The Brookings Institution
Center for Sustainable Development
and
The Rockefeller Foundation

17 Rooms Podcast
"Investing in nature to protect and benefit people"
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Episode Summary:

In this fifth interview of the "17 Rooms" podcast, Rosina Bierbaum and Richard Florizone discuss near-term opportunities and challenges for scaling nature-based solutions. Bierbaum, professor at University of Maryland and University of Michigan, and Florizone, president at International Institute for Sustainable Development, moderated Room 15 focused on Sustainable Development Goal number 15—on life on land—during the 2021 17 Rooms flagship process.

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MCARTHUR: Hi, I'm John MacArthur, senior fellow and director of the Center for Sustainable Development at Brookings,

KHAN: And I'm Zia Khan, senior vice president for innovation at The Rockefeller Foundation. This is 17 Rooms, a podcast about actions, insights, and community for the Sustainable Development Goals and the people driving them.

MCARTHUR: So, Zia, there's been a lot of conversation around the world in recent months about climate, climate change, and what's going on with the planet itself.

KHAN: What's exciting, John, is people are really looking towards solutions now. I think we've gained alignment around the problem, and lots of solutions are coming up. But there's one that a lot of times people overlook, which is just relying on nature itself to be a solution. How can nature provide benefits when it comes to carbon, protect people from extreme climate events? And there's a whole range of these nature-based solutions that we can advance as part of our portfolio.

MCARTHUR: In the 17 Rooms process this year, we've learned about a new frame for that type of mindset of a Natural Security Initiative. Yes, an explicit play on national security initiative. It's about investing in nature in order to protect people where they live. And a lot of it was motivated by the extreme weather events that have taken place, especially in the northern hemisphere in 2021, which of course match a lot of the other parts of the world that have been facing extreme weather events for a long time.

In today's episode, we're joined by Rosina Bierbaum and Richard Florizone to learn about their efforts in developing this Natural Security initiative, which aims to catalyze investment in natural ecosystems to protect and benefit people where they live. Rosina is a research professor in the School of Public Health at University of Michigan and in the School of Public Policy at the University of Maryland. She focuses on science and policy issues of climate change, adaptation and mitigation.

Richard is the president and CEO of the International Institute for Sustainable Development, formerly president of Dalhousie University in Canada, and he's held senior leadership roles at places like Bombardier Aerospace, the International Finance Corporation, Boston Consulting Group and the Quantum Valley Ideas Lab.

Rosina and Richard co-moderate Room 15 this year, a working group for Sustainable Development Goal, or SDG 15, on life on land in this year's 17 Rooms process. For new listeners, 17 Rooms is an approach to spurring action for the SDGs. The convenes 17 working groups one per goal and ask them to focus on an area within the goal that is ripe for action and then to define some concrete next steps that can be achieved in 12 to 18 months to make a difference. This one's pretty interesting.

KHAN: It's very interesting, John. Here we have two leaders who have been so deep in these issues came together and came up with a really innovative framing that I think creates a whole new window for solutions and practical next steps. Richard and Rosina are co-moderators of Room 15, the working group for SDG 15 on life on land. This is their story.

MCARTHUR: Rosina, welcome to 17 Rooms.

BIERBAUM: Thank you so much. Thank you for inviting me to talk about Room 15.

MCARTHUR: And Richard, such a pleasure to have you here too.

FLORIZONE: It's great to be here, John. It's been a real journey with 17 Rooms and glad to chat a bit more about it, about what we did last year and where we're heading next year.

KHAN: Well, Richard, I'm glad you used the word journey, because my first question that I'd like to ask each of you is about your personal journeys to this broad issue and also to 17 Rooms and how you got to this point. Rosina, maybe we could start with you.

BIERBAUM: Well, sure. In the very beginning, I grew up in the smoggy steel town of Bethlehem, Pennsylvania. And so I learned very early about pollution issues. And whenever possible, my family would take us to a more pristine environment to enjoy a day in the lakes and rivers in Pennsylvania. In fact, my parents reminded me that I stood on stage on the very first Earth Day and won my first science. And I think that was in part because, while neither of my parents went to college, science was really an important part of our upbringing. We got up every morning when the space flights were taking off—whatever time they were, we got up to watch them and I had read Rachel Carson's other book, *The Sea Around Us*, and was determined to study the ocean and uncover its secrets for the rest of my quiet life in a beautiful marine setting.

But in graduate school, when I returned to study marine biology, I studied parasites in shellfish, which was something no one since Aristotle had really cared about. Although since then, my long career in Washington has pointed out many times that maybe understanding how parasites and invertebrates can interact is not that unusual. Anyway, I won, much to my chagrin, a congressional fellowship. And so I had to go to Washington and work in the science policy interface. And the very first day, I went to a science hearing, the House Science Committee, and I was deeply depressed, had an epiphany, and that experience changed my life. The scientists amassed against the one lawyer on the committee that showed up could not really communicate with each other, and I realized that science that isn't explained won't be used, and we must translate science into usable information or we may as well not all be out there discovering new things.

So, that kind of application of science, working at the science-practitioner divide, became a new mission of mine, and I worked at the late great Office of Technology Assessment, and then moved to the White House Science Office to run their first environment division with Al Gore. And eventually, when Gore did not take over the White House, decided that I wanted to return to academia to be a dean and help the next generation of students learn how to work at that science-policy-economics-engineering-interface where all these important complex issues are now situated. I was very lucky to be an adviser for Barack Obama on his President's Council of Advisors on Science and Technology, and now I chaired the Science and Technology Advisory Panel of the Global Environment Facility. And so working with development agencies on environmental treaties and trying to think about how to improve livelihoods while simultaneously improving the environment.

So, it was a long, circuitous route to get here. But I was very lucky, also, for the Room's project that I was co-chair with two other brilliant co-chairs last year, and those were Tom Lovejoy and John Robinson. And we began thinking about, well, we're about life on Earth, Room 15, and how the role of nature-based solutions could really be important to lift people

out of poverty, to reverse biodiversity loss, ocean degradation, improve livelihoods and preserve and use indigenous knowledge. So, I got to Room 15 last year and we started on that path, and I'm very fortunate to have my co-chair Richard this year to help take us from what we're calling a campfire to a trial balloon.

KHAN: That's wonderful, Richard, how about yourself?

FLORIZONE: Wow, how do I follow up that? I just have to say upfront, it's a reminder, Rosina, it really has been an honor and a great pleasure getting to know you and to work with you this past year. So thank you for sharing your story. It's remarkable. So very quickly, I'm Richard Florizone, I'm the CEO of IISD, the International Institute for Sustainable Development. We are a made-in-Canada think tank with a global impact with our offices in Canada and Geneva. We focus on three things: on a stable climate, on sustainable resource management, and on fair economies, specifically trade and investment for developing countries.

Just a little bit about my history: I'm a physicist by training, actually my Ph.D.'s originally in nuclear physics. But I although I followed a bit of an academic route, I concluded quite early on that I was at least as interested in the interactions between people as the interactions inside the atom. And a big part of my career has been working in different organizations to try to bring people together across disciplines and across sectors to try to drive meaningful change. And that's what brings me, I think, to 17 Rooms and to this topic.

One of my last roles I was president of Dalhousie University, which is one of the leading research universities in Canada. And there we did a lot of work on ocean sustainability and clean energy. And what we found is that when we could marry concerns about sustainability with concerns about the planet, with concerns about people, that we could find ways to catalyze major action. So, for example, marrying the concern about the Northwest Atlantic as a carbon sink with the need to develop the ocean economy sustainably for the people of Atlantic Canada, that we could attract significant private and public sector investment and drive some progress.

So, that's really brings me to why I believe in 17 Rooms and why I was so excited when John invited me a year ago to join. And it's because, because when you think about things like the Sustainable Development Goals or the climate challenge, there's two things I'd say up front. One is that the complexity of these problems means that no one organization or country or academic discipline can tackle it alone. The challenges are too complex, they're too interconnected, they require that multidisciplinary approach.

And the scale of the problem also means that you've got to attract multiple players, and we're seeing that out of COP, for example, the private sector investment, one of the reasons many people like me celebrate that is if we're going to get the economic transformation we need, we need the private sector there. So, no one can do it alone, and that's what's at the heart of 17 Rooms.

The second is I think we have to be humble about the answers and solutions. We have to be humble because I think humility leads us to be equitable and inclusive in the perspectives that we gather. You know what? As a scientist, we have to be humble because we don't know the answers to these big, tough problems. So when it comes to climate, for example, there's no shortage of views out there on the theories of change and how you might tackle emissions.

And there's lots of great ideas and I have my own. But we have to be humble in recognizing that we haven't turned this problem around. So anyone who says they know the answer, there should be a bit of a degree of humility because the answers haven't been delivered yet.

Now I'm hopeful, to come full circle. I think that's why processes like the 17 Rooms are great because we're bringing together institutions and viewpoints from around the world to kind of work through some of that complexity and to define what are some initiatives that can move the ball forward on climate and the rest of the SDGs. So, thank you for the opportunity to be here.

MCARTHUR: The two of you are like paragons of reason in connecting science to public discourse. You're so clear in your distillation. Many people listening to this conversation might think the world's not doing so well in bringing evidence into public discussion, and in fact, going the other direction. Curious how you each see that tension of fact based public conversation versus loud and antagonistic conversation and how should we be thinking about what's needed? Richard?

FLORIZONE: Oh, boy, I get to start?! Well, that means, Rosina, I can share a few thoughts and then you'll get the much greater wisdom of Rosina on top of my thoughts. There's two really important ideas. Number one is you have to remain committed to evidence. So in a world that starts to drift from evidence, you could, I suppose, argue and you have to respond to those realities. But you also have to stand up for facts. Right? We do need someone to stand up for scientific facts. And if people are saying gravity points up, well, some of us are going to have to just be clear and firm, and that gravity points down even though it might be unpleasant. Because if you care about people and you care about the planet and you believe in science, someone has to stand up for it. So that's number one.

The second, and this is really informed by talking to leading political leaders is saying, okay, how do you deal with this? How do you deal with social media? How do you deal with alternative facts? How do you deal with populist responses to what can be seen as science elite or expert advice? And the best advice I've heard so far from leaders in multiple countries is we have to meet people where they are. That means that when you're thinking about initiatives, you really have to think about the mind of voters, that means you have to think about things like prices and cost right up front. You have to think about what some of the very best climate communicators have learned. You have to figure out how the message and what you're talking about affects people on the ground where they live and how it connects to their everyday interests. Without that, and particularly if you're a small D democrat like me, if you believe in democracy, you have to believe in bringing people along. And so those are the two twin ideas. You have to keep your commitment to facts, but you have to find a way to connect those facts to the interests of the people where they are.

BIERBAUM: That was brilliant, Richard. I was going to also start with, you have to meet people where they are. You know, sometimes scientists think if we just say things louder, you'll get it. Climate change is real. Here's the physics. No, not necessarily. And so, as Richard said, you may not want to talk about climate change, but you might want to talk about economic competitiveness. And there's a way to bring in how clean energy and clean air can go together. You may care about jobs, and so I think that's very important that you have to find access points to people.

The second thing I would say is that I think there has been both a very scary change in the world in the last few years, but that also offers the attention to science a greater focus right now. And that is the confluence of the pandemic, the biodiversity crisis, and the climate crisis, even in the United States, where we still have some very strong skeptics about climate change. More than 50 percent of people in every single county in the United States believe climate change is real and is having impacts. Unfortunately, the increasing number of disasters are also making that evident, that past is no longer prologue, and we're seeing events that simply are outside of the realm of possibility in the last 10,000 years when humans flourished. So we are beginning to see signs of climate change.

But I think equally important, the confluence of the pandemic, biodiversity, and climate change led to groups outside the science community, such as the World Economic Forum, saying the risk of neglecting climate and biodiversity protection in the face of COVID-19 would not only be a setback on the sustainability agenda, but create greater risk of future pandemics. And so I think this idea that it's really about one health, human health, the health of biodiversity and a stable climate all have to come together. And I think the unfortunate result of the pandemic is also the emerging fortunate idea around one health that people are beginning to embrace.

KHAN: This starts to bring us to what you focused on in the Room itself. And you mentioned, Rosina, one health, which is this interesting integration between public health and the environment, among other disciplines. And then there are echoes in the idea that you're proposing going forward, which I'd love for you to describe and dive into around payments for ecosystem services, which has tried to kind of marry economics and policy with the science of nature and the value provides to humans. Maybe you could tell us a little bit about this creative framing, I believe, that came out of the Room. What is the solution that you're proposing? Richard, do you want to start?

FLORIZONE: Yeah, it was very much at center of these issues we're talking about. You know, at IISD we talk about our vision as a world where people on the planet thrive. Where you reject the false compromise between people and the economy and the environment, and you actually start to look for solutions that can be good for all. And you have to be cautious when you talk about the SDGs and you talk about environment, about beware of people who are bearing silver bullet solutions. Right? So there are no silver bullets

But there are a set of solutions that are quite compelling in the way that they can be positive for the environment and the economy and for people. And there's a specific area, the idea that we've been putting forward in our room, the idea that we developed is something called the Natural Security Initiative. The idea here is that we want to foster more awareness and investments in nature that better protects people where they live and specifically in something called nature-based solutions. So just to step back. When we say nature-based solutions, what we're talking about—it's kind of a jargony term—we're talking about investing along nature in ways that you can deliver other benefits. So an easy example to think about is if you have a region that's prone to flooding, you could think, Well, I could put up a dam, I could steer the water in a different way. But well, you know, it might be that whether it's mangroves or restoring a wetland, that if you invest alongside nature, not only can you achieve those same outcomes that you want in terms of disaster preparedness and maybe some carbon mitigation, but guess what, if you do it right, it might actually be cheaper and it might be a better solution for the local community.

And that that isn't just pie in the sky. We've seen projects like that. We've seen wetland restoration where we've had greater carbon absorption, better protection from floods, where farmers are happier because they see that their lands aren't as prone to flooding and they can use it better for crops and you've got positives for biodiversity.

So, the idea is, okay, if that exists, why aren't we doing more of it? And those are some of the issues that we start to get underneath in the Room, to start to identify, what are the barriers to this? How do we overcome the policy barriers, the investment barriers, communications barriers to start to advance this idea, to deliver that world that we all want, where we've got improvements in biodiversity, we can meet some of our climate goals, but we really can support and protect people where they live. That's the idea behind the Natural Security Initiative.

MCARTHUR: I'm curious about the specific applicability of this. I love the term Natural Security Initiative and the play on national security, it's really building on your idea of putting people at the center of it and meeting them where they live. I grew up in a part of the world, British Columbia, Canada, that has felt pretty insecure nature wise in the past year with extraordinary heat. The town of Lytton, British Columbia, burned to the ground this summer and then the so-called atmospheric river towards the end of the year leading to major downfalls. The city of Vancouver literally cut off economically from the rest of the country because all the roads got broken in between and the railways, and everything. Seems like this would be a pretty prime case for natural security and investing in nature to support people in a different way. What does your initiative mean or what does nature based solutions mean in cases like this?

BIERBAUM: Well, I think there is no one single answer, but for example, as we think about the need to preserve biodiversity, to reduce greenhouse gases, and to provide adaptive capacity—that is, that people and ecosystems can cope with the changes already underway and more yet to come—there are ways to either preserve landscapes so that they're bigger and species can move through them as climate changes, or intact ecosystems have also been shown to be adaptive against things, to go back to your example of, for example, fire.

So, if you look at parts of the Amazon that burned, if you have a huge part of the Amazon that is a protected forest, you can see the night lights of the fires around that protected area because that intact ecosystem doesn't burn. And so what I think we're trying to do with the Natural Security Initiative is in a way say this is not just good science for biodiversity, but these are necessary things to protect people. And very importantly, with Richard's leadership this year, we looked at what we had done the previous year on thinking hard about nature-based solutions and said, You know what? The business community is seeing that their supply chain is being affected by those natural disasters, whether they're floods or droughts or forest fires. And we need to involve more people. We need to involve the financial sector. And so this year we had Morgan Stanley there, we had the International Finance Corporation there, we had the World Economic Forum there, we had 1.5 there, to begin to think about how these investment opportunities can both protect supply chains and help protect people and help protect ecosystems.

And so, as Richard said, only recently have people been thinking about nature-based solutions, not just as set aside areas, but working ecosystems that you reclaim, some which have been damaged and restore them and you also manage forests differently or agricultural lands.

And the last thing is, we're not just protecting people and nature. If you look at this decade between—well, we don't have a decade anymore—between now and 2030, if we must reduce greenhouse gas emissions 50 percent to have a prayer of staying below dangerous climate change, one third of the emission reductions you need come from preserving, restoring, and managing landscapes, too. So you start to get these three-fers, you know, you're protecting humans and their livelihoods, you're protecting and enhancing biodiversity, and you're reducing greenhouse gases. And so they need to be married together, and there's not enough public money to do it without the private sector, which now is very alerted to the kinds of disasters you raised.

MCARTHUR: Is it a matter of more investment? Or different types of investment? Or better investment? When we're talking about these investments, what's the change that needs to happen in order for people to be more secure at the center of the investment?

FLORIZONE: Well, certainly part of it is the amount of investment, and the type of investments. But the barriers to this, if you just kind of look at the whole question, say, Okay, what are the barriers if this makes so much sense, Richard and Rosina, you know, why hasn't it happened? So a couple of the key barriers that have been identified and we've been getting underneath in 17 Rooms, one is valuation. So, when you're thinking about a traditional infrastructure projects or even a nature based infrastructure project, we'd argue that you have to look at it holistically. Now that means, of course, that you have to look at its environmental benefits. And that's certainly helped by things like carbon pricing. But it means you have to look at it comprehensively.

So I'll give you an example. If you were to build a bridge over a river, you will have some certain cost estimates. If you now start to look at the impact of climate change and you play with your scenario, of maybe a 50 year flood, this might come every 10 years. Well, that's going to change how you look at the project and how much you need to invest in it. And that may change the calculus around the benefit of some upstream, nature-based solutions that you might put. If you looked at the project narrowly, you say, Well, build the bridge, we're done, right, we've always done it that way. If you look at it more comprehensively, you might say, Well, gee, I have to build a way bigger bridge. Or you might say, if I plants some trees upriver, that might help control the flooding. And that is not only a better solution and saves money, it's more climate resilient and it's better for carbon and biodiversity. So that's number one kind of the valuation in the way of thinking about it. And so there's some work on that.

The second is closely related. The second challenge is scalability. And so what I mean by that—again, kind of a jargony word—but basically, if you imagine a fund devoted to building roads, you could probably conceptualize, well let's create a fund and billions of dollars and governments do this, because you go create roads. And not that road building is so simple, but it's simpler than looking at all of the climate and biodiversity elements of a project.

And so what I mean by scalability is we have examples of great nature-based solutions, and I can show you they deliver these kind of triple bottom line or quadruple bottom line returns. But the challenge is how do you scale them up? So there's lots of conversation around that project preparation or how might you create new identities that can kind of identify and package these kinds of ideas. So those are a couple of the challenges in scaling this up that we're that we're dealing with.

KHAN: I'd love to come to in a moment the practical next steps that you see coming out of this Room. But before we get there I want to ask a question, and Rosina maybe we could start with you, around just nature-based solutions themselves and putting people in the middle. It seems that one of the big drivers of momentum on the climate conversation has been better alignment of interests where the private sector now is seeing that their interests and they have interests in addressing climate solutions. But I would imagine at some point there will be just tradeoffs between different people's goals. Let's take wetlands, for example. You can imagine all the benefits for resilience and the farmers—let's just for the sake of example, say—but there's also a bunch of people who want to put a golf course there, and they just got great joy out of that golf course. So without getting into the late night college discussions about utilitarianism and philosophy, I'm curious on that process of coming to consensus of what the people in the middle here is that we're trying to optimize for, how do you see that playing out or what is the climate like to come to that kind of consensus, given some of the fractures and divisions that we have going on now?

BIERBAUM: I don't know that we have the answer to it, but I would say if you look at the recent conclusion of the climate Conference of Parties, inside the negotiating room, there was not a lot happening specifically on nature-based solutions. Outside the negotiating room, there were many, many, many side events trying to bring together progress on biodiversity and progress on climate at the same time.

And I think, to go back to what Richard said, the really difficult thing is we can count carbon, we can value carbon. It's a lot harder to calculate and value the ecosystem services that you can also get and have for free. And so I think a number of simple metrics might help. If you're doing a climate project, make sure it's also nature positive. If you're doing a biodiversity project, make sure it's also carbon positive. I mean, that would be a very simplistic way to get at it.

But the issue of the finance needed, which is where you started with Richard's previous question, you know, it's not the $100 billion that we're talking about in the climate negotiations. It's trillions of dollars to, as Richard said, make the next generation of infrastructure proactively plan for the future. And since we have so many Canadians on this call, you know, we're supposed to be planning for where the puck is going to be, not where it is now. And we plan infrastructure as if what was true the last hundred years is stationary. One of the battle cries of the engineers appears to be "stationarity is dead."

So, we don't have the exact answer. But if we can move from issues of ESG, which now definitely incorporate climate and to some extent, related issues like plastic, and begin to embed the nature-positive characteristics, working with business and with the private sector, I think that's a way that we can get to, quickly, the goals of the Natural Security Initiative. You know, as Richard said, it really has three parts. One is financial, but the other two are equally important: policy and communication. And policy is requiring everything from local to global activity happening and enabling along the way, and, coming back to your point of skepticism about environmental issues writ large, the important communication of the value added and the cost averted by being proactive in planning these things.

FLORIZONE: I think it's been recognized, certainly for decades that if you want to implement big infrastructure projects, certainly in developed countries, that it involves community engagement. And I think, some people bemoan that, but I think others would argue that people deserve to have a say on what lands in their backyard. And that trend has

led to some very positive things like, for example, in the last decade much better indigenous engagement, right? That has led us to better outcomes. So those tradeoffs will never go away and they need to kind of be worked out through the through the democratic process, right, to make sure that people have projects they support where they live, that meet people's needs where they live.

But the second thing I'd add, to go to the global, is those tradeoffs. So the imperfect way that we weigh all those tradeoffs is through economics. And so that's why things like carbon pricing, why even more technical things like Article Six in the COP agreement around carbon markets is so important. Because if you have some pricing in there, you start to change the business case, and it's much easier to package a project when you can put a dollar value to its ecosystem services that it provides. Now, some people think there's also some danger to that, right? That we shouldn't financialized nature, and I, for one, certainly value nature in its own right, not just for the services that it provides. And that's important.

But nevertheless it holds that if we are going to use nature's resources, which we will continue to do, to thrive on this planet, it's not really accurate to treat those as zero cost goods, right? It leads us to perverse decisions if we treat the air and water and the forests as an endless asset that doesn't need replenishment. And so, I think these moves to price carbon are really important, because they're one way—a crude way, an imperfect way through economics—but one way to price those tradeoffs and lead us to better outcomes, to the outcomes that we want.

MCARTHUR: As an economist in the conversation with severe scientific deficiency syndrome in the company of all of you, I'm delighted that pricing has come up. But also I'm of the view that economists, and social scientists in general, don't spend enough time learning from different scientific disciplines. And it's part of why 17 Rooms are so fascinating. I get to learn from all these extraordinary people who are working across all these domains, and Zia and I get to do it together with our team. I'm curious if you could tell us a little bit about the bridging even between Room 15, 13, 14 and how that conversation has been moving forward. Because 13 is a little more economics-y this year—it's on climate finance—14 on oceans has had a little more of an oceanography plus policy leadership lens. And the three of you—talk about a three-fer, I love that term—are approaching these issues from very different angles. How does that come together? Can you just share with our audience a bit about the state of those conversations.

BIERBAUM: Can I just come back to your social science issue? I do not think you, John, should beat yourself up. I think in fact, the scientists have held the tyranny of not involving the social scientists enough. And just to your point, I would say in all the things that we posit can happen, you know, climate positive, nature positive, we are assuming that a goal will be set and a miracle will happen. And the middle part, we don't really think out so well.

And so, behavioral science, economic science, all of those are absolutely essential to being able to set a goal and get buy in from the communities that have to buy into it. And so I would say the harder scientists as it were, ought to include the social scientists much more often in thinking through these issues, which is part of the disconnect you mentioned earlier.

In terms of how Room 13, 14 and 15 got together, I think actually it was this feeling that in our Room, we need policy, we need communication, we need new science, and we need finance. So Room 13, working on the finance was gripped by our finance piece. Room 14,

working on biodiversity and the very important role of 30 by 30, that is setting aside 30 percent of the land and ocean by 2030, was quite relevant to our Natural Security Initiative. And here we are in Room 15. So I think while we were thinking about different parts of the elephant, we realized that there was a common recognition of the form that was developing in Room 13, 14 and 15 that could support the Natural Security Initiative.

FLORIZONE: I agree entirely. Just to add a bit to what Rosina said, I think for us, we were looking we started through the lens of looking in SDG 15 about life on land and nature. And that led us to nature-based solutions. And of course, that had a natural link then to Room 13 that was something about international climate finance. Because this is both a great need and a great way to invest those dollars to invest in nature-based solutions that can be positive for climate and biodiversity and for people.

And then let me just say on Room 14, which is about life below water in the oceans, it's very clear that the oceans, as far behind as we are on properly valuing nature on Earth, it's even it's even further behind, I think, when you look at the oceans. I think we've only in recent years start to fully appreciate the ocean's role as a carbon sink and a producer of oxygen. And there are some real concerns around what parts of the ocean might start to flip from sink to source of carbon.

And so that topic of nature-based solutions is very, very important in the ocean world. And so that was the common cause that got us all talking about this idea of how can we galvanize further action, further investment, how can we overcome the policy-finance-communications goals around this emerging asset class of nature-based solutions and use it to drive more progress, again, for people on the planet, for life on land, life below the ocean, but also as a support for that international climate finance in developing countries.

KHAN: You know, John, I often watch and wonder as any one Room comes up with a concrete action and here we've seen this remarkable convergence across three Rooms, which again is one of the benefits of running the process with all 17 Rooms simultaneously. I'm curious, what comes next as you look towards next year? What are some of the near-term actions or where do you hope to land at the end of next year, given that this is going to be a longer term journey?

FLORIZONE: Well, look, I'm an engineer. It's my first degree, so I look at things sort of systematically. So for us, it's very much peeling the next layer of the onion. We've established a community of people who really believe in this asset class, in these nature-based solutions. We also know from the literature and elsewhere what some of the barriers are around policy, around finance, around the communications and knowledge. And so what we're doing as a set of partners is laying out a work plan for both research and convening to advance that, and with some thoughts on where to move it forward. So, in each of our organizations—so, for example, at IISD—we've launched a new center for nature-based infrastructure together with the Global Environmental Facility to bring more attention to this asset class. That's just started. That's limited. Now we're looking at other ways. What else can we do around the communications and best practices to get the information out? Because that's gap one.

What else can we do around catalyzing financial flows? Rosina mentioned that we've got the IFC, for example, at the table. And we know that all of the development banks have been encouraged to rethink their approach to climate. So how can we advance that conversation?

How can we advance the conversation with private sector investments to create new pools of capital? How do we think about the policy front? So that work continues. We continue to work with Brookings and Rockefeller to really drive some tangible progress. So wait for it. As I said, we've launched with this one center inside IISD. Now we want to figure out what else it is we need to do, whether it's around specific campaigns or new financial models or funds to actually move this forward in the next 12 months.

BIERBAUM: I would just add to that that we are seeing incredible commitments in philanthropy for climate action, and we are separately seeing many actions in philanthropy for nature action. And I think what we really want to do over this next year is take these pieces and try to make the whole greater than just the sum of the pieces. And so in the Rooms parlance, what we're really trying to do is get from what was a campfire two years ago to the trial balloon this year to an ascent next year. And that is a coordinated set of actions that can actually be taken across policy, science, and communication to enhance the finance and to make sure that this initiative to protect people and protect nature and attack climate change comes together.

There are many, many policy meetings coming up over the next year, and we intend to try to build this idea of the NSI into them. But there are also very important research areas that we need to aggregate and refine. So, for example, Richard has spoken about how difficult it is to value nature. So, natural capital accounting is something that has been tried in about 100 countries so far, and we're going to try to pull together lessons learned and see if there are ways that we can refine it.

So, we have both this kind of convening campaign bringing together all of the interests that we hope to have completed by the end of the year. But very importantly, some of the missing underpinnings that can really take this ascent forward by the end of this year is the other area that's that we intend to focus on and is equally important. So, it's a very exciting time. And I think this is not something that could have happened a few years ago. It's really taken the confluence of both negative events and positive funding streams to get us to the state where we think we can actually really bolster this over the next year.

FLORIZONE: Well, you can see why I love working with Rosina, right? There I was as an engineer saying, I've disaggregate the hurdles, I'm going to start working on the parts, and Rosina said, but it's greater than the sum of the parts. So it's perfect, right? And it's a reminder why 17 Rooms is a great venue to bring folks together, and it's just been a delight working with you, Rosina, and with you, John and Zia.

MCARTHUR: Well, thank you both so much, it's inspiring to listen to you and to learn about the breadth of thinking happening in your Room, but also the push for practicality, whether it's as a matter of parts or greater than the sum of the parts. And, we have to bring this to a conclusion, sadly, but I'm wondering if we can ask each of you, what's a takeaway that you'd want our audience to really understand about nature-based solutions, natural security, and maybe in the sense of a vision of success, what should they be looking for as a sign of progress, say, by 2030? What's something you hope a listener might take away from this if they want to make a contribution or watch for success? Richard?

FLORIZONE: I'm going to pick a big picture one and apologies if it sounds more philosophical. But what I really hope is we don't get caught up with false compromises. There aren't silver bullet solutions out there, right? So be conscious of that. But there really are

solutions out there that are good for the planet and good for people. What we have to do is continue to push ourselves to find them and implement them.

Let me provide further evidence of that. I think if you look at most analyses—this is certainly true in Canada and other countries—if you look at our climate goals, most people would say that the path to 2050 isn't known yet. There's still some unknown technology that needs to be developed. However, the path to 2030, most people would say to get to those levels of carbon reduction, it relies on existing technology. That means the hurdle is implementation. The hurdle is us. The hurdle is finding ways to come together in new ways to tackle these big problems. We think nature-based solutions and things like the Natural Security Initiative are an example of that, where we can take known ideas that just aren't properly understood or haven't been fully valued. And we're hoping to bring together people in new ways to achieve some great progress.

BIERBAUM: And I guess I would say we want a sign that there is systems thinking about these problems, as I would also say, the youth of today are much better at thinking about than we are, but we want a coordinated focus on finance, policy, and science that is enhancing the idea of one health because our quality of lives depend on a stable climate and a sound environment. And I would say we will not be the first generation to leave the next one a truly irreversible problem.

KHAN: Thank you so much, Richard and Rosina, it's been a fascinating discussion, and thanks for your leadership of this Room and the exciting initiatives that you're launching.

FLORIZONE: Thank you.

BIERBAUM: Thank you.

MCARTHUR: Well, Zia, I'm delighted that Wayne Gretzky finally made an appearance indirectly in our podcast. Hockey fans everywhere are glad to think about skating where the puck is going. And more seriously, I'm also going to think a lot differently in the future about how much it cost to build a bridge and what all the actual costs are to make sure that bridge succeeds over a period of decades.

KHAN: John, and it was fantastic to hear Rosina and Richard refer to trial balloons, campfires, ascents, which are terms we use in 17 Rooms to describe the different place a room might be in their solution. Campfire being an open conversation and shaping and framing. Trial balloon testing different ideas and solutions. And an ascent really driving to action. And what's so exciting is how this year the trial balloon process got them right to the precipice of an ascent on the Natural Security Initiative. It'll be very exciting to see what happens next.

MCARTHUR: And even the evolution of those Room topologies that, as we call them, are a product of, of course, our collective team working behind the scenes in 17 Rooms, so full credit to them. But there's also an interesting piece here of how the Rooms are connecting. And that's something that we've struggled with and tried to balance of how to help each Room succeed in a very short amount of time, but also how to help them connect with other Rooms as they identify their own actionable steps and see where collaboration can bubble up.

So, we're pretty excited that the next conversation actually in this podcast series will be with Room 13—Amar Bhattacharya and John Podesta, co-moderators on designing a breakthrough agenda for climate finance. And a little while later, we're also going to have the conversation with Room 14 on oceans with David Obura and Lisa Dreier. So it's all quite exciting. We're looking forward to the next conversation.

To learn more, find this episode at "Brookings Dot Edu Slash 17 Rooms podcast," and until next time.

I'm John McArthur.

KHAN: And I'm Zia Khan, and this has been 17 Rooms.

MCARTHUR: Our thanks go out to the guests you heard today, and also to the production team, including Fred Dews and Alexandra Bracken, producers; Jacob Taylor, associate producer; Gaston Reboredo, audio engineer, and Nicolette Kelly, audio intern. The show art was designed by Katie Merris. Additional support comes from Shrijana Khanal, Ian McAllister, Soren Messner-Zidell, Andrea Risotto, Marie Wilkin, Chris McKenna, Esther Rosen, David Batcheck, and Caio Pereira at the Brookings Institution, and Nathalia dos Santos, Sara Geisenheimer, Hunter Goldman, and Miranda Waters at The Rockefeller Foundation.

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