Moderator: Okay. Hello, ladies and gentlemen, Welcome to The Green Room episode 8. My name is Duygu Sever Mehmetoğlu. Today; I have the pleasure to moderate a very interesting discussion with Professor Randall Abate. Welcome Professor. Thank you so much for joining us today.

Prof. Randall: Thank you so much for having me doing Dugyu. It's great to be here.

Moderator: If you allow me, Professor let me offer a brief introduction for you, about you to our audience. Of course, a couple of words would not be enough to summarize your expertise on climate and environmental issues, but I do my best.

So, Professor Randall Abate is the inaugural Rechnitz family and urban Coast Institute and all chair in marine and environments law and policy. He's also a professor in the department of political science and sociology in Monmouth University in New Jersey. He serves also as the Director of the Institute for Global Understanding. Professor teaches numerous courses in domestic and international environmental law, climate justice, constitutional law, and animal law and he also has published numerous Publications, book chapters, books, Journal articles on environmental and animal law topics. Recently he has gone further focusing on climate change and climate justice. And in this regard, he has a very interesting book, which also has given us the inspiration for today's Green Room session. The book is titled Climate Change and the Voiceless protecting future generations, wildlife, and natural resources, published by Cambridge University Press. He's also the editor of another recent book titled as "What can Animal Law Learn from Environmental Law.

We will have a discussion with Professor Abate, but I would also like to remind you, our dear participants that we will have a Q&A session at the end of the discussion. So, please feel free to write your questions in the chatbox or write down your comments. I will be going over them at the end of the discussion and we'll ask your questions to Professor. So Professor, let's start with the basics. You are using a very interesting, striking, and important term The Voiceless while talking about climate change and the efforts to mitigate its impact. What does the term Voiceless stand for?

Prof. Randall: Well, I used this term deliberately in the book to represent those that are not able to represent their own interests under the law. So, the three categories that I've identified in the book share that common vulnerability when we talk about future generations of humans such as youth that are not yet able to vote and the unborn, and wildlife and natural resources. They share a common vulnerability of not being able to represent their interest in the legal system and therefore they need human guardians and advocates to step in to protect their interest, to account for their concerns because they're not able to participate on their own behalf. And so the term of the voiceless does have other meanings outside of this book project and I certainly respect those references as well. For instance, sometimes voiceless can refer to other marginalized communities of humans who aren't adequately protected under the law but for purposes of this book project, it's those three categories only.

Moderator: Of course, we always other than talking about sustainable developments or climate change mitigation policies. We always state the importance of having integrated and interdependent courses in different aspects, different issue areas, including different communities and stakeholders. Even the motto of sustainable development goals is "leave no one behind," in

this regard all these three categories that you are accumulating under the term of voiceless. What is the importance of including their needs into the efforts of sustainable development? How sustainable development policies can benefit from including the Voiceless into the policymaking or What would be the cost of not including the Voiceless, in not taking them into account?

Prof. Randall: I think that's very much of a focus of the books proposal that it's very easy to overlook the interests of the Voiceless and how they are valuable and understanding what we mean by Sustainable Development, Sustainable Development is often taken from a human-focused perspective and what's important to understand about what Sustainability really means is that it really requires us to adopt more of an ecocentric way of looking and moving forward as inhabitants of this planet and that means that humans are just a part of this broader system of life and it's not just about the humans. So we very much rely on humans. To ensure human sustainability, non-human populations, wildlife, natural resources play valuable roles in ensuring resilience in our fight against climate change for instance.

Moderator: Sure and What do you think is the biggest challenge in this regard for changing this bill from the humancentric way for us to include the environment, animals, the future generations i.e. the voiceless into the across making efforts. What's the biggest challenge to accomplishing that?

Prof. Randall: Well, the first challenge is a word I've used a lot of my recent scholarship and that's "anthropocentrism" that the biggest challenge we face is that we think we are the only thing that matters humans. So the need to overcome anthropocentrism and how we protect the environment and our shared future is perhaps the biggest challenge and that's one that's taken a long time to move away from the kind of open people's minds to a more egocentric way of thinking when it comes to environmental protection.

And the other challenge and that's really a challenge for protecting wildlife and natural resources more effectively because we focus on humans, but the other challenge we face is short known as short-termism and this is really a challenge for protecting future generations of humans adequately. I think where this has been a challenge is that much of our consideration in moving forward as humans is driven by cultural values, political expediency, and an economics and so this problem of short-termism ultimately means that we're much better at protecting ourselves those who are currently alive in our immediate needs, but we're not as good in thinking about those who will be inheriting the earth after us. Current youth and the unborn and it is harder to make effective laws that take that long view. We tend to be locked into a short-term view of how to protect our planet.

Moderator: Definitely and it such a thing requires a change of mentality to transform things for short-termers, from human sanctions perspective towards a longer term view and more inclusive view and I think this change of mentality isn't easy either. So maybe there's a huge role for a change in the education system or there's a role for the whole educational system with regards to changing the mentality of today and teachers policymakers. What would be your Reflections on that? What can be the way to impact their mentalities and what role education would play? What kind of a role education would play in this?

Prof. Randall: Well, I think education is critical and there's so many different ways education can be involved on these issues. So one, is through more formal education, whether we're talking about primary and secondary education. The state in which Monmouth resides New Jersey is the first state in the US to require climate change education in the public school curriculum, and it's not just climate science that would be required to it would need to be taught across all subjects and that's very important because what we find is that climate change is not perceived the way it needs to be as an intersectional issue. It just affects everything. It's not just this narrow environmental scientific challenge. It's a social problem. It's an economic problem. It is a political problem. And so, that's one way in which the new generation certainly being exposed to this education from their early childhood will be in much better positions to address climate than my generation which didn't have any trace of that and we were very much locked into that anthropocentric short-term way of thinking and how we approach the world. So the other aspect of education though beyond the formal education system, and of course we're seeing developments at higher education as well is very encouraging so many more programs in the US have emerged just in the past decade on sustainability master's and doctoral level focus on Climate energy sustainability and that's very important. We need current adults to take on the fight every bit as much as the upcoming generation of youth and then in another way, education is about informing the public, it's about this new field that's emerged called climate change communication. It is about making the public understand on a daily basis what climate change means for their daily lives and for their future because not everyone is going to get that through any kind of formal education and yet we all need very effective easy to understand information about how climate change is impacting our lives.

Moderator: Definitely, I totally agree with you and I also think that there is an importance in how you see the notion of security as well. I think especially the policymakers or the conventional system of education, especially with regards to political science or international relations tends to still see the world through the lenses of traditional understanding of security, which means all, of course, the Tri-State security, the territorial integrity and everything in relation with that and bringing in the human dimension is quite it's conceptual it's not a new concept but in terms of practice and perspective wise, I think a new dimension to include the human dimension into the national security and policymakers or professors or programs which tend to define the national security in a broader term tend to include more climate change and environment animal law and the protection of you know vulnerable communities, with the broader understanding of human security of course. inline with that first, of course, the policy solutions for this whole transformation is not straightforward but Professor, if you were to give you a recipe for the policymakers and for the society like separating the two if you were to give a recipe for a sustainable future and also for mitigating the risks of climate change on the Voiceless. What will be the key recommendations?

Prof. Randall: Yeah, that's hard to summarize in a couple of sentences but really the approach that the book takes is focused on sustainable development as something that needs to transition from aspirational rhetoric to mandatory requirements.

So what we've seen over the past three decades with sustainable development is that it's very much something that is considered in decisions, but it is not required to be upheld before development can occur and the other problem of sustainable development is how we are defining development. We tend to be locked into this notion of development must mean economic

progress and it must mean traditional ways of using land or using resources in a way to go somewhere else with our objectives and society and basically we need to think more in terms of regenerational values rather than sustainable in that sense because in many ways with the climate crisis we face, just sustaining what we've done is going to doom us. We have to reverse many of the ways we engage with our world to be able to be truly sustainable. So that means for instance when we have such vast concrete jungle developments in our country in the US with shopping malls and movie theaters and too much concrete and not enough green space, what part of what sustainable is going to mean is restoring those spaces to green spaces and to enable us to be adaptive to the threat of climate change more readily and that is something we're starting to see and we'll talk more about the effect of the covid-19 pandemic, but I think that's one step toward that future for us. The other piece I would say for policymakers is just the importance of understanding the intersectionality of the challenge of climate change that it can't be perceived as just an environmental problem that an instrument like the green new deal that's been proposed in the US, recognizes that intersectionality that climate change is about racial justice, it's about gender equality, it's about jobs, it's about our food system and of course, it's also a major environmental threat.

So I think that's most important for policymakers because policymakers have been too much in their silos and thinking about regulating climate change and it just has to be recognized as a key example of the ills of capitalism and then we have to recognize that to be able to address it effectively and then that doesn't mean the world is going to be socialist next week to be able to address climate change, but we have to understand that much of what capitalism represents inevitably cause to this crisis that we face now with climate change and the other piece, I guess from an individual level and every bit is important is for people to be more mindful that every decision they make has an impact on what it means to have a sustainable future. So that runs from transportation choices to food choices to where you live and how you live and so again in the US now that we're in this crisis, people are living in larger houses, driving larger cars not using public transportation, having a heavy meat-based diet from factory farms. All of these things are catastrophic for sustainability. So, individual actions cumulatively can do much more in many ways than government regulation.

Moderator: Definitely and we always talk about, you know energy transition to mitigate the carbon emissions and decarbonize our current world, but It's actually not only about energy transition but the transition of a whole lifestyle and way of doing business actually. You also refer to covid-19 I of I was also hoping to learn about your thoughts on that too. And it's all it has been definitely worsening things which regards to that because people now are stuck at their homes. It has been affecting their jobs, the way they are consuming food, goods and the earth's condition, of course, it's not maybe the first time that the climate change mitigation efforts, the energy transition or policies or efforts for sustainable development has been facing a disruptive event. But this is a huge crisis that we are all passing through, What has been the impact of covid-19 to come up with a sustainable solution, sustainable future for the voiceless from the category of these three groups? What has been the impact of covid-19?

Prof. Randall: Well, I like to look for Silver Linings and I think one of the things we've learned in a really valuable way about covid-19 is that it's given us a window into the future about how we can be more sustainable coming out of this pandemic and certainly the first is as I referred to transportation choices are obviously big impact. When we look at what covid-19 required of us,

it was a requirement of telecommuting and reliance on what we're doing right now, use of the internet to conduct sessions that would have been held in person prior to the pandemic. And so that reduction in travel has had a massive positive impact on our net global greenhouse gas emissions this year. In fact, the scientists are telling us that 2020 globally is going to be the lowest year of green gas emissions since post World War II times, and granted we had to make a lot of intrusive sacrifices very abruptly when the pandemic hit in the spring to be able to do that. But many of the adjustments we made were not only manageable, they were the sort of things we should have been doing prior to the pandemic if we were serious about sustainability and I think that's also true with our food choices in the sense that the pandemic caused massive disruption to the supply chains in the meat and dairy Industries such that there was a more rapid transition to where we need to be going anyway toward a plant-based food system or at least a more smallscale sustainable animal agriculture system. We needed to be away from factory farming years ago, and we're still trapped in it and I think the covid-19 pandemic exposed some deficiencies in that system and at it in a very graphic way, where there was massive food waste and an exposure of the conditions again of the voiceless of how factory farm animals are treated. I think that was really positive for the protection of the voiceless as well.

And then, the other is the transition from fossil fuels to renewables. I think that too, what we saw coming out of the pandemic was a massive economic hit to the oil giants such that without even being required to do so, companies BP and Sunoco have voluntarily changed their portfolios to include more renewables. And so again something that was tragic for humanity the covid-19 pandemic causing so much death and illness around the globe. I think it's given us this kind of opportunity to say, okay, we need to rethink a lot of the things that we've been doing. Otherwise, we're going to see another pandemic if we don't change these habits and again, that's our relationship to animals in many ways that makes us vulnerable.

Moderator: Yeah, Professor I'm seeing some pop-ups I think we have questions. So before continuing with my questions, maybe we can check the comments coming from our participants. So I'm seeing Chris, Professor Abate is an inspiration, his work in social equality, climate justice, and clarification on sustainable development is indeed profound and needed he says. There's another question here and Nishant with respect to the short-termism. He asks, may I ask how to do you think ESG is changing the scenario practically? How do you feel CSR will be impacted from the pandemic?

Prof. Randall: There's a lot of acronyms in there that I want to make sure that I and the audience understand. So it is CSR I believe is referring to corporate social responsibility and the first one in environmental sustainability ESG. And I mean that there are so many acronyms and environmental economics answering the right question. So, I guess from what I understand about what the questions asking, I would like to speak on the CSR If it does mean corporate social responsibility. I think it's very important that perhaps the most rapid mobilization toward renewable energy toward plant-based food systems would be enhanced responsibility from the corporate sector. So and that is something, that they are about making a profit and so I think when businesses see these transitions in our society that it's not going to be profitable to ultimately engage the way they have been I think it's very important to accept that responsibility and ultimately not be part of the problem and ultimately transition in a way that's going to meet society's demands and ultimately enable them to remain profitable by transitioning to renewables for instance and still ensure that that we've got a sustainable future. That you know, it's not really

in their interest in a certainly not in society's interest to cling to the bad habits that have put us into this crisis, and then there's other efforts as well about efforts, like fossil fuel divestment campaigns. I mean just trying to build awareness about how we need to be transitioning off of these habits that have really led us to this crisis we face now.

Moderator: Yeah also there is another question, I think we can have a life guest as well. We have Sabika. She also has a question for you. Maybe if you can just connect her to the session. Hello Sabika, how are you?

Sabika: Thank you for having me on your show. Thank you. My name is Sabika and I'm calling in from Qatar and I suppose I'd like to just briefly tap into your expertise at law. And as we all know that climate change is just not a simple issue, It is not only an environmental issue, It is an issue that is a social issue and economic issue, a racial one, a gender, ableism, a moral issue, just so many layers but when it comes to law, which is a mechanism to kind of figure this all out, in your opinion has the field of law involved enough to allow representation from these, you know vulnerable groups if you will and even in the field of law and law schools and what have you, has environmental law developed enough to be powerful? Do you see a specialist out there?

Prof. Randall: Thank you very much for that question Sabika. I am encouraged by the developments in the US, I can certainly speak too much directly just in the past decade that environmental justice as a field has really become much more recognized and respected as a way of seeking to promote change on these issues and just with the Biden administration some very progressive thinking people on the notion of environmental justice and how that fits into climate change and sustainability have been appointed. So I have some hope there, but more importantly at what I am most encouraged by is that there are a lot of efforts creative efforts in the courts with climate change litigation over the past decade and it wasn't so much about which cases won or lost in the court. But what was encouraging to me about it was that it really transformed climate Justice into a movement into a social movement and I've seen that very much reflected in the youth in American society now that climate justice is very much a rallying cry like black lives matter and like me too. It's a galvanizing of this demand for social justice and how we move forward and so environmental justice is a very important piece of those when used to be different social issues. And now we're seeing those come together in today's youth in the US and that is also informing who that generation is voting for who's ultimately getting into state and federal political offices to be able to reflect the will of the public and set agendas on these issues.

Sabika: Thank you so much and do I have an opportunity to ask one more question then

Moderator: Sure, please do.

Sabika: Okay, perfect. So, I mean I understand that capitalism has been the driving force of economies worldwide and you also touched upon this in your earlier discussion, but I guess the alarming fact is that it's also the driving force behind the developing economies that are almost myopically kind of going on this narrow path of rapid development and it tends to kind of emphasize individual prosperity over the more global kind of thinking. So I suppose the question is that is there a space within capitalism that is being practiced in developing countries to look at actions towards climate change as a win-win situation as opposed to a zero-sum game. Are there

any ways to make it, you know, the defects of climate change less conceptually distant because at the moment there seems to be very limited pressure to have these sustainable mechanisms in place, especially in this new kind of economies?

Prof. Randall: That's a great question. So I think that kind of reflects back on this notion of climate in the climate change negotiations, the notion of common but differentiated responsibilities in how we need to move forward as a global community to address climate change, and what that really means is that the developed countries have a higher responsibility to lead these transitions away from our bad habits whether it be capitalism or fossil fuels or factory farming and essentially the developing world is entitled to financial and technical assistance from the developed world to help them make that transition in a slower way because they lack the means and in fact, they're entitled to their engagement of those capitalism mechanisms to advance their economics because the developed world had that opportunity and exploited it and it shouldn't be well now there's no room for the developing world to engage in that more shortterm capitalistic frame. But the reality is that we're all more informed about what it means to be sustainable. So even with that slower transition in the developing world away from capitalism, there needs to be more sustainable minded thinking and how those capitalistic efforts can move forward. There's no right to exploit the environment. There is a right to develop in a way that's going to sustain the economies of those developing countries without being unduly burdensome on the environment. And so I think that's where there really is this moral and political and economic responsibility in the developed world to support that transition and that hasn't gone as well as hoped. If there's anything that has come out of the past three decades of climate negotiations, It's that the developed world especially countries like the US have not embraced that moral responsibility and the developing world is just pushing back and saying it shouldn't land in our shoulders and as has been very frustrated by that reality.

Sabika: Thank you. Dr. Randall. Thank you so much.

Prof. Randall: Thank you for the questions.

Moderator: Thank you. Sabika for your questions. I'm reading a couple of more messages that have been going through the screen. So another question is, Do you think the need for upgrades for Stockholm and Rio de Janeiro conventions in the 21st century? What changes would you propose if yes, the question is from Mishant Professor?

Prof. Randall: That's an interesting question. And I think there's a lot of value to what Rio and Stockholm embrace. I mean, it was certainly the coming together for the first time globally to have these aspirational instruments about what we ought to be doing to protect the planet and Stockholm certainly was more I think environmentally minded and Rio was a little bit more about sustainable development and balancing economic and social with environmental which is also relevant, but I think when we're talking about what's relevant for today given that even Rio was ninety-two decades ago. We're in a new place now. And so I think I think where we are in 2020 is should build on some of those principles. But I think what we really need is a more serious attention to the more ambitious environmental principles of those documents. So two that come to mind to me would be the precautionary principle that we really need to live by in terms of how we address climate change. We were very effective in relying on the precautionary

principle to address stratospheric ozone depletion and we came out of that as victorious but ultimately, climate change has not followed that track record and so many reasons or core reason why that hasn't occurred is because the precautionary principle has not been applied to climate change. It's been very much of a cost-benefit way of thinking on how we address climate change. And then another one is intergenerational equity, that's a big focus of my climate change in the voiceless book that that principle is built into this declaration and ultimately we are living by those principles as readily as we should as seriously as we should and I think there's opportunities to build on that and one example is future generations commissions, These already exist in some countries in Europe and I think it's going to be hopefully more of the model about how we account for future generations interest. We have appointed bodies whose job is to consider impacts of legislation or litigation on future generations and ultimately be a voice for those voiceless entities

Moderator: Especially there are several youth delegations and several platforms to include the proposals or policy ideas from the young people and pulse entrepreneurship in this regard or with regards to policies, with regards to tools, with regards to projects so as to cope with climate change and to offer a sustainable development either, you know trending topic among the youth as well and that's quite promising. I think there are also two questions from Chris. So if we can I would also happy to invite Chris to our live session too. Can we invite Chim? Hello. How are you?

Chinomnso: I'm good. This is Chinomnso speaking. Can you hear me? Yeah, thanks. I have a question and it's mostly related to the subject of democracy. The institutions will have the moment and how that can stand us in good stead for what we're trying to represent, the Voiceless, so my question is how do you think our Democratic institutions can be positioned to help us translate the whole communication of climate change for the voiceless, Do you think we are currently equipped in our democratic debate institutions to be able to do that or the something have to fundamentally change for us to champion this whole notion of climate change going forward?

Prof. Randall: Thank you for that question. It's a very complex challenge. So really this is about information dissemination to the public and I think one valuable lesson in reference point we have in the US is that many of our federal environmental laws are built on this idea of transparency and accountability in terms of how we ultimately conduct business, that those who hold permits, that who pollute the air and water ultimately have to disclose publicly whether they are in compliance with their permits. And so I think when it comes to climate change, we don't have that same culture at all because climate change is so much more complex to regulate and so when I made the point about sustainable development needs to be a mandate rather than an aspiration what I mean by that is that we have the ability within our governance systems to say basically establish a standard for what it means to be sustainable across a variety of context and then ultimately not allow the activity to proceed if it's deemed unsustainable. So an example of that is a court in Australia recently about a year ago, ultimately issued a decision where there was a proposed coal mine that was going to take Australia out of compliance with its carbon budget. The amount of carbon and pretty mint and still be in compliance with its climate change commitments and prior to that decision, there was never a court that ultimately said well this project is essentially unsustainable because it takes a country outside its carbon budget but this

judge was very forward-thinking and said this project cannot go forward because it's going to be unsustainable on those terms and that reference was what it means to be in compliance with your carbon budget as unsustainable that can be applied in many different contexts about what science and what law and policy tell us is sustainable and what isn't and so I think that's really where democracy can with the proper political-will, impose those kinds of standards that would ultimately enable us to be sustainable in a way that we haven't been. When sustainable development has really just been window dressing and not really mandatory requirements on what we need to do.

Chinomnso: Thanks very much. Yeah.

Moderator: There are also two more questions from David, the first one is it has been a half-century since Stone's should Trees Have Standing was published, has there been much progress in the US or global legal systems on that point. He asks, how does "standing" relate to your use of "voice"? He says and also what about the role of evolving doctrine on the public's trust and trust ship notions. How does that relate to your arguments? He asks, so two questions.

Prof. Randall: Those are two great questions that go very much to the themes of the book. So the first question is when I've spent a lot of time on in my career. I've really worked hard on standing issues access to the courts in the environmental context and then later in my career in the animal law contacts and it's a huge challenge in the US. We have very restrictive standing requirements about who can bring suits and ultimately be in the court system. So what this means in the context of where we are now is that yes 50 years have passed since we've seen that that very forward-looking scholarship.

The Should Trees Have Standing which was really an effort to say nature itself has intrinsic value and should be able to have rights to be protected and of course the trees don't talk, a human guardian would be appointed to represent the interests that are recognized by the law. So what we have now, both in environmental law and animal law, which is not nearly as effective, is that in order to protect the trees or in order to protect the endangered species, a human has to have some interest that has been compromised and then the human can sue on behalf of that harmed resource or animal and that's not nearly as effective in protecting the voiceless as the voiceless entities having the rights themselves. And so that's progressed a great deal just in the past decade alone in animal rights, litigation and in rights of nature developments, worldwide courts, legislative bodies have recognized this notion of the intrinsic rights that nature and wildlife have. The US has been slower than other countries in this regard. So, rivers have been recognized with legal personhood in New Zealand and Colombia, and India just to name a few that didn't do well in the US, and a case seeking personal for the Colorado River that was rejected. And then on the animal right side again outside the US, there have been very significant developments in protecting animals on variety of legal theories in the US, there's been a leading organization, the nonhuman rights project that has been bringing these cases very doggedly and very effectively and has made some progress in the courts, but there is not yet been a judgment hat's says animals have legal personhood, animals are treated as property under our current system. So really what this means for the proposal is that there is a mechanism called next friend status under US Federal rules of civil procedure and that enables a human to step in on behalf of another person and person is not defined to only be humans. So a representative can represent the interest of a person who cannot otherwise represent his or her own interests, so courts have interpreted that so

far to be limited to humans, but it says person and that's where the battle is, person doesn't have to be limited to humans. And that's where the advocacy of these organizations has been focused on. So, the other piece about and that's so that's very much about rights-based thinking and that's a big part of the book proposal. The other part of the book's proposal goes to stewardship how rights-based thinking is very difficult and challenges people's views about how the law should work and there are certain challenges about how effectively it can be adopted. So the more intermediate step is let's just put a higher duty on the government to protect the voiceless. So an effort in the courts, the Juliana case in the US is that very effort. It's looking to expand the notion of the public Trust doctrine to say that not just the wet sands on the coast and the river beds and freshwater bodies, but let's say the government has a duty to protect the integrity of the atmosphere on behalf of the people and that's a very ambitious expansion of what public trust means but it's inappropriate one because arguably the government ought to have that responsibility if it really is about protecting the public health safety and welfare of the population. What is more fundamental than the Integrity of the atmosphere? I mean that that's really where our ultimate future lies to ensure that we're fighting climate change effectively. So I think the idea of public trust has been quite powerfully and creatively used not just in that Juliana case, but in many other contexts now to enhance the protection of Wildlife and in other ways that these are ways where lawyers are doing really inspiring things to get protection for voiceless in ways that traditional existing law does not.

Moderator: Professor. I know that you are more focused on the US and do you handle the issue more from the United States perspective in line with your expertise, but I'm asking out of curiosity actually. All these challenges are universal, you know, they are valid for all the countries and all the countries must act on this so that we can have plausible solutions and sustainable solutions, of course, but the way the countries, national countries deal with these problems are quite divergent. Even how they define the problem is very different across cases. Do you see specific patterns across the regions or some, you know, specific significant national characteristics all across different countries with regards to dealing with the Voiceless, with nature, with animals? Is there some maybe cultural traits or some breeding types which are more inclined to value the animal law or environmental law more? Do you have such remarks?

Prof. Randall: That's a very good question. So the trends that I see are in Latin America. There are many very progressive constitutional provisions to protect the voiceless. So there's an enhanced effort at least aspirationally and constitutions like in Ecuador and Bolivia and Columbia certainly has protections in this regard that are really much more ambitious than you see in countries like the US or Canada. The challenge that they face is enforcing those ambitious protections because then they're just words on a page in their constitution and they don't have legislation to implement those aspirations and if they don't have a very effective court system to enforce them and it's just words on the page. So they're doing that better than the US and some of their courts are actually yielding very effective results, but we're still waiting to see how effectively those results are enforced now. So for instance in Colombia, the Atrato River was granted legal personhood and now we have to see how effectively that opportunity for enhanced protection is going to be enforced. So another trend that I see is that the use of the courts, US has a very sophisticated court system that really uses the courts in ways that other countries don't, in that we have a challenge with our legislature. Congress hasn't done anything productive for the environment in decades in the US. So when you have the legislative body not fulfilling its role.

The courts are then consulted to say, let's try to get the courts to make some law that the legislature hasn't, and in fact that's in that instance you get some good outcomes, but they're very one at a time kind of outcomes. They aren't uniform they often complained so it's better than nothing, but it's not the right way to go about doing it in the long term whereas in other countries that aren't on a common law system. So that similar reality that we see in the US, we're also seeing in systems like India, they have a common law system. They're doing a lot through their courts, but in other countries, it is very much about legislative efforts and another trend I'm seeing is that it's much harder to get effective legislative efforts on these issues at the federal level and countries. There are much more effective things happening closer to the people. So at a State or provincial level and even in the US, at the local level, some very ambitious protections are happening. So it's important to remember that ideally we want to see as many things happening at the federal level but things that happen at the sub-national level are very important and need to be pursued and one example of that is California, California has an outstanding provision on these issues if California were a country, It's the fifth largest economy in the world. So just because it's only one of our state's doesn't mean that we're not doing anything. We need to do much more in the US but to the extent that California and the impact it has on the global economy and environment is doing a lot of very good thing is really very important.

Moderator: So we can say that basically, the two major takeaways. One, there's still a gap between the action and words even though some countries might have legislation or words on paper as you just said it's not yet fully being transferred into the action and second is, there is a need to breach the local efforts with the national and even international efforts so that they become effective policy options or legal options. I think there is a new comment. Yeah, talking about "global legal systems," "the watershed of sustainability and internet intellectual property rights" has been gaining momentum. What are your views on the feature scope of this development?

Prof. Randall: And I don't have as much experience on this issue. I mean, I'm certainly the idea of intellectual property rights as clashing with sustainability value certainly has a lot of manifestations and that's been going on a while. I think that what we need is more effective global governance on that notion and there are some efforts that that do address that. The Biosafety Protocol is one of them under the convention on biological diversity that speaks to that to some degree. The problem that we always run into though is that the actors that potentially cause the most harm are the ones that aren't parties to these treaties. So again, the US is a frequent violator of that proposition, and then for instance when you've got treaties that protect the rights of indigenous people, really great language. Some of these efforts and have about 20 parties and not surprisingly most of the countries who are parties to these treaties are Latin America. Well, that's not going to protect the indigenous peoples very well when the exploiters are coming from the west and from China and ultimately not paying attention not bound by those treaties that are designed to protect the vulnerable there. So it's a huge challenge on international governance when you don't have the developed countries accepting the responsibility, their political and their moral responsibility for leadership and again, I'm mildly hopeful that that will change slightly under the Biden Administration but it's not going to be night and day change by any means that the US has failed in its leadership on these issues for three decades now.

Moderator: As you said, the change will not be from today to tomorrow, of course, but we are always hoping for the best. To leave with a positive note maybe the last question. I know that there are many students, many sustainable volunteers who are watching us today. Do you have any messages to them as a professor working on these topics for so many years and as an expert on these issues, what would be your advice for them with regards to their studies and actions with regards to sustainability?

Prof. Randall: Well, it's always inspiring to be able to leave a hopeful note on these issues because it is very overwhelming and depressing in many ways. But as one who is now teaching at the college level, teaching law courses to college students rather than law students, graduate students, and I've enjoyed that opportunity to really help inform the coming generation of opportunities about how they can make a difference before they are already trapped in a profession and feeling kind of overwhelmed. So I think with sustainability been this used to be very much about purchase a hybrid vehicle or make sure your recycling and then the discussion stops. I think the most important thing about sustainability Advocates is that it's important for them to embrace and to convey the reality to their constituents that sustainability is so broadbased and multifaceted. So when I'm an advisor to the sustainability club at my University and again when if left to their own devices, they might plant a community garden and make sure we have effective recycling on campus and think that they've done their job and you know, I understand that's valuable. But there's so many more ways they can be engaged. So now they're starting to see that engaging with the dining services about food waste is massive. I mean just food waste alone. If food waste, where a country it would be the number three greenhouse gas emitter on the planet. That's how bad food waste is as a sustainability challenge. So if you just immerse in one of these many daunting sustainability challenges and getting beyond, you know recycling it's going to help a lot and it is about every individual choice we make and that's where fossil fuel divestment campaigns have been very powerful. It's just making sure that everyone is more aware about the impacts that every one of our decisions we make on a daily basis has on global sustainability and spreading that message in as many ways as you can. So I think there's this generation is also much more empowered to get a formal education on these things in a way that I never had. So I encourage them to pursue specialized programs in sustainability and climate and energy. There's all kinds of new job opportunities in the US Climate and energy law is considered the third fastest-growing sector for legal jobs right now. So it's not just pursuing a niche interest. It's about economic security too. This is where the work is going to be if we have a chance for a sustainable future

Moderator: And that's only for foreign-based, for individuals as well for countries, as well as diversification of the economy, especially for the countries, which are based on fossil fuels. They need to diversify their economies away from fossil. Feel so that they can survive hopefully the new world which will be decarbonized and which will be more sustainable for the voiceless as well. Professor, there's tons of questions and topics that I would love to continue talking about with you, but we are reaching the end of our time. Thank you so much for your remarks for your valuable insights. I'm sure the audience and me as well, we enjoyed a lot of your comments and remarks. Thank you so much. For joining us, and I would also like to thank the Green Institute for giving us this opportunity to host this Green Room session, and of course, I would love to thank you our dear participants for your questions and remarks. Thank you so much, Professor.

Prof. Randall: Thank you very much. I really enjoyed it.

Moderator: Thank you and we will talk to see you in another Green Room episode. Take care. Bye-bye.