

Dr. McSparren: Greetings, everyone is 2:00 pm eastern time. I would like to welcome our audience and our expert speakers. My name is Dr. Jason McSparren, and I will be your host today. This is the 11th episode of the green room, produced by the Green Institute. We got a great conversation for you today. The title of our conversation this afternoon is titled Collaboration, not Competition: Building Multi-stakeholder Partnerships for Sustainability.

Our presentation is led by Dr Emilia Clarke. She is an Associate Dean of Research for the Faculty of Environment and Associate Professor in the School of Environment, Enterprise and Development at the University of Waterloo. We are also joined by one of Dr. Clarke's PhD students Bayo Akomolafe. We like to welcome them and you as well.

Okay, so before we begin our discussion. I will like to give the audience a little bit of a background on Dr. Clarke and Bayo. So let me just tell you a little bit about them, and then I will give you an idea of how the discussion is going to proceed.

Okay, so as I mentioned, Dr Amelia Clarke is here with us today. She is the Associate Dean of Research at the Faculty of Environment at the University of Waterloo. Dr. Clarke has been working on environment and sustainability issues since 1989, including her role as the president of the Sierra Club in Canada from 2003 to 2006. She was also the first Director of the University of Waterloo Master's program of Environment and Business degree. She is now the Associate Dean of Research in the Faculty of Environment at the University. Her main research project focuses on implementing sustainable community plans, including community climate plans, and she focuses on youth in innovation as well.

She also has a long history of working on climate and sustainability action on university campuses, including co-authoring a classic publication on campus environmental management. She is a strong believer in youth lead change and on implementing the United Nations Sustainable Development Goals.

Dr Clarke approaches her research on sustainable development, sustainable business, sustainable campuses and sustainable communities from a strategic management lens. Many of her theoretical contributions have been related to designing cross sector partnerships, stakeholder engagement and strategy implementation. Her most cited work is on collaborative strategic management, and her most recent work is on governance of strategies for local deep decarbonisation, which is going to be part of our discussion today.

Dr. Clarke holds a PhD in Management Strategy from McGill University, a Master of Environmental Studies from Dalhousie University. She is currently also a founding member of Nature Canada's Women for Nature. She is a member of the GreenBiz Intelligence Panel. She is a member of WRIsAdvisory Council for the Ross Center Price for Cities. She has been named on the #Thinklist30 as a social media influencer, and she is a member of the LGBTQ+ community and the universities as well.

Okay, so please, ladies and gentlemen, I know the clap does not necessarily work, but please send out your passion Emilia Clarke. And then, in one moment, I just like to give a brief introduction to Bayo Akomolafe.

Bayo holds a master's degree. He is studying Sustainable Management at the University of Waterloo School Environment Enterprise and Development in Canada. He is working with Dr. Amelia Clarke on this project. His current research, Bayo current research, focuses on pathways and strategic strategies

for deep decarbonisation in cities in developing nations. As a passionate and strong advocate of the United Nations Sustainable Development Goals.

All right, so now that we have that part of our program given out, we have met our speakers. I just like to tell the audience. Please be sure to have your microphone muted so that we don't have any disruptions to the presentation. We will have a question and answer period once the presentation is finalised. Okay, so you will have the opportunity to present your questions. If you would like to ask a question, at that point, please raise your hand. Then we at the green Institute will ask you to come on in due time and ask your question. You may also ask your question in the chat mode. Okay, so we monitoring that for good questions as well. And if you put your question to the chat mode, then I would most likely read it to our presenters.

Okay, now that we have that part of the program out of the way. I will like to please ask Dr Amelia Clarke to begin her presentation.

Dr. Clarke: Thanks so much for inviting us, and I am just going to share my screen. Well, thank you again for inviting us. We're thrilled to be here, and I'm actually really looking forward to this discussion this afternoon for us, this evening for some, perhaps this morning for others. I am coming to you from Waterloo, Canada, which is where I live and work on the traditional territory of out of water in the holding the Shona, and anish no big indigenous peoples. I'm going to talk today about Building multi-stakeholder partnerships for sustainability.

I will start by just introducing the research project that we've been working on really for the last eight years and then get into some definitions around what are sustainable community plans? What are partnerships? And some of the key terms that go with the concept of partnerships. Then I will share some of our methods, get into some of the results that are particularly relevant to designing partnerships, and then share with you some of our newer work around climate mitigation. Then Bayo is going to share his research interests with you, and then we will come back to me for conclusion.

So, in general, our research aims to help implement three SDGs in particular. We are working on 11 related to sustainable cities, 13 related to climate action and 17 related to partnerships for the goals. And what we do is we help local governments all around the world think about how best to implement their sustainable community plans and their climate action plans, through a collaborative approach or through partnerships and how best to design those partnerships.

So, what are sustainable community plans? Let me start that; it really started to form in the 90s and were once known as local agenda 21. The last time there was an inventory, over 10,000 cities around the world have one of these. And really all over the world, both in developed and developing countries, their community-wide, the sustainability plans, their long term in their vision. They are integrated content, so you will see economic, social and ecological topics all in the same strategic plan; they are bound by the local region and when it comes to implementation. But also to the creation of the plan, there are numerous cross-sector partners, so from the public sector, from the private sector and from civil society, who are all voluntarily involved.

Now while these plans look similar everywhere, when it came to their implementation, that was huge variance, and how cities and local communities and their actors approached implementation. One of the big difference and a key concept to understand here, as I talked about partnerships, is the difference

between participation and partnership. So, in a participation approach, essentially, it is related to stakeholder engagement, where you are consulting your citizens or other organisations, and ultimately your organisation still makes all the decisions. And then you are responsible for implementation, but with a partnership approach, it is different. In this case, there is more than one organisation involved, and you shared decision making. You have a collective vision together. And then, for the implementation, each of the organisations is responsible for some of the implementation. So there is a fundamental difference between a participation approach and a partnership approach, and I studied the partnership approach. So let me just explain the concept of partnerships first because there are many different forms of partnerships. Probably you might have heard of public-private partnerships or PPP. This is one particular form of partnership. There are also joint ventures and alliances, joint projects, cross sector social partnerships, large cross sector partnerships, which are one of the things I studied and multi-stakeholder initiatives.

And in essence, all of these are collaborative approaches or partnership approaches that can be used in implementation, and generally, you are using a combination of them. The ones near the top of the list are more contractual and tend to have only a couple of partners, while the ones near the bottom of the list are more voluntary and can have up to a thousand partners. So really different models of how you would design these partnerships.

Now when it comes to the strategy process. Your first step is going to be formed a partnership. Then you will create some kind of collaborative strategic plan together, create your commendation, and then you will implement. An implementation can be done collectively through partnership actions or can be done by individual partners. And then, ultimately, you will reach your outcomes.

So we've particularly studied the implementation and the outcomes to see how is that designed for these partnerships. And what we found is that there are five key features that should be involved in the design of any large partnership. So there needs to be some kind of oversight entity that's monitoring the progress, some kind of synergy that goes with that. There needs to be communication system monitoring and reporting system and mechanism to engage new partners over time. And also, the partners themselves need to be involved in implementing.

So our methods, we partnered with a global NGO called I.C.L.E.I, Local Governments for Sustainability. And with them, designed a survey instrument, which they sent out to their memberships all over the world, inviting them to fill it along survey about their sustainability plans and their engagement of partners, and then their outcomes. So our response rate was from, we had 111 local authorities participate, from all over the world, mostly North America but also from Africa, Asia, Australia, Europe and South America.

After the survey, we took a deeper dive into three cases, in particular, all which are very large partnerships. We looked closely at Barcelona + Sustainable, which is in Spain, which has more than 1000 partners. The Gwangju Council for Sustainable Development in South Korea and Sustainable Montreal in Canada. So with these ones, we actually surveyed their partners, not just the partnerships, to understand why is it that partners would get involved in these? What did they get out of it?

So I'm just going to share a few of the results here. This is actually one of my favourite slides. It tells us what topics are in a sustainable community plan. So what you can see here that the dotted line means 50% or more answered yes to this, so more than half of the plans have your typical environmental

sustainability topics such as waste, energy, water climate change, land use, transportation, air, and ecological diversity. That said, some of the others have your social sustainability topics and even economic sustainability topics embedded in their same sustainability plan.

What might strike you right away is how similar these topics are to the global Sustainable Development Goals. And if you map them, there is almost an exact mapping. If you think about what do we need to achieve globally, from a sustainable development perspective, and what actually is happening locally that matters for sustainability. So you still have water and land use and climate change and all of these topics with a local component. And so what we learned from this is really the Sustainable Community plans are a wonderful way of localising the SDGs and bringing those topics all down to local scale and what can be achieved at the local scale. So I'm not just talking about SDG 11 here. What I'm saying is that the majority of the global goals have a local component to them.

So in that same survey, we asked how many partners do you have, and the largest number of the most frequent was small, which means one to 10 partners. The next in the 11 to 50 partners range, there was 23%. And then in the 50 plus partners range, 17.5%, and I get most excited about these 50 Plus because there is so much potential for collective action when you have that number of partners all helping move forward the same common vision for their local region.

So, we looked at the relationship between the structures and the outcomes. And I'll just show you a couple of results here from climate change in particular. What we found is in relation to progress on the climate goals. There were three things in particular in the structural design that were significant statistically significant for achieving progress on those goals. In other words, if there was more of this, you're going to see more progress. So oversight by local government was very important. The reporting and communication by local government was important, and community-wide actions, which means, not just the local government implementing, but all of the partners, helping implement the strategy was key for achieving those.

Then when did the same analysis but specifically looking at carbon reduction, CO₂ emission reduction. And again, we found a statistical significant relationship between there being a partnership entity, the reporting structure and having partners themselves implement. So what this tells you is that the design of the partnership itself is key to achieving these outcomes. And, which brings you to, it's really important to think about the design of these partnerships if you care about actually achieving your climate or end or broader sustainability outcomes.

So we also did analysis related to money. Asking okay, so the local governments only got so much money. Where should they invest it? Should they put it into contributing resources internally, how about helping fund the partnership structure. What about helping fund community-wide actions. And what essentially we found is all three of them had statistically significant relationships to sustainability progress on the goals. In other words, it's worth spending money on all of these, but some of them are moderated a mediated by the design of the partnership. In other words, for the partnership structure, you need a partnership engagement mechanism to strengthen the relationship, and it's absolutely critical that the partners themselves are implementing as part of the design in order to see the progress on the goals.

And the same one actions. So again, all three were important but only if moderated by this partnership design. So you will see more action on the implementation of your sustainability plan. When you invest money, if there's a collaborative oversight, if there's an engagement mechanism.

So why that's particularly fascinating, I'll just stop there for a second is because we always kind of thought, okay, of course, a well designed partnerships going to make a difference, and if you're monitoring reporting of course, it makes a difference. But what this survey provides its empirical results, proving that it makes a difference that you're going to see more progress on your sustainability goals if you have a well-designed partnership.

So just touch briefly on our results related to partner outcomes. This is where we asked the partners, well, why do you join one of these partnerships, what do you get out of being a part of one of these partnerships. And in essence, there are ten resources they gain from being involved in a multi-stakeholder partnership. They gain knowledge; they gain new processes and programs that have increased impact on community sustainability. They build new relationships and social capital. They improve their own reputation. They gain influence to access business opportunities to increase their capacity especially related to stakeholder engagement. They gain new marketing opportunities, and some of the ideas that they get through being involved in the partnership helps them save money and improve efficiency.

So why does all that matter? Well, you want to be able to attract partners to the partnership. So knowing what it is that they might get out of it will help you motivate partners to join but then also motivate them to stay involved because addressing climate addressing sustainable development is not a short term process. You want them to still be involved five years down the road in helping achieve these longer-term goals. So knowing what their outcomes potentially are means you can design the partnerships with this in mind, ensuring that there's opportunities for them to gain the reputation or to have capacity building built into the design of your partnership.

Now moving to our more recent work. We are now looking much closer at deep decarbonisation. And what I mean by that concept is really related to climate mitigation. And particularly, ambitious climate mitigation. So how are we going to reach net zero, how are we going to reach carbon neutrality at the local level, and community-wide.

So, this research. In particular, we asked questions of what are the pathways, what are the elements where are greenhouse gas emissions happening at the local level. And the biggest sources are from electricity, from buildings, from transportation and to a lesser extent from waste, and then it also matters in terms of carbon sinks, your local biodiversity.

We've also looked at what tools are available to local governments to help implement their climate action plan and the governance arrangements. So within the governance arrangements, especially for community, wide action is cross sector partnerships again. And we are seeing a range of partnerships from PPP, those public-private partnerships to larger cross-sector, kind of multi-stakeholder initiatives.

So, we're getting much deeper in that so far we've only looked at case studies from the global north from developed countries, but we're now starting, and Bayo is going to talk about this a bit more to see how much of this is transferable or relevant and what new lessons might we also see from how cities in the global south, are approaching this. So Bayo I'm turning it over to you now.

Bayo: Thank you, Professor Clarke. Good morning good evening, everyone. So, as mentioned, my research focuses on the deep decarbonisation mechanism in the global south in developed nations. In this case, we are focusing more on Sub Saharan Africa. Why Sub-Saharan Africa, why deep decarbonisation, why cities. Well, it is well known that global climate change is very related to poverty. And we know Africa, in general, about 700 million people globally, that are still in poverty that we need to pull out of poverty and not getting more into poverty. So, addressing decarbonisation, addressing carbon emission through deep decarbonisation will help us solve that issue of global warming and climate change. So that is why I'm interested in this, and I know as we continue this discussion through the q&a session. I'll be able to elaborate more on that. Thank you, Prof. Clarke.

Dr. Clarke: **Well, so some concluding thoughts. And just so you know, we were asked to keep this presentation short, and more opportunities will come in the q&a to go deeper.** If you're interested in particular aspects of it or other parts of my work. But in conclusion, the collaborative governance structure is critical for sustainability and climate progress. In other words, how you design your partnership is going to matter for actually achieving your sustainability and climate goals.

There was great uptake of local agenda 21s and equivalent in the past 25 years, and it's still a good integrated approach for localising the Sustainable Development Goals through partnerships. And I'll also say now that we're getting much deeper into the net-zero work, it's providing a really good way to have a target. And then to use that to provide direction to how you design your sustainable development strategy and the pathways needed, but partnerships are also key to climate action as well.

So I'll end there. If you're interested in our research, we do have a website, and you can find out more there, and my contact information is there; more information about Bayo is there as well. So thank you,

Dr. McSparren: Fantastic work. Thank you very much. Thank you very, very much. Okay, I'd like to begin now with the question and answer period. Okay, again, ladies and gentlemen in the audience, if you're interested in asking a question, please raise your hand or type your question into the chatbox. And then, we will call on you unmute your screen so that you can ask your question, or if you prefer if it's in the chat box, I can always ask.

But as I was listening to the presentation. One thing came to mind that that jumped out on me. Actually, there are a lot of very interesting details. This is a really fantastic research; it can have a big impact on sustainable development progress and the actualisation of the SDGs going forward. So that's really great work. I want to commend the two of you. But one thing that I thought about really quickly is, you mentioned, Dr. Clarke, that you have some of these multi-stakeholder group projects are either voluntarily put together or they are contract-based. And I was wondering if in your conclusions in your findings. Did you find that one or the other is more successful, or was that something that you weren't necessarily looking at?

Dr. Clarke: So what we're finding is that at the local scale, they're all relevant. And so then it's a question for what. So generally, organisations get involved with a partnership approach because they've, they want to tackle something that's outside their jurisdiction, or they don't have the resources to do it. And so that drives them to want to partner with someone else. So, if the main resource you're missing is capital, don't have the money to do an infrastructure project for example, then a PPP might be the right approach. On the other hand, if you're missing kind of collective action by many actors simultaneously. And you want to move forward on a lot of aspects because these are very complicated problems. Then a

multi-stakeholder kind of cross sector partnership will enable you to engage many actors from local universities to local businesses to civil society, to all collectively work towards the same vision. So, each one has a purpose. And what we're seeing in the climate spaces now there's a lot of sector approaches. So they're starting to develop partnerships very specific on transportation, for example. And then another one over here on electricity. So, again, it depends on what you're missing right how much do you control the local utilities or it's another company. How much needs to be done through partnership or how much you can do yourself.

Dr. McSparren: Yes, interesting I asked that question because in some of my research, I've looked at voluntary governance mechanisms in the mining sector, and again in the literature, there's a lot of talk about the effectiveness or sometimes lack thereof. And those so I'll just kind of wondering about your perspective in the sustainability front.

Dr. Clarke: I'm glad you brought up mining. So, this is a perfect example of a participation approach versus a partnership approach. And if you're doing stakeholder engagement, but you completely control their decision, and you're going to completely implement all the decisions that's not collaborative right, where if it's a partnership approach where you let the community have a big say in what's happening here. Then you're starting to get into a more partnership approach.

Dr. McSparren: Right, I appreciate that distinction. I think that's a major distinction that really needs to be highlighted because so often you see these PPP these public-private partnerships, etc. or you see these, you know governance initiatives that are supposed to be multi-stakeholder yet while the civil society may be invited their voices are not always, you know, they are not always heard. So, yeah, thank you very much.

Okay, we are starting to pile up with a few questions, which is really great. Um, here is, well, several questions we have a question from Namarotta. This person is asking, what is the role of academic institutions in such partnerships.

Dr. Clarke: Excellent question. And I've seen them play many roles. So, from initiating sometimes a community-wide sustainability and partnership. And then pulling in the other actors and helping bring that common vision to play more of a support role in terms of research, or if it's initiated by someone else, typically universities will take on implementation in relation to their own operations. Because you, have a large campus that already has impact just through its own operation so by addressing its efforts internally, whether that's the land or the buildings with their fleet if they have cars, or, vehicles with the food they offer on campus. There's a role there, and then there's the role, of course, they're teaching, and their research and their service. So it's, it depends on who the leaders on a cross-sector partnership, but academic institutions are always involved as one of the partners in a community sustainability partnership.

Dr. McSparren: Great. Okay, let's see. So let me ask Dr Clarke again. Why have you decided to focus your research on multi-stakeholder partnerships? So before we get too much further into the middle of your work. Why is it that you focus on the sort of partnerships and then a follow-up. What is it about this political arrangement that makes it suitable for addressing these global issues, environmental issues and sustainability issues, etc. Please speak to some of the more prominent debates and issues in developments in the field of sustainable environment studies

Dr. Clarke: Super, well, how did I come to study this? Well, as you probably heard from my introduction, I've been thinking about environment and sustainability topics for a really long time, since 1989, and therefore, I have watched as essentially things have gotten worse, in many ways, there are places where it's gotten better. And when I saw some really good policies being created, some really good plans being created at all different scales. Not only by local governments, but also at the UN level, but were fulfilled down was always in the implementation, and that brought me to a real interest in strategy implementation, which is why I chose to focus my PhD there. But then, when we think about whether its sustainability or climate or any number of these complex issues. They're too complicated for anyone organisation to deal with it alone. And so that brought me into thinking about well what we need is partnerships and collaborative approaches to address these complex topics. But the design of the partnership is key. And that's as a strategy scholar kind of structure in the implementation is key to succeeding in achieving your strategic goals. So that's kind of a long answer to tell you I got there because I care. And I figured this is the place I could have the most impact on practice.

Dr. McSparren: Right, I would argue that you do have a great topic that really can't have you know serious impact on these issues and again, when we think about international relations, when we think about political science. You know, very often, the tradition has always been state-centric, right, and you can see since the 1980s how we've seen more of these more partnerships in these multi-stakeholder initiatives, etc. Because you know as the state, kind of step back in the era of neoliberalism, there were gaps in governance. NGOs and community groups started to, you know, fill these gaps, and corporations took more initiative in terms of governance of their sectors and these sort of things. So I think your work on the specifics to the design of the initiative really has relevance for these sort of projects going forward so I'm really pleased to see this is the work you're doing.

Dr. Clarke: So you had a three-part question there. Let me just take the third part about the field it to. So I focus on this from the management side right, which is essentially the business literature. And you particularly focused on it from the kind of public governance and the gaps, but from the literature I work with, mostly it's coming out of the business literature and why would we partner, why would we have multi-stakeholder initiatives to address our own rules, or why would we partner across sectors. And it's the same logic for the most part, it's they see gaps. And in certain jurisdictions, they don't see the government doing enough, so they feel like they need to step in some, but with these larger partnerships, they're engaging because of, well, that whole list I gave you, but also because they care about seeing progress on very sustainable development elements.

So, the research in the space, though I mostly focused on structure and design, but I definitely have some colleagues who are focused on questions of power. Right, who has power in the partnership, who has legitimacy, where's the equity here, whose voice gets hurt. So well, that's not my research at its core, it is research that's happening in the partnership space.

Dr. McSparren: Great. Thank you very much. We have another question here, coming from Varsha. When it comes to civil society in government partnership, how do we tackle incoherent between the local community and the government? This might go to the structure of these initiatives right; an example that they mentioned examples of this could be a development project that might lead to displacement of local communities or projects that could lead to the loss of traditional sources of livelihood. So they may be talking about negotiation, methodologies or something like that. What do you think?

Dr. Clarke: Not all partnerships are designed well let me just start there. And they don't necessarily have all the local actors involved in creating the shared vision. So it sounds like the example you're giving is a story where the government and perhaps business came up with a plan where they didn't necessarily engage the local other actors, the civil society. I see this less when the local government is involved, they're closer to the people. So, we see this more when it's coming from a higher level of government, but with a good design on the partnership, then you you've built in a mechanism for local people and consideration of different elements and different needs in the story. So that it's a kind of co-created solution, which typically means that it's a better solution.

Dr. McSparren: Fantastic. Okay, I'd like to give Dr. Clarke a moment to relax you been working pretty hard. So I was going to offer a question to Bayo if you'd like. We have a question here. And I like to ask Bayo. Why do you want to study these deep decarbonisation pathways in Africa? In, just to preface your answer, could you please inform our audience about what is the decarbonisation, please.

Bayo: Thank you. So, deep decarbonisation is simply put, is reducing carbon emission to the barest minimum. Is that going to happen in the next five years? No. But how can we make that happen? So next, to be sure that the looming environmental catastrophe is averted. That is what deep decarbonisation is all about. We are looking at economical ways, technological ways and political policy strategies to make sure that happens very soon. That is what the deep decarbonisation is all about.

And to the second part of the question, why am I interested in this. I am interested in this because of a little bit of my background, a little bit of my work experience and a little bit of my passion to ensure that we pull people out of poverty. Because, again, and this might sound strange to people. But, climate change is same as the major hurdle to cross to lift people out of poverty, especially in the developing nations. And why is that so? Take for example, in Africa, in sub-Saharan Africa, millions and millions of people depend on small scale agriculture product to survive. Where are they going to go when all those climate changes start affecting their products. We all know infrastructure development in developing nations is not as great as the developed nations. There's a lot of urban fragility in developing nations. And mostly that is caused by carbon emissions because of lack of strategies for sustainable development. And that is why we look at it all these; we're looking at 22 policies, we're looking at the technological approaches, transportation, electricity, and so on and so forth. To see, we can reduce our can support and cities and government in implementing the needed policies to reduce emissions. That is why I'm interested in this and that was. That's the goal of this research at this point.

Dr. McSparren: Okay, fantastic thank you very much for that.

Bayo: Thank you.

Dr. McSparren: I'm going to kind of synthesise a few questions that I see, and I'm going to start with Bayo and then perhaps Dr. Clarke can fill in. But people are asking questions about the challenges that these partnerships face in the challenges in different contexts. Some people that are mentioned India while some people are mentioning Sub Saharan Africa, etc.

Bayo you know it's very interesting to see the discussion in Africa, that there's a real priority to supply people with electricity and reliable electricity across the continent. And as you know, you know there's a lot of nascent oil and natural gas sector is opening up in particular in East Africa but really, across the

country, in one of the debates in the literature is talking about the stranded assets, you know as we are trying to find these decarbonise pathways in the renewable energies, a lot of these countries may lose revenues. The stranded assets leaving oil, natural gas, etc in the ground. Besides that, or if you wanted to speak to that, Please, could you tell us a little bit about the challenges that, African stakeholders have to achieving this decarbonised economy.

Bayo : Thank you. I agree with you, when you look at nations like Nigeria. And now maybe Angola, Ghana, They are mono-economic countries; they depend mostly on oil for their GDP for revenue. However, in the last 10 years, when you look at places like in the US, renewable energy sector I have created over. I don't have the numbers on top of my head but thousands and thousands and thousands of jobs, which means if we can, if we move from fossil-based fuel or energy resources to renewable energy, we can transfer those job loss in that in those sector, we can transfer them to do renewable sector. I know people have a concern that oh now we're going to lose our source of revenue, the jobs and what jobs we, on the other hand, will be created.

Secondly, when you look at the Levelized cost of energy of solar panel for example, that is going down, that gives us access to more people. And we've seen that all over sub-Sahara Africa, The rural energy electrification projects in Nigeria, where the electrifying universities with solar panel. That has never happened. I started in Nigeria, right. I know what the universities, how the issues of electricity are in those countries but those are solved now. Student, people can go to university study very well, not concerned about access to electricity. So, yes, we they might, we might take off all revenue, but we this process of deep decarbonisation move into renewable energy is going to create new source of revenue to the people, which would be safer for the people, which will be more, which will also be safer to the environment. That's all I have for now. Thank you.

McSparren: Yeah. Great answer Bayo, thank you very much very informative. And then over to Dr Clarke, if you don't mind, I'm just going to read this is from Dr Georgina, and she's asking you, Professor clock please share with us some of the challenges that you have faced in the beginning stages, while trying to launch private partnerships approaches to climate change mitigation and the SDGs attainment. Aside from funding issues.

Dr. Clarke: So first, let me say that it hasn't been me doing this, so I study other people who are really working hard at this. In general, SDGs have taken off in different ways, in different countries around the world, so I will just say that in Canada in particular, there's a very weak understanding the Sustainable Development Goals. There's an understanding of sustainability, to a certain extent, but right now, our languages are all climate and then on the flip side, there is a strong interest in social equity. But the two words haven't necessarily come together as they do under sustainable development, where we are thinking about both at the same time.

So one of the challenges is just a general understanding of the potential to leverage the SDGs as a mechanism.

But more generally, the challenge besides funding, and that is a big one, there is still a lack of awareness around that which I brought up. And there is some incumbents who really have an interest in maintaining the status quo, which speaks to your previous question around the difficulty of a transformation of our economy to deep decarbonisation.

McWSparren: Right.

Dr. Clarke: And then I'm finding at the local skill, there is a lack of understanding on how to do partnerships well. So, There's a confluence of people confuse the participation approach with the partnership approach and don't quite know how to engage partners and collaborate and achieve the potential that's needed to address these complex problems. So there are lots of challenges, political will being another one.

McSparren: Right, but also I'm so market mechanisms getting the way as well. Yes. Okay, great, great, really appreciate it. So I'm going to combine a couple of questions. Here we have a question asking, what are some of the more prominent partnerships or some multi-stakeholder partnerships that you are looking at? And then also, this question from Lila Marcel, you mentioned that partnerships with 50 plus partners give us the most hope, you also think that there is potential for these partnerships to have a low engagement or a potential inaction due to the number of actors. So, please tell us about some of the more successful project programs, and then let us know what you think about that last part about the size of the partnerships.

Dr. Clarke: Super. So, let me pick two different scales. So I mentioned Barcelona was one of our cases which is in Spain. It has more than 1000 partners, right that's getting into a lot of partners. Now, about half of those are actually schools who are individually signed up, but the other half are businesses, universities, different public institutions that are run on their own, and civil society organisations. So, what I love about their model and materials model is they really have a mechanism to make and ensure that the partners commit to implementing internally within their own organisation. So in Barcelona, they've set it up so that each organisation has a local strategy for themselves, sustainability, and that they're committing to action. And then they've also set up kind of sector approaches to help with the learning that's needed. It's, it's just fascinating to get that level of collective action. So, do they have some inactive partners? Yes, but they also have a really good design.

So, Montreal, the same thing has a really good design, where they have once a year, they get their partners to recommit to what actions they're going to work on in the coming year. So all kind of 300 partners are committing to at least three actions, and then there's a check-in a year later; what have you achieved, how far along are you, what are your commitments for the following year. So it just helps kind of keep that momentum going. And in their case there's, there's no inactive partners, if someone's inactive they drop them off the list. So they start. They can't have the kind of reputational gains of being part of this collective action.

So, otherwise I would say at a completely different scale, something like the Forest Stewardship Council is considered a multi stakeholder initiative. So that's an initiative to address forest deforestation, but at the same time ensure that the forest products we are getting are harvested in a sustainable way. And it's a really neat model where they, they actually took an ecosystem by ecosystem to determine kind of what does sustainable forestry look like in this type of forest and then, built in whole ways of creating a certification scheme around that.

But it is multi stakeholder so the civil society, the big global environmental groups were involved in creating that, as were the big forestry companies, and they helped set a standard that's completely voluntary. So companies are opting into that because they want that logo they want to be certified by a third party to say look, we've followed a sustainable harvest process and, and we're recycled materials

now they're into all kinds of different forest products and wood products and paper products now. But I'm just giving a couple of examples of where these big initiatives have worked really well in moving collective action all in a voluntary way.

Dr. McSparren: Great. Fantastic. Thank you very much. I'm seeing a few questions for Bayo. I'm going to start with one here and then perhaps will be a second one right behind that okay.

So Bayo, please What are some of the strengths and weaknesses of multi stakeholder partnerships being implemented in Nigeria. More broadly, in the African context and when we talk about more broadly in the African context, I'm going to reference Canis Majoris. Her question she's asking you, What can African governments may continue to ignore environmental needs, such as reducing deep decarbonisation for infrastructure development. She references, Kenya, and its road development in partnership with China, which has caused major deforestation in the capital. Therefore, how could African government do a better job of governing these issues? So again, just very briefly just let me summarise that again. What are the strengths and weaknesses of these multi stakeholder partnerships in Nigeria, and then could you speak to other places, other instances on the African continent, Perhaps this Kenyan example.

Dr. Claire: And let me just say Bayo Oh it's okay to say this is out of your knowledge base that you're that you are unable to answer this if you feel that's the case.

Bayo: Thank you for jumping in on that Prof. Clarke but I think I can say something about this then I will turn it over to you have to give more maybe more detail. So, let me put an experience that I had. I worked a couple of years in the power generation industry; I worked all over lot of Sub-Saharan African countries. And I was working on this project where it's a partnership between different global organisation, national government and public-private enterprises to build a power plant.

This is a gas fired power plant, which is situated close to location of gas infrastructure. Now the prob, that's a partnership, let's build the power plant, so that we can get a electricity to the hospitals, schools and so on and so forth. In the process of bringing the equipment to the project site, the bridge does not have the strength to take the weight of the equipment. And what why am I saying this, infrastructure is a major problem to partnership in developing nations, you are trying to solve one problem, which in this case we're trying to solve the problem of electricity. But we completely overlook access to that site road infrastructure. So, one of the challenges in developing nation that I know is that when you move, we have to look at multitude of actions and processes to solve a one in our partnership. We need to look at everything we need to have is 360 degrees look around, to ensure that every part of that plan is taken care of. Because in developing nations, the infrastructure is fragile, So that's that I don't know, Professor Clarke if you want to jump in

Dr. Clarke: That was super

McSparren: Fantastic really appreciates it. Thank you very much. Okay, as we're just about running out the hour, like to just finish up with just a couple more questions, two or three more questions and then I can give you a little summary. But let me see. Dr. Clarke we saw in your bio that you also have experience, promoting sustainability on campuses in local communities. I was wondering, before the hour and I was wondering if you could speak to our audience about how you know university students

and community members might be able to get involved in promoting sustainability in their own local areas.

Dr. Clarke: So, let me first comment on what you can do with your campus and then what you can do as an individual. When I first arrived here at University of Waterloo and this isn't specific to students it's for faculty or anybody else who's listening that's involved with the University. But there was no multi stakeholder committee here, there was no sustainability policy. There was no sustainability strategy. And remember I'm a Strategy Prof. So I'm thinking about this from how do we institutionalise sustainability so that the University is committed to it. And so that it will continue to implement it even if I'm not here. And then it's not on the students to try and carry it on the side.

So, for many years, even long before I was Professor, I've worked on this kind of how do we institutionalise campus sustainability. And the first movements in Canada were led by students. Where the students started was by doing assessments to say, well, where are we at? How much waste do we generate? How much greenhouse gases do we regenerate? What is the situation on our campus? and doing that sustainability report first.

And then from there, asking for a staff person to be responsible and from there getting that multi-stakeholder committee, and ultimately a strategy put, like, the University committing to it with a policy, and then a strategy for implementation. Now, we have that all now on my campus. And under that is where we've committed to carbon neutrality, and now we have a plan to reach carbon neutrality on campus, etc. But I can just say, whether you're whatever role you play in the University, there are opportunities to kind of push the institutionalisation of this, either from that from the student side or from a faculty member or employee side.

So that would be my first recommendation, take the long run. See what can be done to build it into the institution itself.

Now, if I can talk about individuals because I've done a lot of work on youth and innovation as well. My advice usually to young people is to think about your sphere of influence.

So, what is it you care about? Is it Climate change? Is it poverty reduction? Is it plastics? Or it might be a whole mix of things that you care about and that you want to see change on. So start with yourself. Start because you absolutely have influence over yourself. So start with your choices, your consumer choices, your voting choices. It's your behaviour all of this you can control. So then, who can you influence Where's your sphere of influence, probably your friends or next, your family. Perhaps coworkers if you're working. Then you can go, where's my next sphere of influence. This is where we start to get into organisation, so maybe it's your school, your workplace, your religious institution and then from there if you're really wanting to create change in the system. You can take it to your sector, your community, and then really the government policy, and I've seen young people get all the way to government policy on that sphere of influence and not alone. Right, you start joining movements, you start joining other people. But really, I say start with where you are. Start with yourself.

McSparren: Fantastic, Great. Appreciate it. Okay, so we are just reaching the three o'clock hour. We have one message, let me just see we've got here. Okay, that's just a thank you.

Yes, I just like to have a quick summary again, ladies and gentlemen, thank you very much for being here today. Thank you, Dr Amelia Clarke and Bayo Komolafe for coming to our greenroom discussion today.

Today we talked about multi stakeholder partnerships, at different levels looking at how they interact between the global issues and local development and implementation, Implementation and sustainable environment and sustainable development goals.

One of the things that I want you to take away is the research that Dr. Clarke is doing is really bearing out that when we have these partnerships. There are endless types of configurations the endless numbers of partners. However, the design is really important, it's essential to have checks and balances, and it's essential to have accountability measures as well.

This way, you don't end up with this free-rider sort of phenomena, where members of the group get to have the reputational accolades in benefits from being associated to being a member. However, they are not actually implementing in the way that they should. Okay. Do either of you have any last words or comments,

Dr. Clarke: Really, just to thank you, Jason and the team at the Green Institute's it is. You are providing a great service here. Well, not related to me but more generally, providing the opportunity through your green room series for people to listen to different speakers, so thank you for creating this opportunity.

McSparren: On behalf of the Green Room team, I really do appreciate that compliment. Thanks so much.

Bayo any last words. Just to thank our audience.

Bayo: Yeah. Once again, thank you for having me here. Thank you to all the audience for joining in and listening. We appreciate what you are doing, Jason, your team, and thank you for having us today. Thank you.

McSparren: Excellent. Thank you very much. And again, ladies and gentlemen, please, take note of the green room. You can follow us on Twitter; you can find our videos on YouTube, also on Facebook. Our website is the greeninstitute.ng, where you can see upcoming events and other aspects and features of the green Institute and the green room program in particular. We have another Green Room coming to you next month, so please keep an eye out for our website and our social media pages to find out when that is who we will be discussing.

Thank you very much, everyone. Thank you for coming. Have a great weekend. Enjoy tomorrow is the spring equinox. Happy spring. Thank you very much.

Best wishes, everybody. Thank you. Goodbye.