

The Interchange Recharged Podcast: GHG Accounting Reform Could Transform Energy Investment Transcript

David Banmiller: This is The Interchange Recharged, I'm David Banmiller.

What gets measured, gets managed. Friar Luca Pacioli, the Franciscan monk known as the father of accounting, wrote in 1494 that one of the keys to success in business was keeping proper records. Today, it's as true as ever, but there are new demands placed on companies by investors and regulators, that means it's not only financial accounts that matter. In 1998, the World Resources Institute and the World Business Council for Sustainable Development set out rules for businesses designed to regulate how they measure and report greenhouse gas emissions. The GHG Protocol Corporate Accounting and Reporting Standard now influences corporate behavior such as investment decisions. In 2025, there will be a revision of the rules. This proposed change to the way Scope 2 emissions are reported will have a huge impact on corporate investment and low carbon energy around the world. Reporting accurately on emissions is a crucial part of the energy transition. Today, I'm joined by Jake Oster, Director of Energy and Environmental Policy at Amazon Web Services.

Jake Oster: When we look back to the last time the Greenhouse Gas Protocol was revised in 2015, and they created a market-based method, which is very, very dependent on RECs or attributes, RECs and attributes were not everywhere around the world. There were those same gaps of getting access to RECs and attributes. And then you fast forward, and RECs and attributes are very widely available. And there's lots of new REC programs that have sprung up. So because of that system, that demand drove that into place.

David: Also joining us as Peter Freed, Director of Energy Strategy at Meta.

Peter Freed: I am fond of saying that the Greenhouse Gas Protocol is the most important piece of sustainability material that no one's ever heard of. It is an accounting standard, it's a pretty deep in the weeds thing, but it drives an incredible amount of corporate behaviors.

David: Together, they helped found the Emissions First Partnership, which advocates for changes to the GHG Protocol. Jake explains why it's important to look at the rules around emissions reporting.

Jake: So the GHGP, or the Greenhouse Gas Protocol, is the most commonly used carbon accounting standard by corporates around the world. It's how you look at your carbon inventory as a company, and how you account for it. And you may be familiar with hearing companies talk about their Scope 1 emissions and their Scope 2 emissions and their Scope 3 emissions - all of that is set out in the Greenhouse Gas Protocol. And that's the framework for how we think of carbon accounting. And so when you look at how we, as Amazon, are going out and buying renewable energy, we are looking at the Greenhouse Gas Protocol as that accounting

framework when we think about how that renewable energy is going to translate into our emission reductions in our carbon footprint.

Peter: I am fond of saying that the greenhouse gas protocol is the most important piece of sustainability material that no one's ever heard of. It is an accounting standard, it's a pretty deep in the weeds thing, but it drives an incredible amount of corporate behavior. So if you've ever heard a company talk about their carbon footprint or anything like that, it is very likely the tool that they're using to figure out those numbers. And in turn, it drives a huge amount of corporate action as people begin to respond to those carbon footprints. Really important piece of information that not too many folks outside of folks like Jake and me know about, but it's really, really important.

David: And so why does it need to be updated from where it is today?

Peter: Yeah, that's also a great question. This is a tool that's been around for more than a decade now. And the world is really different than it was when it was first developed. First of all, there's been tremendous progress for things like getting renewable energy onto the electric grid. Meta alone has hit a 100% renewable energy target in 2020, and has brought more than eight gigawatts of renewable energy onto the system. Lots of other companies are meeting these goals and the renewable energy across the world is increasing in volume and capacity. So as the world changes, grid changes, it also creates a circumstance where we might need to look at the ways that these tools are used, and think about updating them. And one of the things that is really interesting as these evolutions happen is that we're getting better and better data about the emissions impacts, both of our loads on the systems - so how much electricity we're using from our facilities - and also from renewable energy projects around the world. And so really what Emissions First is about is in the name - putting emissions first. Let's start looking at the emissions impacts associated with our use of the electricity system, the renewable energy that we put on and update the protocol to use the best data we have available. That's at the highest level what we're after.

Jake: The other thing I'll add on top of that, David, is if we look also at the proliferation of data and the opportunity to modernize the greenhouse gas protocol, the other thing we can take into consideration is that there are a bevy of new technologies that have suddenly become available towards grid decarbonization, and also decarbonization overall. So when we look at what companies can do towards grid decarbonization efforts, there's a lot of opportunity around whether it's electric vehicles, whether it's around flexibility services, whether it's around battery storage, whether it's around demand response - there are all these opportunities to help drive grid decarbonization through corporate action and corporate investments in clean energy and a Greenhouse Gas Protocol that's modernized - it's doing what Peter said. Taking in that data and using it to look at the emission reductions and emissions avoided through those actions is a real opportunity to encourage corporates to be able to take those actions and be able to account for those actions as they take them to help reduce their carbon footprint, and also towards decarbonizing the power system.

David: Jake, Peter mentioned Scope 1 and Scope 2 emissions, and that gets a lot of the focus. Now people are also now talking about Scope 3. But there's a lot of different methodologies around those calculations. Different companies, countries are looking at them differently. So what exactly is the EFP proposing as kind of a standard change to help account for this?

Jake: What we are proposing through the Emissions First Partnership is that we want to look at emissions first. And what that means is we are looking specifically at the Scope 2 guidance within the Greenhouse Gas Protocol. And our proposal is to modernize the Scope 2 guidance. And what we are saying is that when we look at investments in clean energy on the grid, or consumption from energy on the grid, time matters and location matters. So if you do a renewable energy project in Wyoming versus in California or Texas, the avoided emissions are going to be considerably different from one place to the other. And if you consume your power during the day versus during the night, your induced emissions from that consumption are going to be very different. And what we want to look at is a carbon accounting method or framework within the Scope 2 guidance that takes that into consideration and looks at that data and bases the accounting framework on that data - on the emissions avoided and the emissions induced from when and where the carbon emissions are happening on the grid. And we want to look at that on a global framework. So we want to look at that around the world, knowing that emissions are not contained on a specific grid. They are obviously emissions that happen around the world. What we want to do is give corporates and give companies that information to make those decisions around looking at how to reduce emissions through the best possible way to reduce emissions most cost effectively and most quickly, to focus those investments in the right way.

Peter: I'll also just jump in to say that it may not be obvious that this isn't already happening. Because it seems, in a sense, so straightforward. Like of course you would look at the emissions impacts associated with what you're doing. Some of this is because we have not historically had the data. So without getting too deep into very esoteric weeds on this, the way that the Greenhouse Gas Protocol works today is on a megawatt hour basis. So it's really just saying like, "how many megawatt hours of energy did you consume? How many megawatt hours of energy did you have from a renewable energy project?" This is under what we call the market-based mechanism. And those two numbers just sort of cancel each other out in the current protocol. It's not taking into consideration those very important factors that Jake just talked about. So if you're on a particularly dirty grid, and you're working with projects on a cleaner grid, that's not really a perfect netting, right. The emissions profiles of those two things are different. So one of the things that we're focused on is now that we are finally in a place where we have grid by grid, and in many cases node by node data about the emissions profiles, let's just look at that. Let's look at the emissions first. And I think ultimately that's the thing that seems so straightforward about all of this is that we are finally in a place where we can modernize the approach. 10 years ago it was probably a very reasonable assumption that if you put a renewable energy project onto the grid, you were having some impact. And it's not to say that we aren't having impact today. It's just that we're looking for an opportunity to let companies optimize for impact. Impact is something that we're really focused on at Meta. I'm sure Amazon is focused on it too. And so if we're going to be making these purchases, we're going to be

making decisions about where we put our facilities, let's do the absolute best that we can to make sure that we're driving as many emissions reductions as possible, because the thing that we all care about is decarbonizing the electricity sector as quickly as we can.

Jake: Dude, let me give you a concrete example from some of the work that we've done at Amazon. So if you look at our renewable energy portfolio, we have projects around the world. Amazon has more than 400 renewable energy projects announced in more than 20 countries. And as Peter mentioned, understanding the data and the emissions associated with those projects is really what we're after, as opposed to just looking at the megawatt hours that they generate. So for example, we have six offsite wind and solar projects in India. As you probably know, India has a fairly carbon intensive grid. And we roughly expect those projects are going to generate little more than 2.8 million megawatt hours of electricity annually. So that's the megawatt hour number. But when we look at that, we also expect that they will avoid around 2.06 million tons of carbon emissions annually as well. So that information is really important to us. But now to make the point, if you took that project - those exact projects - and took them out of India and took them off the Indian grid, and let's say just for example, you were to put them on a really clean grid. So Costa Rica, which has an incredibly clean, almost nearly carbon free grid, you would only avoid 5,100 tons of carbon emissions annually. So those same projects are going to generate the same number of megawatt hours in Costa Rica, as they're going to generate in India. But the carbon emissions avoided by having those projects on a carbon intensive grid versus having them on a very low carbon grade is massively different. And so what we're after at emissions first is instead of counting those megawatt hours as your accounting metric, we want to count those emissions as your accounting metric, because we think that's going to drive both a really accurate data driven accounting method, but it's also going to drive chasing after the fastest way to reduce emissions. And to Peter's point, our overall goal is decarbonizing the power sector as quickly as possible, because obviously, decarbonization matters and time towards decarbonization matters a lot right now.

David: I mean, Peter, to your point that we've got more data available to us than we did say 10 years ago, and obviously accounting standards need to be updated to reflect that. But it kind of accomplishes two goals that are essentially related - is, one, more accurate reporting of emissions data. But the number two, it really prevents greenwashing - to be able to get a more accurate view of what companies are doing, and what their emissions profile is.

Peter: Yeah, I think that's a really important point. Because from my perspective, this is about enabling companies to do the most possible with the best available information moving forward. And I want to make sure that we're not thinking about this as a backwards looking critique of what companies have done. People have always used the best information that was available to them. But this is a fast moving framework, we're seeing a lot of new information coming forward, the protocol revision process is just getting kicked off. So I do think it creates a lot of opportunity for companies to begin maximizing emissions reductions for making informed decisions. And to Jake's point to the one that you just made, we are seeing new ways for people to be as accurate as they can be in terms of what they're reporting, and that feels very important.

David: So obviously, to get some type of standardized accounting method in - we're not operating in the wild wild west of emissions reporting like maybe we were five years ago, but we're still at early stages - how can you go about getting the consensus across with Emissions First, to be able to get that group think together to really drive this forward?

Jake: Within Emissions First we've got 10 companies working together, who are all experienced practitioners in renewable energy purchasing, and also obviously have really, really professional experience on corporate sustainability teams that are quite focused on this work. And we've been meeting together to work through all of our thoughts on "How do you agree on doing this the best way? How do you agree on the right data framework and the right data hierarchy? And how do we agree on the right algorithm or approach to actually doing that accounting, when you look at the data, and you look at the emissions associated with that data?" And we put together a proposal as the Emissions First Partnership, and we submitted that to the Greenhouse Gas Protocol in March of this year. So the GHGP held a formal consultation process or public feedback process from late 2022 into early this year. And it was a great opportunity for all of us to get together, 10 companies, and say, "okay, we've built this partnership. And now we need to get together and figure out exactly what we agree on, and put pen to paper and put that in front of everybody." And I won't belabor you with all the details - it's a 20 page document - but it's on our website. And I would encourage everyone to read all 20 pages and contact us with questions. But you know, we do put forth the calculations on how to do this. We also have to be really honest that we don't have all of the answers. There are certainly things we're going to need to work through around implementing this. Revising the Greenhouse Gas Protocol is not something that's going to happen in a minute. It's going to happen over the next year or two. And I think though, there's going to be some work ahead for us on figuring out some of these questions around how exactly you transition in new methods, how exactly you work with new sources of data. But I think generally speaking, the companies working on this are all very closely aligned on wanting to get this done and recognizing that we all have commonality on solving this, on modernizing the Greenhouse Gas Protocol in the same way.

Peter: Yeah but I think there's a really important point that Jake made, which is that we are all practitioners. We are companies that have been doing this for quite some time. And we've been hitting a variety of targets, whether they're net-zero targets or renewable energy targets. And ultimately, the way that this group came together is because we were looking to improve. We were looking to maximize impact, optimize what we were doing, a lot of us are data driven companies, we were looking for better data. And one of the things that's so interesting is that as we began to coalesce, we were finding these improved datasets, and also an increasing amount of research that demonstrates that this approach makes a lot of sense, and is a great way for companies to achieve highly impactful decision making in terms of renewable energy deployments. So as we began talking to each other, that was sort of the very first beginning of Emissions First. Just companies talking to each other saying, "what are you all doing? How are you trying to do better?" And it turned out that there was alignment. One of the things that's happening now is we talked to more companies, we get this idea out there, is we see a lot of growing interest. So more companies are talking to us. There was this great research paper that came out from a firm called TCR, that was looking at a lot of details on this recently. Lots of

people have been interested in that work showing the efficiency of using these types of metrics for meeting emissions reduction targets. And so this sort of organic growth in the idea has been really interesting to watch. And I think one of the reasons for that is because this is really common sense stuff. And it works for practitioners.

David: So Jake, a lot of this obviously relies on data. And data has continued, like we just mentioned, continued to get more reliable, as the years have gone on from the start of really the focus on the energy transition. But there are still gaps, particularly in certain areas or regions. How does that impact this initiative to really put together a good framework that can last?

Jake: Our thoughts here is that the data is certainly already available in large parts of the world. And we already see that the data is widely available across a lot of the U.S. and a lot of Europe. And then data is quickly becoming more and more available in other parts of the world where we're going to need this to do this type of work. At the same time, we also have to recognize that there are data gaps, and there are places where the data is going to mature. But I think one of the things we've talked about a lot is that when we look back to the last time the Greenhouse Gas Protocol was revised in 2015, and the Scope 2 guidance was revised. And they created the market based method, which is very, very dependent on RECs or attributes for that accounting. RECS and attributes were not everywhere around the world. There were those same gaps of getting access to RECs and attributes. And then you fast forward. We're now eight years beyond that. And RECs and attributes are very widely available. And there's lots of new REC programs that have sprung up. So because of that system, that demand drove that into place. So we also feel fairly confident that if you build this structure within the Greenhouse Gas Protocol, and you build this emissions based accounting framework, you are going to see those data gaps close. In the meantime, there are lots of ways to do this math with best available data. And we've proposed a data hierarchy to do that over time. But there's going to be work ahead. But in this industry, in this space, there's always been iteration and maturation and evolution around that data availability. And we expect the same thing now. And I think we're eager to see, if this gets put into place, that that data accelerates, and that data becomes widely available. And that increases our access to that data. But it also means there's far more granular data available about emissions from the grid. And then everything becomes a far greater understanding too, about decarbonizing the grid and the emissions from the grid.

Peter: For what it's worth, the Greenhouse Gas Protocol actually does a very nice job, even in the original version, of dealing with differing data quality sets. There's a data hierarchy inside of the protocol today. In fact, our proposal really just talks about an update to that data hierarchy, at the simplest level. There's not a massive throwing out of the old protocol and introducing a new protocol. These are using the existing tool sets to pull in one more level to the data hierarchy, and then figure out how to apply that most effectively into greenhouse gas accounting. So I think this is stuff that we know how to do. Even just using the United States as an example, and maybe it's the most mature market for some of the data availability, we've got 100% coverage of the country at sort of a sub-regional level for the kinds of data Jake and I are talking about. And by the end of the year, we think that about 75% of all the electric load in the United States will have nodal Locational Marginal Emissions data. So we're talking about high

levels of data availability. It is moving very quickly. The EIA has a mandate to collect this information directly from grid operators and begin publishing it. So we are seeing momentum in this direction. And I think, to Jake's point, if it ends up in the protocol, just another sort of thumb on the scale of getting the datasets moving in the right direction. But people are already doing this. So the notion that we're in the very early stages of the development of these datasets is not correct. These are mature datasets. They're getting more mature. And we're also seeing a lot of global implementation of similar methodologies. So it's a really exciting time.

David: So Peter, Meta and Amazon are obviously big players in this space. What about some of the smaller businesses that really want to make a positive impact to their sustainability profile? Is it possible that this could prove too costly or complex for some of these smaller businesses?

Peter: It's such an important question. And one of the things that I am fond of saying when I sit on EFP calls is "if this only works for the 10 companies on this call, we have failed." That's not what we're after. We are after solid information to help companies of every shape and size make high impact decisions. And our supposition is that with the appropriate information, any company regardless of how big or small they are, whether or not they have a big sophisticated energy team, or someone who is doing this in addition to 15 other sustainability related functions, which is often the case, it gives them the information to make the highest impact decision that they possibly can. So from our perspective, this is a game changer for small companies who right now are generally figuring out how to do a drib and a drab here and there, wherever they can, not knowing the impact of that. And now we're giving them the data to say "alright, even if I can only do something small, or my footprint isn't very big, I can have the biggest impact with the best possible data for whatever project it is that I'm going to work with."

Jake: David, this has been such an important guiding principle for us as we work together as EFP, is that we absolutely want a system that works for everyone. Because we don't want a world in which companies either don't set goals or don't chase targets, or decide that this has gotten too complex. It has to be a framework that every company can apply. And Peter's heard me joke about this before - I want to be able to continue to go to the diner I used to go to in this little ski town that would tell me they were powered by 100% renewable, and that they still can do that because they're not suddenly bedeviled by data. Or, I used to ski at a small ski resort outside of Seattle that would do the same thing and tell me it was powered by renewable energy. I want them to be able to very easily and quickly have the tools to do that accounting. And so we've been very careful within this framework of saying, "okay, we know that we're active players, we have a lot of expertise. But we've got to make sure that this is incredibly accessible for companies of all sizes, and companies of all formats." Because not every company's load profile looks the same either. Some companies have distributed loads across lots and lots of different grids with lots of meters. And some have lots of condensed load in just a couple locations. And so we want all of those companies of all shapes and sizes to be able to do this in the same way we can.

Peter: That is also the reason why this builds on the existing protocol methodologies. So, again, we have a lot of good tools in place. This is an evolution, this is an update. And I think that if

you're a company that has been reliant on some of the previous versions, there's still a lot of ways to do those pieces in ways that work.

David: On this podcast we've talked a number of times about the need for capital flowing into the industry. So how will this impact the investment community? Obviously, I'm thinking it helps with more accurate decision making. But what do you think the overall impact could be for the investment funds flowing into the energy transition space with these protocols?

Jake: So I think one of the important things to look back at is the historical success of the existing Greenhouse Gas Protocol. If you look back to pre-2015, before the market-based method was in place, there was roughly, I think, about a gigawatt of installed capacity from corporate renewable PPAs. You fast forward to today, there's more than 100. And all of that has very much followed the trajectory of the Greenhouse Gas Protocol and the creation of the Scope 2 guidance and the market-based method that was released in 2015. So we see there's a lot of interest in corporates moving towards buying more and more renewables. We're very involved with other companies that are moving towards buying renewables. And what we see from this, and one of the things we're very excited about, is one, we see this framework creating a system where corporates go after high impact projects. And I think Peter mentioned this before, in a world where you're only accounting using megawatt hours, it means you might keep doing project after project after project in California or in Texas or here in Europe, in Sweden. And what we want to get to is where companies are also looking at how to drive impact and emissions impact from this decision and from those investments. And we want to see companies focusing on that and chasing that impact. And so we see the opportunity to make those investments and target that. We also see a lot of opportunity for investments in new technologies. And again, I'll take an example from us, we have a number of renewable energy projects in California, that are solar plus storage. And if the projects were just solar, of course the avoided emissions from those projects will be far less when they're solar plus storage. The megawatt hours generated, again, exactly the same if they're solar alone, or solar plus storage. When you start looking at the avoided emissions, we get considerably more avoided emissions when you pair those two technologies together and you do that solar plus storage. We see a lot of opportunity to unlock investment in new technologies and also towards higher impact projects from corporates as a result of this accounting framework.

David: Peter, what are your thoughts on this being able to enhance the investments in other technologies that Jake was just mentioning but like, demand response or green hydrogen? How will that help incentivize that?

Peter: Yeah, that's a super question. And frankly, we think about this a lot, too. I think everybody is. Every company, and particularly ones that have already met 100% renewable energy goals, which, just to be clear, is a lot of work to keep meeting those goals through time and we're continuing to do that, but additionally, we're interested in storage technologies like Jake said - hydrogen, what have you - and I think the shift from megawatt hours to tons allows you to think about the emissions profiles of a much broader suite of technologies. And ultimately, what I would love to see is watching how the tons flow through with technology. So if you think about

hydrogen, there's been a lot of interesting conversations right now around some of the tax credits for that. We don't need to go too deep in the weeds, but the notion of carbon matching - that you could trace the emissions impacts associated with input electricity to an electrolyzer coming out with the hydrogen product on the back end - is a very compelling notion that just says, "hey, let's follow the emissions first. Let's follow the emissions through whatever the technology chain is." And it allows you significantly more flexibility than you would have if you were just looking at megawatt hours. Megawatt hours are not really a compatible approach to looking at some of these more sophisticated technologies, or even frankly, storage gets a little bit complicated when you're just thinking about megawatt hours. Emissions make a ton more sense. What's the emissions profile of the charge electricity? What's the emissions profile of the grid when you're discharging? And can you do really cool stuff like carbon arbitrage? There's all kinds of interesting things that become possible when you use these datasets.

David: So Jake, what are some of the challenges that EFP is facing right now as it pushes this initiative forward? I mean, there's got to be a lot of parties involved - regulators, accounting firms, you name it - what are some of those challenges that you're facing?

Jake: So I think actually, at the moment, it feels like we have a lot of opportunity in front of us more than we have challenges. And I think Peter made this point before - we're suddenly fielding incoming from companies who are saying, "hey, we heard about this, we're really interested in this, and we might want to join you." We're 10 companies today. I'm not going to make projections, but my hunch is we will not be 10 companies by the end of this calendar year. I expect we're going to grow because we have all this incoming. So it's a challenge to manage that, but that's a good challenge. I think when you look at the challenge of trying to make a proposal to the world's most commonly used carbon accounting framework, for which thousands of companies depend, we are venturing on doing something that is really impactful and really important to people. And Peter kind of joked in the beginning that this is the most important thing in corporate and climate work that nobody's ever heard of. I think the challenge we have is making sure we do this right. That we pay really close attention to the details, and that we listen to other stakeholders to make sure that we continue to improve. I think, at the moment for us, the Greenhouse Gas Protocol revision process started in November. We didn't launch till December. So I think at the moment, the thing for us is getting people aware of this approach, getting people aware of this framework, having them understand why we think this is the right approach for carbon accounting for Scope 2 emissions, why we think this is a carbon accounting approach that we think will lead to the fastest, most cost-effective investments towards decarbonizing the grid around the world, why we think that this is the carbon accounting method that's best, not just for the 10 companies involved, but for companies all over the world who are making investments towards decarbonization, and why we think that it's incredibly important that the Greenhouse Gas Protocol embrace this and make this change to the Scope 2 guidance. I think those are our biggest challenges. But those are great challenges to have, right? That's why we do this. And I think that's one of the most exciting things about my job, is getting to come to work every day and do stuff like this and work with colleagues like Peter and folks from the other companies, and be really excited to do this change that just can be incredibly impactful around the world towards driving grid decarbonization towards accelerating

how we address the climate crisis, which is certainly, I think, what motivates all of us who do this work. We didn't take this on and choose these careers because we really wanted to geek out on megawatt hours and tons of carbon emissions, we do it because we really want to focus on addressing the climate crisis and focusing on how we decarbonize the power system. So I think this is, for me, that challenge is just a lot of fun. And I'm really excited about what we've taken on and the path we have ahead of us, and the challenge we have of getting the world of stakeholders and people that are focused on this to really understand it and get excited about it, too.

David: I think that this is a critical piece of accelerating the decarbonization efforts. I actually got into accounting early in my career, majored in accounting in college, because I'd always heard, "if you understand the numbers, you understand the business." And I think as we get this standardized method of reporting, you can really look at who's doing what, who's doing it the right way, how we are driving the decarbonization effort, which is going to bring in more investors like we just talked about earlier. To be able to have more informed decisions, where to put the capital to drive the growth, is going to be essential. So I think that this initiative is really important to the overall energy transition. Peter, what do you think can be done more to help drive this forward? Because like I said, I think it's a key piece to what we're trying to accomplish here. What can be done to help further it?

Peter: Yeah, such an important question. As Jake said, we launched in December. Six months later, we're getting a lot of momentum. But there could be more. No question. There's organic interest from companies but I think we'd like to see more. One of the other things, and Jake's absolutely right about this - more and more companies are realizing that they'd like a more complete toolset to help make decisions. And so we're seeing different pockets of activity kind of pop up. And there's some coordination that would likely be useful for bringing folks together to talk about these sorts of things. I think that's really important. And frankly, getting to a place where we have some concrete workstreams, where practitioners can begin with implementation - because this is the thing, right? The Greenhouse Gas Protocol revision process, as important as it is, is likely going to take two years, maybe a little bit longer. Most of us are needing to act today. And so the mismatch between the standards process and beginning to take action as practitioners can be challenging. And so I think finding some spaces where companies that want to do this can begin doing it, talk about lessons learned, compare notes - that's a really important piece of that practitioner puzzle that again, a group of companies got together trying to do the best thing that we could, try to maximize impact. Well, what do we do next? Yeah, of course, we're going to work on protocol development. But how do we build this into our procurement philosophies? Jake shared a bunch of information about some Amazon thinking, we are also beginning to figure out how you would incorporate this type of data into decision making for procurement processes, new technology selection. We've got big, sophisticated energy teams that are spending a lot of time and brainpower trying to figure out how to do this stuff. How do we share lessons learned? You're kind of hearing me in the same way that Jake was. I get so jazzed about this stuff. It is really, really interesting. I think, frankly, at a personal level, it's some of the most important work that I've done in my career. So how do we get this out there? How do we share this with other companies? How do we keep learning? Let's work with

the academic community, let's work with think tanks, let's make sure we're doing this right. If we can improve, let's improve. There's no pride of ownership in the concepts. This is really just about trying to drive the fastest, decarbonization of the electricity system that we can.

David: Yeah. And Peter you're right. It's something that absolutely does have to be done now. Just in my conversations with some of the large banks that have lending initiatives or lending targets that they have for the space, they're trying to grapple with the emissions data, and where they're putting their money, and is it going in the right spot, are they making the informed decisions for that. And to have this standardized method of calculations, it's going to help them make those decisions. But again, you'll have the SEC involved that could help on the public company side of things so that investors can make those decisions. So it's something that we really can't wait around for. It's something that regardless of what industry you're in, if you have anything to do with sustainability or investment, you're looking for this, and you're really crying for, at this point, to make these informed decisions.

Peter: Yeah, couldn't agree more. These datasets and these approaches do seem to be broadly applicable. Many different companies are interested in the impacts of a wide variety of activities. We are very focused on the electricity sector. And again, I don't want to get too deep in the accounting weeds, but even as we think about, say, Scope 3, electricity is a huge part of that, too. So ultimately, I think thinking about the emissions, thinking about impact, becomes an important consideration in a wide variety of spaces.

David: So Jake, what's the EFP planning to do for the rest of the year? And what happens when this comes to a conclusion? ,

Jake: Well, I think, to Peter's point, we hope it comes to a conclusion as fast as possible because we want to go quickly, and we hope it can move quicker. But we have realistic expectations that we're probably looking at about a two year timeline at a minimum. So our plan for the rest of the year - one is, as I said, I don't think we will finish the year with the same number of ESB companies as we started. We have a lot of interest and we're fielding a lot of incoming from companies who are interested in joining. And so I suspect one of the things we'll be managing is just natural growth. And I think that's a great thing. And like I said, it's a great challenge for us to have. The next thing we're going to be doing is continuing to sharpen our pencils. There are still some things we have to work through. There are some questions on data standardization we want to think through. There are some questions around implementation we want to think through. To Peter's point, we want to do some testing and be able to work together with other companies on testing, and how you take that data and how you make those decisions. I've shared with you before, just anecdotally, some of the carbon emissions impact of our investments for renewable energy projects in India, and how those might be different in a place like Costa Rica, or another low carbon grid like France or Sweden. We've done some of that work, but we also know that our peers and our friends in other companies are doing some of that work. And so I think if we can get together and learn from each other, that's going to be one of the things we're starting to do. And I think we're talking about a landscape of meetings and workshops over the coming year. But the other thing that we're going to be doing, and it's

probably the core and most important, is we're going to be working with the Greenhouse Gas Protocol on the revision process, right. That is our core purpose. We fed into the submission process or the public consultation and feedback process in March, and we spent a couple months working on our submission. The next thing is going to be, we expect that the Greenhouse Gas Protocol is going to start working on workshops, soliciting expertise, talking to the stakeholders that have been putting forth ideas, and I think that's going to be a big body of work for us. And it's probably going to be a very big focus for us for the remainder of the year, and certainly I would expect into next year and until this process concludes. My hunch is it's going to keep all of us quite busy.

David: Peter, this obviously is a Herculean effort, right. And I think it's a positive that companies such as Amazon and Meta, with the size and resources that they have available, are helping to drive this forward. And obviously there's the partnership, companies joining that. Is there anything that maybe some smaller businesses or individuals or organizations can also do to help with the initiative?

Peter: First of all, we certainly want to hear about the kinds of issues that companies that don't look like us are tackling. As I said before, we've failed if this only works for a handful of sophisticated companies. So I think it's really important that we keep our eye on the ball in terms of making sure this works for a lot of folks. And so hearing from small companies, medium sized companies with different types of emissions considerations and making sure that the approaches that we're taking are comprehensive, that they work for them, that they work for Jake's ski diner. So I think that's really important. I also think that the folks that write these standards need to hear from people. These are public solicitation processes, and ultimately, hearing from a wider variety of voices, supporting these kinds of approaches, is going to be really important. And then finally, while it is true that Greenhouse Gas Protocol is ultimately a voluntary carbon reporting standard, it is being referenced all over the place in laws and regulatory rulemakings, both in the United States, in Europe, individual states. As with any public process of this sort, there is plenty of room for folks to get involved, wherever they live, to say that they feel that this emissions first approach is a good and sound approach for companies and others to use to manage these kinds of issues. So lots of different engagement pathways, from helping us to make sure that we're being thoughtful and comprehensive, coming along for the ride, and also getting involved wherever it makes sense to push for these types of changes to be incorporated into the wide variety of considerations that we're seeing in the greenhouse gas accounting space.

David: Well, listen, Jake, Peter, thank you for coming on the show and your time to discuss, in my opinion, a very important initiative. So I really appreciate it.

Peter: David, thank you. You know, I know this stuff can get deep in the weeds, but clearly we're two energy nerds that get very excited about this sort of stuff. Hopefully your audience will be excited about it, too. And if anybody out there is hearing this and wants to know more, we do have an amazing website. They should go check it out. And if you're a company that's interested in joining, there's pathways to do that, too.

Jake: Yeah, I'll just echo that, David. Thank you so much. I know accounting and carbon accounting is not the most exciting topic anywhere. But I think as you mentioned, it is incredibly important for driving investment, making decisions, and towards grid decarbonization and addressing the challenge we all are facing with mitigating the climate crisis. So appreciate the opportunity to come and chat with you and look forward to coming back and keeping you updated on the work we're doing as EFP.

David: I'm David Banmiller, and this is The Interchange Recharged. As always, we'd love to hear your thoughts and suggestions for topics we should look at on future episodes. You can find us on Twitter. We're @interchangeshow. See you next time.