thought. That they're lots and lots of great examples of what's been done already, far beyond the UK, some of it, which is completely inspiring, and these outcomes in terms of social value, of environmental impact and actually economic impact as well, there's lots of evidence that it can be done and I think we should take confidence from that.

**BLANCHE CAMERON:** Absolutely. Dusty, you look like you might have something to say about that, but I was just going to mention as well, in terms of the training and skills piece, I think what -- things like the green roof project, Chris Bringham's project in million ton Keynes and your ideas, as well, Dusty, in terms of developing programmes that can help deliver this stuff is where you can unlock economic projects for people too, so that that training and skills piece, I would like your thoughts on this, all of you, as to the opportunities for this, because if we are going to deliver nature-based solutions in cities, we need the people who are able to do that, and we need to invest in them and to support that maintenance long-term as well, as John, you were saying.

**JOHN LITTLE:**I would say certainly with the experience that I have got with, for instance, landscape architects, garden designers, nearly all the people that are switched on out of that crew, the high end, the people that are really in the know, they all know, this is the way they've got toggle, and this is what Jonny is saying, anyone involved in any way, whether or not they're absolutely committed to it personally, one way or another, this is where they have to go, and this is the momentum -- you've got to force it. There's a big proportion of it, you've definitely got to force.

There's a proportion that people will going to be -- the switched on people know that this is the way their business has got to go for sure. Otherwise they're going to be left behind.

**DUSTY GEDGE:**If I may John, on that, there's all the stuff going on at UN, TFND, T whatevers, all these things, it's the direction of travel, it's the Drek of -- direction of travel, finance and real estate companies have to report on environment, that's high level stuff, but it's the direction of travel, and I think the conflict is, or not the conflict, the tension is, and it's what's interesting about a discussion like that, that's what's happening at the high end but then you go down to what John, the community and there's lots of questions about how the council -- the councils doesn't talk to the community, that's just because we have processes in the United Kingdom, we like to blame the councils when something goes wrong, we don't like to say well done to the council when they do something good. We have got to shift to a process where it becomes a more collaborative process because it's actually quite polarised and I can't answer -- some of these questions are really, really, really quite complex to answer. But to take on board what Jonny has said, just in my little world of green roofs, I can think of two countries, in Brazil, in Rio de Janeiro who is just greening up the favelas with urban food growing, it's a fantastic project, he's now getting international funding to do it. There's the the same group of people doing it in cities in Mexico just doing it.

And they're getting funding. So it can come from the bottom up and the favelas in Rio are pretty grim places, I suspect. But he's going, I've got an idea, I'll do it, and he's become very, very, very successful, so I think there are good examples from around the world where this can happen, and certainly from Europe, in my fed recreation, I know about those. So the direction of travel is there. It's just how we speed it up.

**JOHN LITTLE:**We can't be under the illusion that it's all happening right now because certainly in our experience very recently there's planning consent going through for infrastructure projects with absolutely no emphasis on habitat or joy of any sort, you know what I mean? So these things, the system is still stinking in places and also it's to have that conversation early on with developers, with construction, with planners, to have that conversation of, how can we make this better, integrate more, how can we make it multifunctional, how can we reuse some of the materials we're taking off site, all those niche conversations tend top way too late. It would be wonderful if they were embedded in the system very early. I know me and Dusty have had this for years where, you know, an architect wants a green roof and by the time they ask us about it, they want a beautiful lush meadow roof and then they have designed the structure to take a 30mill of soil. So there's that conversation to have, they could be small ones.

**DREW DAVY:**To roll with that, I think from a developers, it's weird getting more and more questions about biodiversity from developers, but there's still a massive lack of knowledge, for example, I had one developer come to me and, again, this is an anecdote but say, "Why am I not getting any biodiversity net gain uplift from this external wall?" And it turned out that external wall was some dead moss, that was bleached and was coloured. And that just gives an example of some of the thinking that goes into the developers and there's a big challenge of how do you bring, yeah, I agree, how do you bring people along in that journey and increase knowledge about biodiversity and nature in general?

**DUSTY GEDGE:** I've got a comment on that Drew, the thing is, it's also the process in the construction industry, you know, I write a report, it goes to the planners, there's a planning condition, then it goes back to the architect, then it goes to the main contractor, then it goes to a contractor, I went to inspect a roof that I wrote a report for, I said, who changed the specification, and they wanted me to sign it off. So there's a culture, there's a process that needs to also change where that is a value right up until the moment that's delivered that people are checking that they're delivering what they're meant to be delivering. Obviously --

**JONATHAN WATES:**As an insider on the construction side, I think maybe there's value in looking at ideas, approaches for retrofits as opposed to the construction process, the development process has got lots of difficulties in it, but it's only a small proportion of it. And if we are going to do things at scale, there needs to be retrofits that are economically viable, and the little bit of work that we started to do together, I'm very excited about it, because we have limited resources as a philanthropist, say, and we have had a good think about where to apply those resources, and we think urban greening is the sweet spot because there aren't many places where you can get the social, environmental, and the potential economic impact. There are examples out there where people are doing this, you gave an example of that work in favelas, it might be a long way away but it's highly relevant, I think. Part of our -- without wanting to overstep the mark, part of our exploratory discussion together is, whether our philanthropic funding whether we can put forward a proposal that attracts other philanthropists to join us, and put their funding with us, partner with a good local authority, who's already on it, and there's some great work going on in UK local authorities, partner with you guys around urban green infrastructure, and you can start to play with something that's not possible if those parties act independently. Something to do, for example, with addressing the shortage of operatives and staff to actually make urban greening happen in practice.

So it's early days but I think we have got to step forward.

**DUSTY GEDGE:**If I may, Drew, I think I'm allowed to do this, because you looked at with my company, we looked at retrofit opportunities with the Grosvenor estate. In terms of what he do and what John does, non-green roof stuff is the retrofit is the most interesting because -- and I'm sorry, some people might not like this -- there's less -- there's too many people involved in new projects. With retrofits, you've got a client and experts and that's where you can really engage the community, create local jobs, perhaps, deliver good biodiversity, and by "retrofit," not only do we do something at the microlevel, 32 percent of London could be retrofitted with green roofs tomorrow. The impact globally, macro on a macro level for London in terms of climate change adaptation would be incredible. So it's a win-win all the way around.

**JOHN LITTLE:**Interestingly, and just thinking about retrofit as an -- I was just thinking, the way you look after green spaces in effect, you are retrofitting, so when we came into a green space that was relatively blank, you retrofit that to boost the biodiversity and community. So there's a big opportunity to retrofit and you need to invest in people to go in there and change things.

**BLANCHE CAMERON:**I'm going to cut in with the support from the Q&A, the questions that are coming in too. One of the questions, what's the most challenging part of greening cities, and I would say exactly that, because as development slows, or if there isn't going to be that much new development, and we still have to retrofit our existing infrastructure, then I think the retrofit is the most challenging part and then the partnerships that you need for that. It's like gardening something, continually so that you agreed it, and caring for it, isn't it? And that's the -- I think that's actually the most challenging, all the focus leak you were saying at the beginning is on the upfront capital investment but then the revenue infrastructure to upkeep and maintain the services.

**JOHN LITTLE:**And it's not just maintaining it, it's to be there, and come up with innovative ideas to change it. Because that's what you can do when you are there in person, because you know the place unto melt -- intimately.

**DUSTY GEDGE:**I showed a picture of Blackheath, they're retrofits. John knows this, because he saw it last Saturday. I get people e-mailing saying, it must be more technical than that, no, you dump a load of rubble and put some seeds in, no, no, no, can I have the full technical specification, you put some rubble down, loam on it, and seed it. No, it must be more complicated than that. And it's not, I find it quite amusing.

**BLANCHE CAMERON:**I'm going to go to the questions in the Q&A, panelists you might not be able to see it, one of them, from Adam Mitchell, who's writing his dissertation on regrowth or degrowth economics, depending on how you want to frame it, what are your thoughts on reducing cost, profits and material use in building design, how could that help support, or influence biodiversity? For example, leaving aside a patch of bear earth for whatever grows instead of garden planting, it's an interesting question, I think if anybody has got an immediate response to that. And is this approach compatible with current business operations, what needs to change? Yeah.

**JOHN LITTLE:**Yeah, I guess only the worst thing I think about one thing mystifies me is the lack of timber buildings in the UK, that's the first thing that's weird. An amazing way to capture carbon because there's a big emphasis on growing trees but what we want to do is capture that wood and keep it in good condition to make it last and not release the carbon again and putting it into a structure would be a lovely way to do that, and there doesn't seem to be much of a conversation around that too much.

I would say if you are going to -- just, again, that little emphasis about what the space around the new development is going to be like, what materials you're building with and what materials you've demolished, all those, how can we incorporate those back into the actual development and especially back into the landscape and the opportunities that that gives. You know, don't take stuff away, keep stuff there, if we possibly can. You know?

**DREW DAVY:**Yeah, I definitely agree, I think the -- I would definitely -- because there's within the question, there's the assumption that doing these things doesn't make on occasion economic sense and actually we've found that they do, that you can actually -- it's been proven that a payback period for a building with brown status leads to higher yield. So I think we have to get away from this thinking that actually, it's a tradeoff, that actually, there is economic sense in making these decisions, and quite often, they're using cheaper material from more sustainable places that's just a win-win-win, so it makes sense to me.

**JONATHAN WATES:** It would help a lot if you think about the energy sector and transport automotive, the legislative impact on those sectors has been huge and stimulated huge innovation and deep change, the built environment for some reason hasn't been subject to the same weight of legislation. There's about an some around the edges but I think it would help enormously. It's a sector that struggles with innovation for various reasons. And it always has. We're still broadly doing the things the way that we were, and there's a deep level of frustration within the sector about how to overcome that. And I'm not saying that legislation is a silver bullet but it's notable that other sectors are transitioning, or transforming at a rate that recognises the severity of the issue that we face, the built environment is 40 percent of emissions and yet ...

So just to flag that you wouldn't necessarily expect a developer, which I am contracted to be saying that, but we do need support and help from a legislative point of view.

**BLANCHE CAMERON:**Rate of progress is slow, yes, Dusty?

**DUSTY GEDGE:**I'm just conscious of my time, but I think to me, it always comes down to policy, policy is legislation, if you can change policy and legislation, things happen, hence we've got a lot of green roofs in London because there was a policy in 2008. And people get frightened of legislation, but you say, that's transition, you know? You change the laws and the processes and things happen.

**BLANCHE CAMERON:** It's a bit like the film, all things everywhere all at once, there's the need for policy change but also the need for everything from grassroots action upwards, and business change and how we frame things, just the way that we think about things, and I'm really appreciating the comments that people have made, Jonny and others, about completely rethinking the separation between environment, society, and economy, and that they're all intimately integrated, and as you say, Jonny, these inextricably intertwined challenges, you can't decarbonise without nature, nature is the source of life, and biodiverse is life, so we're reliant on all of these things, so everything else is secondary, in a sense, and what you have discussed and shown, John, with your work, is how people can very immediately get involved with that change process, if you have people on the ground that are there to talk to and discuss, and, in fact, there's where a lot of the innovation can happen. And I think that's really interesting.

I know there are a lot of other questions in the chat that we haven't got to, things like about urban food growing and the relationship of policy and also the relationship of use of resources, there was a question there from Binav Alnuman from Iraq about use of resources, and is that our next issue, well, it's our current issue, and it's that extractive process of natural resources.

You can tell I'm beginning to wind up but if there's anything else that anybody would like to ask, do keep asking your questions in the chat, and we will try to answer them afterwards as much possible too. We might share some further points after the session.

I would like to finish just by thanking everyone for participating, thank you for tuning in online, this is the first in the series, and we're looking forward to more, the next one is coming up in March at the moment.

But thank you for joining us today and for the conversation, we will be back on Wednesday 22nd of March, with Place Inspired Architecture, and how rural architecture, design and craft can be inspired by their natural environment, and sign-up details are in the chat, hope to see you there.

And we'll send information out about the UCL Green Infrastructure network and its launch soon.

So do keep in touch. And we hope to see you all very soon for more discussions about nature-based solutions and climate-adapted cities and neighbourhoods.

Thank you very much, everybody, and thanks for joining today. Thanks, Dusty and Jonny and Drew. Thanks. Bye.