



September 15, 2021

RPM Ep 12_edit version Transcript

MV: Welcome to RPM, the podcast that explores the world of private markets. I'm your host, Michael Venne. This is the second episode in our special on climate change. Here Suzanne Tavill is joined by Carl Prins, Co-founder and CEO at Pathzero, a consultancy that helps companies solve many of the challenges associated with going net zero and carbon footprinting. Carl and Suzanne do an excellent job of explaining the various types of emissions that need to be accounted for in one's net zero journey and more specifically how these aspects are influencing investment choices made by GPs and LPs. So, really interesting conversation, so, with that, I'll pass the mic to Suzanne.

ST: Thanks, Michael, and welcome, Carl, to our podcast today.

CP: Thanks, Suzanne, a pleasure to be here.

ST: You know, it is great having Carl on today because he has this unique perspective where his work takes him to be across some of the leading-edge academic thinking around emissions measurement globally, as well as being across some of the cutting-edge technological applications that are being developed around carbon footprinting. So he is very well positioned to help us in our discussion today. And, you know, the topic of carbon footprinting has become more and more important for a lot of our clients, where we see asset owners setting up climate change policies. And obviously within those policies, they move to make corporate commitments around net zero aligned to the Paris Agreement. And what tends to flow from that corporate commitment is the next step is a focus around establishing what is the carbon footprint of their own portfolio. And obviously, this is not just on the listed side, but also across their private markets holdings. And today, certainly that is going to be an area of focus for this discussion. So today, Carl, we seem to have very accurate measurements of the greenhouse gas emissions in our atmosphere. But to explain to us, how do we move from an understanding of what is floating around in our atmosphere to attributing that to a single company organization?

CP: Yeah, thanks Suzanne. I think the process is very well laid out in the Greenhouse Gas Protocol, or ISO 14064, which provides this guidance internationally for how we look at corporate carbon emissions and in fact, an inventory or a footprint. And it really all starts off with defining which company it is you're actually looking at, what are the legal entities, what are you including, what are you excluding and what's called the organizational boundary. In short, once you've determined the organizational boundary well, then looking at the emissions boundary or the scope of emission sources that should be included in that boundary. So you look to see what is relevant. And again, there's some great international guidance. And then once you have the emission sources you're trying to measure, it's really about collecting the necessary data to do the calculations with the latest

models and emission factors that are available. And that again is based on climate science, the same ones that would help the IPCC. So that's sort of how it comes full circle to what they're reporting.

ST: Let's just walk through some of the basic boundaries or scopes, I suppose, that have been set up by the main protocol, which, as you said, as the Greenhouse Gas Protocol.

CP: Yeah, sure. You know, everyone's now heard of Scope 1, 2 and 3, I think it would have been not as familiar as four years ago. So to run through quickly Scope 1 is generally a fuel that you would be combusting yourself. If you're cooking in the kitchen with natural gas, you are directly combusting that fuel. That's a Scope 1 emission. Scope 1 would also be mobile combustion, so it might be that you're driving your car and that's burning some diesel or some gasoline, and that direct conversion from fuel into emissions is Scope 1. It's very much under your direct control and corporately, that's what we look for there. Scope 2 is generally electricity. It's actually technically energy that you're purchasing, but you're not actually burning or combustion a fuel. Coal, fire, power station, for example, you're not doing that yourself, but you're purchasing that energy that's been produced by that power station. And for most companies, that translates to electricity. It could also be steam, for example. Scope 3. These are your indirect emissions, so these are not under your direct, operational or financial control, but they do occur as a result of your operations of your business. So if you have a supplier that's providing you with raw materials or other purchased goods or services, or you have staff that are commuting from their homes to work, or you're flying to go see a client or you're taking a train across town. All of these activities are happening because your company exists and it operates. And so therefore, in looking at your overall emissions, it's become more and more important to include the Scope 3 emissions as well in an inventory.

ST: How complicated, you know, a complicated, I mean, time and cost does it take to actually get a carbon footprint around scope 1 and 2?

CP: I think the good news here is it's generally quite an efficient process. It may seem difficult and obviously. This varies based on the industry that you're looking at, but by and large, electricity is a number that most people can get a hold of. If you're a professional services firm leasing a floor in a building, you know someone goes and tracks down that electricity bill. Not too difficult to do. Some types of companies don't have a lot of Scope 1 emissions. They don't burn a lot of fuel. But if you do, let's say you have a logistics company generally, because it's such a large part of the expense base of the company. It's already pretty carefully managed. And you know that operations manager would probably be able to tell you very quickly, hey, you know, it's, you know, 60,000 liters in this period. And the conversion from that point to actual CO₂ equivalent is quite straightforward and quite simple. So Scope 1 and 2 emissions on the whole would not be that difficult to calculate. Of course, if there are no systems in place and you know you're shipping things all over the world, but you're not actually keeping track of your fuel, let's say, well, then it becomes an exercise of first going and collecting that data.

ST: Let's turn to Scope 3, which as again you highlighted, this is dependent upon information that the company is not producing itself, it doesn't necessarily have under its own control. So, so how does this all work? I mean, how does a company get the information it needs for Scope 3?

CP: Yeah, it does really vary by the actual emission source that we are looking to measure. So let's look at something which is really quite topical today. One of the Scope 3 emissions sources is working from home. And so you may have employees who aren't able to come into the office every day at the moment, and they'd be sitting at home working clearly, not under the direct control of the company, but it's happening as a result of its operations, and it certainly is relevant to its emissions. So there would be a model that would be produced to say, OK, you know, I live in a particular postcode, which is a particular climate zone which has certain heating or cooling that generally happens there. And therefore I could work out what the normal energy consumption, perhaps electricity, maybe if there's natural gas connected, what that energy consumption would look like for that, for that home. And there'd be some assumptions taken from statistical authorities like (this in the Australian context) the ABS (Australian Bureau of Statistics), to bring in normal assumptions in those models. Once you've actually determined okay, for an employee working from home for eight hours, they consume 10 kilowatt hours of electricity on the whole, that conversion to tons of CO2 equivalent is then done by the, you know, the connected emission factor, which in Australia at least is published by the Australian government in its carbon account. So, to answer your question, it really is often a model like that that works out a quantity of fuel or other emissions source that has been used. For each of the of the different types of Scope 3 emissions you'd have these assumptions. One perhaps to call out as well as is purchased products and services where you have multiple ways of looking at the embodied emissions. So if I, for example, buy a laptop, you know, that laptop was made from raw materials and it was manufactured, it was transported, it was sold to me in a shop. All the emissions that occurred in the lifecycle to that point, the cradle-to-gate emissions would be included in my inventory. Now there's a growing list of public disclosure statements around these purchase goods. Apple, for example, publishes in their PDF that a MacBook Pro these days is about 400 kilograms of CO2 equivalent. And I could simply obtain the PDF for the item that I've purchased, and I can say, right, there you go, that's the embodied emissions in that one. Where there aren't PDFs available, we would then look at other research methods, for example, the environmentally extended input output analysis, which we would use then to say, OK, it's a spend in a particular sector, particular category. And this is the conversion of it. We should realize why the Scopes have been created the way they have. My Scope 3 emissions is someone else's Scope 1 emissions or Scope 2 emissions. And really why the Scopes are there is as a company to help you understand where you have to look and what you're going to have to do to address these emissions. If it's something under your direct control, you could perhaps switch your fleet from, you know, diesel or gasoline to electric. Or if it's electricity, you could look for a renewable electricity supplier. But when it comes to Scope 3, that's where the negotiation is going to be. So, you are going to have to go talk to your staff, you are going to have to go talk to your suppliers, you are going to have to go talk to transports, heavy part of your emissions. You have to look at how you travel or should you even be flying around? Or maybe you should switch to video conferencing, you know. So it tells you where to look. And yeah, if most of your emissions in Scope 3 in your value chain, you won't effectively be able to manage your risk in the business if you don't look at those.

ST: So, we've spoken about the idea of Scopes within the context of non-financial companies. Let's turn to talking about the thinking about Scopes within the context of an investment manager or, in private markets terminology,

a general partner, as well as from the investor or the limited partner perspective. So, so, so can you walk us through what are the Scopes for those respective groups?

CP: Yeah, so looking at it from an LP perspective, you're purchasing a service and investment management service from an investment manager, so it would be a purchased service under Scope 3 for you. And as an investment manager, it would be good practice for you to be able to communicate to your LP. Hey, what the carbon emissions are of that service? And as an investment manager, you're also, you'd be looking at your own operations, so most professional service investment managers have very little Scope 1, Scope 2 emissions. And it's broadly in the order of 70-75% travel. In fact, maybe that's a pre-COVID stat, but definitely one of the biggest ones is flights in that industry. And then there's this question of, OK, but what about the investment portfolio? Now, investment emissions are actually included specifically under Scope 3 in the value chain standard of the Greenhouse Gas Protocol, and generally, it's seen as an optional inclusion. This is for no equity investments so investments that do not form part of, you know, they're not a subsidiary, they're not an associate, they're not a JV. It's kind of your kind of smaller investments. And because it's optional, most investment managers opt out of including that within the boundary. So, it's currently not standard practice that investment managers, I would say, you know, look at their proportion of their investment emissions or their finance emissions and include that in their inventory. But what we're seeing now is progressive investment managers reaching out to the portfolio and saying, hey, you know, we are interested in our finance, the emissions, we want to understand what those are both from a reporting perspective for ourselves, but actually more so in determining the risk here and the portfolio of a transition to a carbon constrained world and how that's going to impact you as a company. So, you know, and its risks and opportunities, obviously, but you know, we want to know how you're going to respond. So it's both a good investment analysis or investment management question, as well as a reporting question. On this obviously being asked of you as well as an investment manager. So, so now we're starting to see the reporting coming through from portfolio companies to investment managers and then actually including their proportion of those emissions in their Scope 3 inventory. And that's really exciting to see, actually, because you know that information can then start flowing through to LPs as well.

ST: We can see that there's quite a lot of free tools out there: Excel add-ons, online systems, etc. From an LPs perspective, what should they be thinking about when they're speaking or engaging with their investment manager in terms of trying to determine what's the quality of the carbon footprint that's being created?

CP: Yeah. Well, if you start at the calculation side, you know, there are various research organizations and entities, government and otherwise that continually do research and publish, you know what we call emission factors, which, you know, converts say, for example, a liter of gasoline into tons of CO₂ equivalent. So one thing is that there's always changing and you always need to keep those up to date. So you want to be certain that whatever calculator you're using is using the latest and the correct years worth of emission factors. The models are also evolving. You know, as we start looking at that working from home model I mentioned, you know, it starts with energy and then it expands and it starts to include waste as well and starts to include other the upstream emissions from the transmission and distribution of electricity to your house. And you know, all these additional factors start coming into it and it becomes more and more rounded and more sophisticated. It also becomes more connected and understands where it is connected. So if you have two companies that, for

example, buy from each other, you know, as much as the scopes are supposed to work together, there is a chance of double counting. So, calculating it, aggregating it, is going to be something you won't take great care in doing. And often the other thing to mention is the gaps in calculation methodologies, you might cover travel and, you know, maybe it's business flights and a few simple ones, but really, if there's 40 emission sources, you really want no gaps in the ability to calculate an emission source. And that's where often the more sophisticated models would be missing from these free online resources, which are otherwise a great tool to get a ballpark.

ST: Yeah, so but for sort of institutional investors, should they be seeing that some type of verification happens on there, the carbon footprinting data that is reported to them? Or is it just sufficient, if you will, that it references some well recognized model?

CP: Yeah, I guess it's, as you say, a matter of the quality of the information that you're using and how much you want to rely on that. Certainly, if you're going to be making a public statement or setting a net zero commitment, you want to make sure that that the evidence that you're receiving is good in its quality. So certainly, you want to ensure that a qualified person has looked over both the boundary that's been set, as I mentioned at the top of this chat, which organization are we including here? If you're saying you're McDonald's, is it just my local McDonald's or is it McDonald's all over the world? You know, what is the actual Scope of what we've actually measured? And then and then which emission sources have been included? That's also something which a professional can advise on and opine on and sign off on effectively that the operational boundaries correct the emissions boundaries is correct. Then the last part is also the validation of the data that's actually been entered to say, OK, if I've entered in a thousand kilowatt hours of electricity, someone has traced that back to an actual receipt to see that, yes, that's the accurate number. So if you can see that the boundaries are correct, the data has been validated, the models and the assumptions that have been used are the latest and are correct. You can have a lot of certainty to say, OK, this information is being reported to me, either for an individual company or in aggregate across a number of companies in a portfolio is trustworthy, I can rely on this, I can use this much as I would use financial data coming out of financial system.

ST: You across the space. What other metrics are you sort of excited by in terms of broadening people's vocabulary around dealing with emissions that you think it would be useful for our listeners to become familiar with and pay attention to?

CP: Well, I think it's really good to set an internal price on carbon. It's that externality that's not that's not priced in right now in a company. And, you know, at least looking at the scenario where that is introduced, you know, where's that coming? Is it coming in my scope 1? Fuel? Is it electricity? Is it from my suppliers who's suddenly going to put a 20% premium on the raw materials I'm purchasing from them? If we had that price today, but where it actually really drives changes, if you look at the abatement curve or you know of a business and you can see the projects or the initiatives that we would be required to actually decarbonize a particular area and without an internal guide on what that price is, you can't see if these projects are viable or not. So. So really, in order to get to the next stage of driving action, you are going to need that price internally. What's really interesting just to what's happening in the market at the moment is the price of these voluntary offsets has really increased a

lot over the last 18 months, and especially in the high-quality side where companies are ensuring that they buy, you know, high quality, verifiable carbon offsets, you know, because consumers of their carbon neutral are starting to look through them and saying, OK, well, what are you actually buying here? And you want that quality? But what that's actually done is, you know, that budget line item that used to cost, let's say, 200 grands to buy those carbon offsets to be carbon neutral, can suddenly be \$2 million, \$3 million, maybe more. It's about a factor of 10 or 20 in certain cases that these prices have changed. So. Now those people are going well, hang on. You know. What if we did a project for a million dollars, could we actually reduce these emissions significantly or should we switch the fleet to electric vehicles, you know? And so it's almost like, you know, people who are voluntarily doing this have already sort of set an internal price on carbon. And because their price is now moves, you can actually see the action that people are being naturally driven to take.

ST: Well, we've covered a lot of ground today and hopefully our listeners are more the wiser when it comes to understanding some of these topics around carbon footprinting and having a net zero targets and what that will entail for both the investment manager as well as the underlying asset. So very much really appreciate your time in talking to us today Carl.

CP: No worries at all. It's been fun, thank you.

MV: That does it for this episode of RPM. A special thank you to Carl for taking the time to join us. In part three of our special series on climate change, Jean-Marc Champagne, Head of Environmental Finance and Bankable Nature Solutions Asia at the World Wildlife Fund joins us to discuss the important role that biodiversity will play in investment due diligence. We are really excited for that one to come out, so please stay tuned. If you enjoyed this episode, please visit our show page at www.stepstonegroup.com. You can also find RPM on Apple podcasts, Spotify, Stitcher and other podcast providers.