

Exchanges at Goldman Sachs

Accelerating Transition

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Allison Nathan: This is *Exchanges at Goldman Sachs*, and I'm Allison Nathan, a senior strategist at Goldman Sachs Research. In this episode, we're going to kick off a special series on the *Exchanges* feed that zeros in on climate change and the path to a net-zero future. To do that, I'm delighted to be speaking with John Goldstein, head of the firm's Sustainable Finance Group, who's joining us remotely from San Francisco. And joining me here in the studio is Kara Mangone, global head of the firm's climate strategy, who's responsible for working across all divisions of the firm to deliver on the firm's climate initiatives. Kara, John, welcome to the program.

John Goldstein: Hey, great to be here, Allison. Thanks for having us.

Kara Mangone: Thanks, Allison.

Allison Nathan: So both of you are on the front lines of sustainable finance and decarbonization. Maybe some level setting is in order here for those of us who aren't as engaged in these efforts. So give us a sense, where are we in our effort to reach a more sustainable future?

John Goldstein: We've gotten to the starting line, right? Which is there's clarity that this is important. People are mobilized. We don't have to work to get people's attention. So now it's not a chief sustainability officer conversation. It's a CEO, CFO and board. Now it really comes down to execution, and the task is big.

Allison Nathan: You just got back from Glasgow. Obviously, we just had COP26, the major gathering of UN nations to address these issues. What were some of your key takeaways? What were some of your impressions of it?

John Goldstein: Yeah. A couple key things that really stood out. I think, one -- and this stood out to a degree to me, but really when I talked to folks that have been to a lot more COPs than I've been to -- is a sea change in terms of

the engagement and the involvement of the private sector, right? For years, I think people that have been going to COP for quite some time said this was largely around governments and civil society with a smattering of private sector participants. And here, you had the leaders of organizations, of financial institutions, and of companies out in force and out there to do business, right? To figure out concretely what do they need to advance their own journey, and what can they offer? The asks and offers of driving real-world decarbonization that kind of shift to really the private sector saying, "We're here. We see this as central. We're rolling up our sleeves, and I think we're getting to work." So I think that was abundantly clear, number one.

I think number two, we did see some interesting movement on things like methane, on deforestation, on thinking about coal and other sorts of issues. I think we saw some work on the policy front that I think is important. But I do think we continue to see -- and we talked about this externally -- with the growing will and momentum on the private sector, the financial sector, and the corporate sector and all the work we're doing, the demand we're seeing from clients, the work we're doing with them. That gives us a lot of

excitement, a lot of hope. But there still is a policy gap, right?

And I think it's not an either/or. It's an “all of the above” situation. It's not about the private sector or the public sector; it's about both of them. And I think this is why we are keenly focused on the importance of things like putting a price on carbon, of things that can work on kind of the demand side here. We're going to do our part. Our clients want to do their part. But also policy is going to be fundamentally important as a part of this. Not as an either/or but really as an “and.”

Allison Nathan: So talk to us a little bit about Goldman's initiatives to be part of this climate solution.

John Goldstein: This topic had gone from the fringe to the periphery to the core. It had gone from being something that was important to something that was a massive opportunity that was starting to affect markets and the economy in a significant way. And if it's that central in the economy, it's that central for us. And stepping back and figuring out kind of what to do and take a long history as a firm. But really this is what led to what

Kara and I do now, is really launching the Sustainable Finance Group and realizing that, fundamentally, climate transition, inclusive growth are massive accelerating secular themes in the real economy that are going to affect almost every nook and cranny of markets, industries, and sectors. And that means it's at the core of our organization. And have really worked to take this and operationalize it across all the divisions of the firm and all the businesses.

And so what it looks like is it's not something off on the back of the shelf that gets dusted off from time to time but front and central to really two main things we do across the business. Number one is help clients across the business measure where they are. Where have they been? Where are they? And more importantly, where are they going? And once we've measured that -- and it looks different for our corporate clients than for investing clients than for portfolios -- how do we then help manage that with a variety of tools and products and services? So kind of having gone from saying it was important, we worked on it in lots of different places to the core of our organization; having gone from bits and pieces to all of our divisions in a more structured way to really make this central

increasingly to conversations we're having with clients across the business to both do that, kind of measure and manage to really drive decarbonization in the real economy.

Kara Mangone: And look Allison, I would say from being at the firm a long time and being involved in our sustainability and ESG work for almost 13 years, we have had a very long standing commitment—always—to sustainability and climate. We were one of the first financial institutions to recognize the realities of climate change back in 2005 and our inaugural environmental policy framework. But what you see today, as John mentioned, is an acceleration of that commitment and those efforts and an extremely integrated approach. It starts with clients and what we're doing commercially. You cannot -- no pun intended -- but you cannot have a lasting sustainability strategy that isn't, first and foremost, commercial and isn't focused on where you actually can move capital and drive impact and progress. So that's the first bucket is the \$750 billion commitment by 2030 to finance, invest and advise and work with our clients at the forefront of sustainable finance, looking at both climate transition, inclusive growth.

The second bucket in terms of how we've really integrated this across the firm is how do we do this within the four walls of Goldman Sachs? So how do we advance our operational commitments? How do we think about what net zero looks like in our supply chain? How do we think about net zero ambitions for the firm over the long term? How do we integrate climate considerations into the way that we manage risk for the firm? And so that's the second bucket, is thinking about, first and foremost, put it with clients. But secondly, how do we actually support that across the firm?

And then the third is really, based on all of those client conversations -- and I'll say John and I did, together with our amazing team and many folks and experts across the firm, almost 1,300 meetings in our first year of this effort. And so a lot of volume, a lot of conversations. What that has demonstrated for us, in addition to the experience that we have managing sustainability as an organization, is a really good understanding of where the gaps are. And there are a lot of gaps. And I know we'll talk about that today.

But that really allows us to work with partners in the

broader ecosystem to figure out where else can we have impact? How can we build relationships with partners to address challenges that exist in terms of climate data? Or to help scale innovation or drive more capital into markets where they really need it? So I think that's sort of three prongs -- what we do with clients, what we do within the firm, and then really trying to pick our heads up as an organization and figure out what more we can do I think has been always core to our approach.

Allison Nathan: And so Kara, maybe if you can elaborate a little bit more and what does a public-private partnership really look like as we're trying to move towards these climate goals?

Kara Mangone: Yeah, it's very important question. And I think as John mentioned, when we think about climate transition, the opportunity we have and the challenge—I mean it is the probably the meta challenge of our time, right, one of many. What that means is that there's going to need to be some private sector solutions and there's going to need to be some public sector solutions. And there's going to need to be a little of both, right? You're kind of going to need all the tools in the toolkit. And maybe just to

take a step back and sort of quantify the challenge, in terms of actual dollar amounts, we were involved in a report alongside many of our financial institution peers that estimated that the global investment that's going to ultimately be required to deliver on the goals of Paris is anywhere from \$3 to \$5 trillion a year. Right? So just incredible magnitude. And maybe to put it into context a little bit, last year we had record levels of sustainability debt issuance globally, which was almost \$800 billion. So there's a lot that needs to happen across equity markets and debt markets. And really importantly, there's a substantial amount of that investment capital which is going to need to go towards innovative solutions -- carbon capture, efuels, hydrogen, etc. -- which are not yet commercial scale today. And there's a lot of technologies that are still being looked at and need to be invented. And so I think that is first and foremost.

Just to take a step back and say there is a big capital gap. But I think that also is an opportunity. And that's partially where we see our role is as a financial institution to be able to invest and finance in low-carbon solutions. But very importantly -- and David Solomon was very clear when he came out with his \$750 billion commitment -- he published

an Op-Ed, and he was very clear to say that, for us, climate transition is not just about working with the greenest of green companies. It's climate transition. Meaning that we also need to work very, very closely with our clients and very carbon-intensive sectors, right? And with institutional investors and asset owners working across the complex because that is where a lot of strategic advice is needed and there is a lot of financing and capital and strategic planning. And so I think that to your question Allison, is really important in terms of private sector opportunity.

In terms of the private-public sector, that innovation opportunity, that is where public-private can be very powerful. So the partnership that we launched with the Asian Development Bank and Bloomberg is a \$25 million grant capital commitment between Goldman Sachs and Bloomberg Philanthropies to the Asian Development Bank to set up a facility that will actually look at ways we can invest in innovative ways in South and Southeast Asia to actually scale climate finance in that region.

If you think about that \$3 to \$5 trillion in capital I talked about, about 55% will need to go directly into Asia. And so that's a really great example, I think, of where you can take

shared expertise but also complementary perspectives. The Asian Development Bank has boots on the ground in these markets. They understand the challenges. They understand where that capital can most be put to use. And the goal is to then crowd in additional private sector investors who really are committed to being able to scale these technologies and to drive capital and finance towards it.

And then I would underscore the point John made last, which is there is a policy gap. Carbon price, which is something that the firm is very supportive of, as a great example. There's also incentives and other mechanisms that can be put in place to help spur and lower the cost, to be able to spur additional investment in those types of technologies and solutions.

John Goldstein: And I would just sort of highlight three things within that that I think have really become apparent to us. I think number one is that applying the same ingenuity and elbow grease we apply to solving all kinds of problems and challenges can really pay kind of green dividends when we apply it to climate transition sustainability. And whether it's things like our acquisition

of DONG Energy, the Danish Oil and Natural Gas company, and turning it into ORSTED, one of the leading offshore wind companies in the world.

Or figuring out how do you capitalize a new battery company at scale? So working with our friends at Northvolt, who ultimately have the chicken and egg problem. You need capital at scale to manufacture at scale so the costs are low enough so that people buy them, right? How do you do that when you're not going have to revenue for some time? Well, you get advanced purchase orders from Volkswagen and BMW lined up to really unlock the whole financing cycle.

So kind of leaning in with creativity and dynamism in the cases is solving problems that matter and can accelerate real-world decarbonization, I think number one. Number two is some of this unfolds with time, right? Which is 2015, we partnered with the New York Common Retirement Fund to create a risk-managed, low-carbon index. On the eve actually of Paris back in November of 2015. Since then, we've evolved, we've iterated, we've refined, and gotten to the point where we have a blended emissions view that I think, from a risk management perspective, we liked

enough we added it to all of our discretionary quantitative active portfolios within GSAM, or with the Goldman Sachs asset management.

So this idea of you need to invest, this doesn't happen overnight, right? But having that history, that legacy that I talked about allows us to grow and evolve. And then ultimately, you take a kernel of an idea, a little research and development, you nurture it, you grow it, and then you can scale it more broadly, right? This ability to kind of go from pilot to scale.

And I mean, three, what Kara was talking about, if we have used all of our creativity and dynamism to try to solve problems and deliver [UNINTEL], if we've tried planting seeds and they're not growing, there may be gaps that we need other tools. We may need philanthropy. We may need partnerships. We may need policy. We may need all of that, right? And I think this is why I think one of the things that is valuable for us is Kara and I and our colleagues getting to work together because it's not either/or, right? You've got to look to understand the system using all the tools at your disposal and be able to mobilize all of them because we don't just have a hammer

and we have to look for nails. We have a hammer and we have a screwdriver, we have a saw. If I were better with tools and hardware, I'd give you even more examples, but I think this ability to kind of see it, thoughtfully lean in, and try to use what tool we can do to move the needle in the real -- because that's what this is about, right? This is not about commitments, pledges. It's not about all that. It's about actually moving the needle in the real economy.

Allison Nathan: So let's talk a little bit more about some of those tools. John, you speak to a range of participants on a daily basis, be it corporates, investors, allocators. And so what are you hearing from them right now? What's top of their minds? And what tools are they using to accelerate the move towards the net-zero future and their climate goals?

John Goldstein: I'd say, as a starting point, number one, people are engaged, interested, curious and slightly overwhelmed, right? That's the starting point. Which is, as this has grown in prominence and centrality, the volume of asks and offers on this has grown almost exponentially. I talked to a CFO recently who'd been asked for 2,000 different ESG data points in the last 12 months. So I think

step one, honestly, is clearing through the underbrush and helping people focus to really, okay, what ultimately matters?

Number two is, to understand what matters, it really helps to talk to the ecosystem, right? If you just talk to one piece of it, if you just see one part of the puzzle, it's harder for us to give good advice, good insight, and help clients. But we get to understand how are companies navigating this? How are asset managers navigating this? Allocators and policymakers? It gets more of a 360-degree view, which means we can help people understand not just how we look at them but how other people look at them, right? That outside-in view of, if you're a company, how do you look today? What does your pathway look like? Are you on track or are you not? Let's understand that diagnostic on a corporate perspective. And we piloted a dedicated toolkit with companies. We're rolling it out much more broadly.

For portfolios, the same thing when we integrated with Marquee. How do you understand what your portfolio looks like today? What would it look like to change it? How can you tweak it? So these diagnostic tools that are really giving people a clear idea of where things are and

where they could be.

The third thing is those diagnostics need a map to action. If it's academic, if it's a lovely report that may go sit on a shelf, like people did it for compliance reasons, that's not very useful. Ultimately, that ability to turn it into actionable advice. And once again, it looks differently.

Within investment banking, once we've analyzed where someone is on their pathway towards Paris, that's why we have a decarbonization business that can go and help say, "Okay, what do you need help with?" Is it M&A to think about your core products and services? Is it green bonds or KPI-linked financing to make your own operations more efficient? Should we change your power mix? Should we buy, sell, hedge, or produce renewable power for you? And finally, can we help you offset what's left?

So mapping those diagnostics to action, same thing that we did with Marquee, is having the same system that people can map out a trade, right? Analyze your portfolio. See the financial characteristics, the carbon characteristics. Identify things you might want to change and actually map that into a trading system. That integration of sort of take that insight, turn it into a diagnostic, and have that

diagnostic map to action because this is what we spend time thinking about. At the end of the day, we're not doing our clients of the world a lot of good unless we help people make progress, right? And I think that's been one of the insights, is it's good to have that differential market perspective. But turning it into tools that we can apply it with scale and having those tools map to action. I think that's one of the key lessons I think that's emerged for us.

Kara Mangone: And I would just build on that, Allison. I think we probably could do an entire episode just on climate data because, as you can hear from the examples John is mentioning, it is one of the most frequent questions we get, right? If you're an institutional investor, you feel that corporates are putting out all of this disclosure. It's not comparable. If you're a corporate -- and I've been there, I've been in this seat, where you're managing a lot of different third parties who are evaluating you from an ESG perspective and scoring you. And investors are all asking you for different information. And so it is absolutely one of the core challenges.

And as John said, our approach, both in our business and our work with clients but then also externally in the

ecosystem, is really figuring out not necessarily just more data, right? Because that's its own challenge. But actually where are the decision-useful points? And how do you get high-quality climate data that can actually allow you to make important distinctions in your portfolio or can allow you to assess risk within your business?

One initiative that I'll just mention that we've been very involved in is called Open-Source Climate. And this is -- we were the founding bank member of this organization. I'd put this in this third bucket I'd mentioned in terms of our framework of how we can work with others and roll up our sleeves to really try to advance progress in an area that's really impactful. And this is effectively taking the thesis that what we really need is a pre-competitive layer of just basic information. Some of that's physically risk-related information. Some of that is just publicly disclosed information that's in existing sustainability reports today but is very difficult to find.

And so we're working very closely with Open-Source Climate team and Microsoft and Amazon and other clients and partners to really figure out how can we actually create a little bit more of an open-source kind of basic set of

climate data information that can help manage risk and can also help measure progress towards net zero?

Allison Nathan: So you mentioned you might do a whole episode on climate. That's the perfect segue, Kara, because of course you are going to be hosting a podcast series in the coming weeks on these types of issues. So give us a little bit more of a preview on what other topics you might hit.

Kara Mangone: So we're going to try to explore in this series, Allison -- and I'm so excited to have the opportunity to bring together a lot of different experts inside and outside the firm -- is really a lot of the sort of under-the-hood. As John mentioned, we're just coming off of COP. A lot of big commitments, but a lot of the questions are: How does this happen? Where are the places that we really need to make progress?

So taking a little bit of a closer look at what decarbonization looks like for some of our clients in really hard-to-abate sectors. How are institutional investors actually developing tools to be able to measure progress? Big questions. One of the things we didn't explore today

which is crucial is how do we think about just transition as an institution, right? And as a world, frankly. Our commitment to sustainable finance is very much about climate transition. The other pillar which we didn't talk about as much today but is equally important is inclusive growth, right? And how do we think about impact on communities of the physical impacts of climate? And how can we work with our clients and others in terms of public-private partnership to think about things like resilience and adaptation and economic empowerment opportunities? So it's a lot, but I'm super excited and can't wait to kick off.

Allison Nathan: Well, we're really excited, too. Really looking forward to hearing how you dive into all these topics ahead. Kara, John, thank you for joining us and sharing your insights on these developments.

Kara Mangone: Thank you, Allison. It was great to be here.

John Goldstein: Yeah, thanks so much for having us.

Allison Nathan: That concludes this episode of *Exchanges at Goldman Sachs*. Thanks for listening. And if

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