

Accelerating Transition

Episode 2

**With Kara Mangone, global head of Climate Strategy
And Peter Kelly and Lisa Williams of AIMS Impact, Asset Management Division**

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Kara Mangone: Hello and welcome to another episode of Accelerating Transition, Goldman Sachs' podcast on climate, sustainability, and the Path to Net Zero. I'm Kara Mangone, global head of Climate Strategy here at the firm. Today, we're going to talk about a key part of the effort to reach Net Zero: nature based solutions. As of now, public companies representing more than two-thirds of global GDP have committed to Net Zero targets. Meeting those targets will require companies to reduce their carbon footprint and incorporate climate considerations into their business strategies going forward. Nature based solutions allow them to do just that. To tell us more about what this looks like in practice, I'm joined by two of my colleagues from our Asset Management Division: Lisa Williams and Peter Kelly WHO work in our AIMS Imprint investment vertical where they advise clients on investments that are net positive for the planet, but also for returns. Lisa, Peter thank you so much for joining us today.

Lisa Williams: Thanks so much Kara.

Peter Kelly: Thanks for having us.

KM: You both have been working in this space for quite some time and come at it from very complementary perspectives. Peter, you spend a lot of time in our investment portfolio and Lisa, you spend a ton of time with our clients who are really grappling with how to think about and then implement decarbonization strategies. So maybe for the start of the conversation, just walk us through: How do you define nature based solutions? And then Peter, could you add a few examples of solutions that are in effect today?

LW: So when we think about nature based solutions, they're really investments in conservation, restoration, and land-management programs that increase carbon storage and reduce emissions. So these solutions really harness the power of nature to help society mitigate and adapt to the impacts of climate change. Forests are probably the most well-known of nature based solutions for climate change, but there are many more, including mangroves, wetlands, savannas, sustainable agriculture and even coral reefs. One thing that we really think is just incredibly important is nature based solutions' ability to really preserve ecosystems and services that are necessary for human life. We've all seen the negative effects of climate change around the world: more intense rainfall, more frequent floods, heat waves, and droughts. The idea here is really to put capital work in a way that can mitigate some of those negative impacts where we

can do things like increased preparedness around flood protection, soil fertility, air quality, carbon storage and even just having more beautiful landscapes that we can enjoy for generations to come.

PK: The way I think about it is we want to fund an investment that has an impact on the landscape where that change to the landscape drives both a revenue model and a financial return, but also an environmental impact and an avoided carbon emission or increased carbon sequestration, as Lisa put it. So a couple of examples of that would be looking at land that's currently in cattle pasture, pretty unproductive uses, and has become quite degraded environmentally, and either acquiring or leasing that land and turning it into a working forest, a production forest with kind of plantation rows that are easy to harvest, that generates a financial return from timber harvest on a sustainable rotation, but at the same time, also setting aside some of those acres for restoration and natural forest regrowth, where the industrial forest activity both generates the financial return and also generates the conservation outcome. Another example would be in agriculture—finding ways to use cover cropping and reducing tillage so that you can build soil carbon in the farm itself, which reduces the need for synthetic fertilizers or pesticides and makes for more profitable farming while also removing carbon from the atmosphere.

KW: That is a great overview, and the examples you provided there at the end peter truly underscore the underlying innovation opportunity here to take unused or degraded land and not only protect it but create an actual investment opportunity. To bring it to a very tangible level – what does an investment in nature really look like in practice? Where do you start? How do you evaluate potential cost and gauge investor interest in a project?

PK: Maybe to pick one example, forestry: The way we go about it is we have a general strategy that we know we want to support. So there's sort of a mix of afforestation and reforestation, so planting new forests on land that isn't forested and then also doing what we call improved forest management: So taking an existing forest and finding opportunities to change the management of that forest to increase carbon stock or improve other environmental outcomes. So we know we want to do those types of forestry investments, and then we go out and we look for who are the best partners to work with to do that. And that evolves a mix of evaluating their track record, their strategy, the scope of their expertise, and really picking the best partners for given species, and silviculture, and region that we're going to be trying to deploy capital into, and then with those partners, finding the best projects or opportunities to buy land or lease land or what have you, to then implement that strategy.

And then from there, it's a bunch of what you would consider a typical investment diligence: Building models to understand what is the likely cash flow here and capital needs, sensitizing that with data on what are realistic log-price assumptions and input cost assumptions and doing all the legal diligence associated with ensuring that you have the right permits and the community has been engaged in the right way. I think one of the things that's unique to this type of work and particularly important, given the

client goals, is working with NGO partners, non-governmental organization partners, to do that environmental and social diligence as well as the financial diligence, and really taking care that this isn't well-intentioned capital that's going into these projects but being oblivious to sort of the local needs or the communities and also just being sophisticated about understanding the potential unintended consequences, whether it be water use or biodiversity impacts, or what have you, and really making sure you're doing a robust job, asking all those questions of any given specific project and gaining comfort that you're getting the outcomes you want.

KM: It's very clear from that overview that not only is this a thorough undertaking but also collaborative process that can involve many stakeholders and partners. What has been the overall level of reception from corporates and investors as using this process as a way to deliver on an institution's climate goals?

LW: Depending on the nature of a company's business model, there can really be a range of constraints—or even opportunities—around decarbonization efforts. The primary investors for the solutions that, you know, Peter walked through, for example, really been kind of corporate-balance-sheet allocators who are looking specifically for carbon and financial return. I think traditional institutional investors, such as pensions, have been intrigued by the category, but may have less of a direct need to procure carbon, so some of these solutions that they would be interested in are more oriented around having proximity to sustainable forestry, but really maximizing financial return. So I think that there's really a spectrum of what a nature based investment solution can be, and so we're trying to think about orienting that towards these different pools of capital. For the corporate balance sheet investors in particular, I think there's been tremendous interest in the category in recent years. We're rapidly depleting global emission budgets that would keep the temperature rise below 1.5 degrees, consistent with the Paris agreement. And so when you think about the fact that the companies in the MSCI ACWI they estimate emitted roughly 11 billion tons of carbon. Um, this is really putting them in a trajectory to actually deplete those budgets within the next five years.

KM: One of the areas where we get a lot of questions from clients and other stakeholders is around voluntary carbon markets, which has gotten a lot of focus in recent months, particularly off the back of COP 26. Can you talk a little bit about how the two efforts are related? So what's the link between nature based solutions and the use of voluntary carbon markets and offsets?

PK: I guess the way I think about voluntary carbon markets and offsets in general is that they are a very robust set of intellectual work that goes into understanding and confirming that a given claim around a carbon reduction—either a removal from the atmosphere or an avoided emission—are real. And there's all these concepts that are embedded in that: Ensuring that they're additional, that they're not double counted, so there's not two entities claiming the same reduction. And that they're permanent, so that if you plant a forest and claim a bunch of carbon that, if it burns down 10 years later, that that's not still being claimed. So there's all these protocols that are sort of written,

and I kind of think of them as like GAAP accounting for impact for climate impact, specifically. And so when we try to make our investments in the same way that we would apply GAAP accounting to the financial returns that we're reporting to investors, we need to apply equally rigorous accounting to the impact returns that we're telling them we're achieving. And that's where the carbon offset markets come in. So, using those protocols as best as we can to ensure that that quality is being achieved. Now, it's not quite generally accepted: It's a much more nascent sort of space and there's a lot of different protocols, some of them are widely used, but newly facing skepticism, some of them are more emerging but promising. And so we have to spend a lot of time engaging with any given project type to ensure to feel comfortable using it. And for these markets to really scale the whole ecosystem: investors, practitioners, media, need to have as much comfort as possible that those claims around climate impact are real, and that's what the carbon markets help us to achieve.

KM: Thanks, Peter. That ecosystem point is such a good one. Lisa, can you just talk about specifically, for a corporate, where do nature based solutions sit into the broad company toolbox that they have in addressing these challenges?

LW: Sure. So as you mentioned, there are kind of a variety of approaches that companies can use to reduce their environmental impact. I think the important thing to keep in mind is what may be best for one company may not necessarily be aligned with others, even within the same industry, based on short term objectives, budget, and risk tolerance. And so there are really three key approaches: First, is starting with their day to day operations and reducing as much as possible, which is consistent with science-based targets and other frameworks that really prioritize starting with core operations; Then it's taking a look at your supply chain: How can you increase the efficiency of your supply chain whether that's purchasing renewable energy or even thinking about strategic investments? And the third is really kind of this piece that we're talking about here is looking at emissions offsets. Generally, that happens through the open market purchase of emissions offsets, but we're really excited about this newer approach which is really looking at offsetting emissions through investment. And so just as we have kind of the range of ways for companies to minimize their environmental footprint, there is also a range as we think about it from an investment standpoint. And so while, you know, we have largely been focused on nature-based solutions, these are a segment of kind of a broader landscape of climate investing.

I think one thing that's important to, to really hone in on is, you know, the carbon intensity of a business model can really determine what the starting point is for this move towards decarbonization and how they go about it. You also have to consider what level of liquidity they have and then how much they actually want to lean into sustainability and really own the narrative around their impact. I think with all of these variables that we can consider both on the implementation side, from a business standpoint as well as investing, I think the unifying objective is really obtaining units of carbon in a way that's scientifically proven and capital efficient. And so when we look at nature based solutions at their core, they're based on long established industries: timber

and agriculture have been around for decades where there's little to no scientific risk. We have proven protocols, especially on the forestry side, and also from a cost curve standpoint, they're much further along as it relates to efficient cost of capital versus some of the other innovations that we're closely tracking in this space. And so I think all of that coming together is really all of the options that a company can have towards really trying to address climate change.

KM: Thanks, Lisa. Those three approaches of (1) reducing operations (2) look at supply chain (3) what is left that needs to be decarbonized/offset is a very simple but helpful framework to describe what a lot of corporates are grappling with as they look to deliver on their commitments. The natural next question then is how do we scale up from where we are today? What are the limitations to doing so?

PK: I think we're still quite early. Um and I think the way it scales is sort of two parallel and related dynamics. One is taking these protocols that we've talked about: The carbon offset market and ensuring that there are robust frameworks for talking about the impact of a given investment across all the different types of investments that we would look to do. And so there needs to be pretty specifically tailored guidance to different types of forestry and different types of agricultural innovations to really gain comfort that you can generate a carbon credit that is going to be broadly accepted and viewed rightly as accurate in the market. And then, in parallel, you need to be educating all the market participants about what you need to do to do that. And so working with the other investors and the property managers to actually implement the practices on the ground and the measurement and monitoring required to provide the comfort needed for those protocols. And I think that education process is just a slow one, because you need to talk to every person in the supply chain and make sure that they know their role and understand the sort of broader framework that they're working within, and that they need to do that sort of in real time around real projects. And so I think we're going to see a sort of scaling mechanism here, where were slow at first and the first projects are painstaking and everyone's learning about doing, and then once it sort of clicks then, you know, off to the races.

LW: I would just add to that, you know, by virtue of these investment strategies, we're often going to find ourselves investing in emerging markets. And so I think another potential limitation is that of the perceived versus real risk of allocating capital in some of those markets and really having a lens towards the impact for stakeholders. And so I think this goes back to Peter's earlier point around just the degree of diligence that's required to do these deals properly. It's not just on the financial side, but it's also on the social, governance, and community side as well. And I think that they're still a bit of a hurdle that needs to be overcome by folks in terms of investing in some of these markets. So I think it's something that can certainly be achieved, but one thing that we should be mindful of as we're looking to do more work in this space.

KM: That point around looking at climate impacts and these investments holistically and in the context of society and communities is such a great stepping stone to the final

question I want to ask, which is around ensuring a just transition in the markets and economies where we live and work. We know this is a really crucial part of delivering on global climate goals. Could you talk us through the intersection of nature based solutions and environmental justice? To what extent is this showing up as part of your work?

PK: They're absolutely related. In part because the effects of climate change are most held by communities that have the least wealth and live in countries with maybe less sort of support systems around financial safety nets, so that's one sort of point of linkage. And then because, in the logic of forestry in particular, trees grow particularly well where there's a lot of sun and where it might be cheaper to acquire land—in practice, we expect to be investing a lot of forestry in emerging markets. And there's a particularly sort of salient issue with making sure that if we're going to be entering those communities, entering a given country, that we're doing it prudently. And that means not just ensuring that, you know, we have full legal title to a property that we might look to buy, but also that the community that we would be affecting, by changing the land use has free prior and informed consent to the changes that are happening. And so this is the type of strategy that could be done very well or it could be done very poorly. And we've seen actors with good intentions sort of accidentally cause unintended consequences in the past, and so we think it's very important to be mindful of that and make it a core part of the diligence process that you're not causing these sorts of unintended consequences.

KM: Lisa. Peter. Thanks so much for joining us today.

LW/PK: Thanks, Kara. Thank you.

KM: We'll be back next week with another look at this vital and fast changing topics featuring more experts from Goldman Sachs as well as its partners and clients. Until then I'm Kara Mangone. Thanks for listening to *Accelerating Transition*; we'll talk to you next week.

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