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TRANSCRIPT

Carbon Footprinting's Giant Step Forward

Featuring:

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Adam Bass:
This is MSCI Perspectives, your source for insights for global investors and access to research and expertise from across the investment industry. I'm your host, Adam Bass, and today is June 30th, 2022.

Adam Bass:
We've somehow arrived at the end of another quarter. And just like the march of time, the pressure on institutional investors to measure and report on their portfolio's total carbon footprint moves ever forward. It's a task much easier said than done, and the topic of today's episode. We'll get specific about some of the challenges investors face and explore the role that regulations continue to play. We'll also look at how the Partnership for Carbon Accounting Financial standard, or PCAF, plays a key role, not only in measuring carbon emissions output, but also taking steps toward reducing it.

Adam Bass:
Before we get there, however, you may be asking, "Why is the idea of total carbon footprinting something investors need to pay attention to, especially given the fact that most of the industry produces low levels of emissions?" Well, to get us started answering those questions, we turn to our first guest.

Oliver Marchand:
My name is Oliver Marchand, I'm global head of ESG and Climate Research & Models at MSCI. I run the Climate Risk Center in Zurich. I think the international community has understood that not only the direct emitters have to be part of the solution to climate change, but financial institutions need to be as well. And one of the major reasons is because they're at the beginning of the value chain of any economic activity, so it's a very efficient method of accelerating the net zero transition.

Adam Bass:
Now, I'm sure we can all agree that's a goal that's vital on a literal existential level, "But what about something a bit closer to my day-to-day professional concerns," you might ask? Well, that brings us to guest number two.
Antonios Panagiotopoulos:
My name is Antonios Panagiotopoulos. I work for MSCI in the London office. I mostly deal with ESG ratings, and also climate change metrics and climate change research. Carbon accounting is very important for investors for a couple of reasons. One is being able to disclose to internal and external stakeholders the greenhouse gas emissions that they are responsible for through their investments. Then, it is also important from a portfolio standpoint, to be able to identify potential risks and opportunities in a climate change context. Also

importantly, especially when it comes down to the net zero journeys that many investors have started, is to set the baseline. So you have to have a starting point, the baseline emissions, and then you can work, if you like, outwards and onwards to help shape the direction of your journey.

Oliver Marchand:
Every target needs a baseline. That is something that's very well known in the climate community, and it's a heavily debated topic because there's this problem of shifting baselines if people start moving in and out their baselines. So it's very important, as quickly as possible, to find your defined baseline.

Oliver Marchand:
So a typical target setting process looks at committing yourself to a certain abstract goal, then developing and planning a climate target, then disclosing and communicating it and tracking and updating it. And in all of these steps, a comparison with the baseline is needed.

Oliver Marchand:
And I just want to mention one point, and that is, when setting a climate target, you're facing one really, really difficult trade off. And that is that, on the one hand, organizations want to announce the most ambitious target possible; but the issue is, you don't want to communicate something that is so ambitious that you know that you're going to fail to deliver on it. So the trade off is between ambition and practicality. And the better your data is, and the more concretely you know what it means for your business and for your portfolios, the better you can decide whether you're confident with a certain level of target setting.

Adam Bass:
Your next question might be about what that looks like for an asset manager. Fortunately, we happened to speak with one this week.

Nick Gaskell:
Hi, I'm Nick Gaskell. I work for Aberdeen within the sustainability function, and I'm a responsible investment analyst solely focusing on climate issues. From our perspective, carbon accounting or using carbon data is really the bedrock for integrating climate change into the investment process. It's really the first step, quite frankly. And the way that I see it is it solves two problems, right? There's one from a reporting angle and then one from a risk management side.

Nick Gaskell:
So on the reporting side, Aberdeen, we've set our own carbon target in line with the Net Zero Asset Managers initiative, along with a lot of our peers; we have clients that have set their own targets as well; and we have funds that have carbon targets against benchmarks. So quite obvious from that perspective, very important to get a grips of carbon data.

Nick Gaskell:
And then from the risk management side of things when looking at investments, putting a price on carbon is really the way to solve climate change. Carbon is an externality, it's an external cost that needs to be internalized. And when you have good quality carbon data, you're able to look at where carbon sits in terms of exposure within your portfolio. And then at a company level, you can have a look at whether it's scope one, scope two, or scope three, and that can give you quite unique insights as to what your carbon exposure is at either a company or portfolio level.

Adam Bass:
Collecting that data and putting it to use, that can be particularly tricky when it comes to carbon emissions. For one thing...

Antonios Panagiotopoulos:
We are, roughly speaking, talking about a timeline that has almost a year lag, worst case scenario. The reason is that, typically, you would need for the year, essentially, to finish before you start measuring what happened in the previous year.

Nick Gaskell:
The corporate is going to be collecting that carbon data and calculating it, and then we'll be reporting on the previous 12 months. And that data then needs to be absorbed by the market, so there's a little bit of a time lag there. And then, once you get to about another 10 or 11 months from there, that data effectively is capturing real emissions from almost two years ago. So there has to be a little bit of contextualization around the emissions data that you're using.

Adam Bass:
And then, there's what Antonios referred to as "the iceberg effect".

Antonios Panagiotopoulos:
There are 15 different categories of scope three emissions. These essentially represent sources of emissions upstream in the supply chain of companies, and downstream when it comes to embodied carbon, either in products, buildings, or loans and investments.

Antonios Panagiotopoulos:
So for investors, essentially, sector exposure to those emissions is quite important. For instance, investors that may have an exposure to energy companies, they need to be mindful of category 11, or the use of sold products. That category represents the emissions when the fuel is burned by the customer, typically, when we're driving our cars to work. Another example would come in the financial sector and financed emissions, where we see that the amount of greenhouse gases produced, if you like, from financial institutions.

Antonios Panagiotopoulos:
Owned operations, so outside scope three, the scope one and two, they're very small compared to other industries. However, their exposure to indirect impact of greenhouse gas emissions through their investing and financing activities can actually be quite big. And our research has shown that greenhouse gas emissions associated with loans and investments, so the scope three category 15, usually referred to as finance

emissions, account for almost 80% of the aggregate total carbon footprint, which includes scope one, scope two, and scope three. So just to break it down, only one category of the scope three categories and also the total footprint accounts for 80% of the total footprint. So it is actually quite important, both from investors but also progressively from a company's perspective, to be able to break down, if you like, the sources of emissions across the supply chain, but also downstream.

Antonios Panagiotopoulos:
The issue with scope three is that, although it's not necessarily controlled by the company in question, there are carbon intensive supply chains and carbon intensive products, investments, and services that are likely to be stranded in the future under certain climate scenarios that see temperature rise, not exceeding two degrees, by the end of the century.

Antonios Panagiotopoulos:
I know that this may seem like a long time from 2022, but we are already seeing the risks that certain carbon intensive industries are experiencing from regulations and increasing costs, so it is only logical that these situations will be progressively passed over in the supply chains, consumer preferences, and investments. So measuring or being able to even reduce scope three emissions now can be a good guide, if you like, for the future, especially when we're talking about the carbon constrained future.

Adam Bass:
Don't worry, this is not another climate episode where we get lost in the scope three swamp. But as even casual listeners know, to ignore scope three completely would be to ignore one of the largest challenges that face companies as well as investors on this issue of measuring the risks of climate change.

Adam Bass:
But now, let's move on to talking about a potential way to overcome these challenges and start measuring a portfolio's total carbon footprint.

Oliver Marchand:
Classically, when people talk about carbon accounting, people have talked about what is called the Greenhouse Gas Protocol, it's a UN body that has come up with a guide on how to calculate carbon emissions. Because I think people need to understand that we... Some people might have the view that the whole world is full of CO2 sensors.

Adam Bass:
Since one of the ideas running through this episode is the benefits of transparency, I feel like I should tell you that it had never occurred to me that the world was full of CO2 sensors. To be completely honest, the fact that there are any at all seems, well, there's no other way to put it, really cool. I should have asked Oliver where they are, but anyway.

Oliver Marchand:
The unfortunate truth is that hardly any CO2 sensors on the planet itself, it's kind of funny to think about it that way. So essentially, all of the carbon numbers that we see anywhere are actually calculated by a environmental accounting method that looks at different steps of an industrial or a transport or a production process and

figures out, in a way, estimates, the carbon footprint. So that's why these standards are really, really important.

Oliver Marchand:
Now, the Greenhouse Gas Protocol wasn't very detailed, or not detailed enough for financial institutions, so that's why the financial industry started a new body called the Partnership for Carbon Accounting Financials. It's a couple dozen banks and insurances that came up with this guide, the PCAF standard, which is essentially a 130-page document that, at least for six asset classes, describes how to do this estimation that I talked about earlier. So that's listed equity and corporate bonds, business loans and unlisted equity, project finance, commercial real estate, mortgages, and motor vehicle loans.

Oliver Marchand:
At MSCI, we have a team of 60 people working on turning this standard into a usable digital tool where the basic idea is you input a multi-asset class portfolio and out you get what is defined in the PCAF standard, and that's called financed emissions. So it is the underlying emissions of the activity that is being funded by the portfolio.

Antonios Panagiotopoulos:
PCAF enables us to move, essentially, to a total portfolio footprint calculation, and essentially eliminate, progressively, blind spots in carbon emissions accounting. For example, in many portfolios, investors were facing hurdles in estimating emissions across different asset classes, like sovereign bonds, green bonds, municipal bonds, or [inaudible 00:14:03] products.

Antonios Panagiotopoulos:
Now, with the methodology of PCAF, we are able to, if you like, dig a bit deeper to those blind spots of different asset classes, and, therefore, move closer to the total portfolio footprint calculation. And the goal is to cover everything. There are some consultations happening at the moment as part of the PCAF initiated consultation for specific asset classes; however, the goal is to cover everything.

Nick Gaskell:
PCAF's main approach was, "How do we create a financed emissions number for investors?" And that financed emissions number represents, basically, the tons of CO_2 that the investor has financed. People that are quite familiar with TCFD will know weighted average carbon intensity quite well, and that's basically an emissions intensity number. So where that differs is the weighted average carbon intensity is essentially emissions normalized by revenue, so emissions divided by revenue. And the benefit of that is you can compare and contrast companies of different size, for example; larger investors are going to have more emissions.

Nick Gaskell:
So with PCAF, there's also an intensity number, which is the economic emissions intensity, which is actually mathematically equivalent to the weighted average carbon intensity, but instead of normalizing emissions by revenue, you're normalizing them by enterprise value, including cash. And it's a very interesting metric in how it works, but what we've been able to see is, what's quite interesting is that weighted average carbon intensity and economic emissions intensity can actually move in different directions. So what we've been trying to explain to our clients and doing more research on is, in using these metrics and applying them to investment

portfolios or carbon targeting, you're going to have to break down and disaggregate the metrics in some way to really understand what's driving them.

Nick Gaskell:
Because at the end of the day, what the goal is for meeting the climate change targets that we've set internationally is to reduce absolute emissions across the whole economy and to get to net zero by 2050. In order to do that, you need to capture total emissions, right? So what we would want to see is those intensity numbers are being driven by the emissions component, rather than revenue or enterprise value.

Oliver Marchand:
In the end, the financed emission results that you're seeking is total emissions, absolute emissions. But, obviously, in the calculation process, you're going to come across emission intensities all the time. Also, when you have a changing asset size base, maybe a portfolio growing, you're going to have to measure its emissions progress by looking at a relative intensity number. And then obviously, when you have an investment object, like an index, that doesn't really have an objective size, then you need to work with intensities as well. So this duality of absolute emissions versus relative emissions is ubiquitous in climate change analysis and PCAF doesn't solve that. Even with PCAF, we're going to have to live with these two worlds.

Antonios Panagiotopoulos:
It is not perfect, but it is the first step to uncovering something that was not previously measured. Also the fact that they are opening it up to consultation, it is also important, because investors can also have a say on how this will fare. The challenge there, as with everything, is that with carbon emissions, it's not necessarily that emissions reporting is that straightforward. You start with what is the most obvious in the iceberg example, and then, progressively, you start to unveil different layers of exposure in carbon emissions. And for certain, all these standards, they will get better over time, especially as companies start to report more.

Adam Bass:
In other words...

Nick Gaskell:
PCAF is the best standard that we have currently out there. The challenge that it tries to solve in terms of apportioning ownership of emissions is quite a difficult challenge considering the market volatility of enterprise value, including cash. I think what's really important for investors and anybody using these metrics, is to just understand the natural limitations, and to understand why it's important to disaggregate scope one and two and three, and to understand what that data's actually telling you. We'll give it a few years, but I think once people in the industry start to really, really get their heads around that, I think we'll be in a much better position to have a bit more consistency in reporting.

Adam Bass:
All three of our guests today pointed to the fact that the PCAF standard is more than a measurement tool. They all noted how it can also help investors take the next step, which is mitigating the effects of carbon risk on their portfolios.

Oliver Marchand:
Switzerland just recommended for all financial institutions in Switzerland to publish what they call the Swiss Climate Scores. It's a set of five scores, and for four of them, you would actually need financed emissions. Number one on that list of climate scores is greenhouse gas emissions, and that is exactly financed emissions. So you're asked to produce this report card where, over time, you show your progress with respect to greenhouse gas emissions; and there are other sections on that climate scorecard which pertain to emissions as well. So that's just an example of an application where a PCAF financed emission reporting solution really helps.

Oliver Marchand:
Let's say your organization has agreed to a de-carbonization pathway. For the sake of an example maybe, let's say a bank has agreed to decarbonize by 7% per year. Now, the big question is going to be, "What are my portfolios going to look like in two or three years?" And de-carbonization, isn't the only constraint that the portfolio is under, but there are obviously other regulatory and investment goals related constraints that you have, so what you then basically need is a portfolio construction tool that can deal with these financed emissions and those other aspects as well.

Oliver Marchand:
The other example that I wanted to give you is, as soon as you in you're net zero journey in the monitoring phase, you might want to look at your emission intensity, but you also want to understand the change in emission intensity in more detail. And that's where classical performance attribution analysis, but with a focus on financed emissions, comes into play. So you want to know, is the change in carbon intensity due to the companies that I've added in my portfolio or the assets that I've deleted in my portfolio, or is it because of the exchange rate, or is it because of changes in some of the denominators of carbon intensities, like sales numbers or production numbers or market capitalization numbers, or is it just interaction? And that's where advanced attribution tools are really powerful in understanding what you need to do to keep your climate goals on track.

Adam Bass:
Another part of the story that became clearer with every conversation we had preparing this episode was the role of regulation and how it could shape the way companies and investors define, measure, and report on their carbon footprints.

Oliver Marchand:
The single most important aspect here is that the regulatory landscape pertaining to climate is rapidly evolving. A few years ago, actually, it was almost an unknown thing for a financial institution to be regulated on climate. Now, about five years ago, the strength kind of started, but right now, it is a really difficult landscape to navigate, and there are three reasons why.

Oliver Marchand:
First of all, a trend that we see is that these regulations are changing from voluntary to mandatory. Corporates and financial institutions are very used to filling out voluntary questionnaires on their business to disclose data on climate, but this is now really starting to be truly mandatory pieces of regulations, not run by industry-led or NGO-led initiatives, but really regulations being run by financial regulators across the planet. A lot of people are

familiar with the TCFD regulations and they are voluntary, but they form the basis in terms of their design for all of those more mandatory initiatives.

Oliver Marchand:
We also see a move to qualitative information turning into quantitative information. And instead of saying, "Have you decreased your footprint?" Organizations are asking, "What's the exact decrease in your footprint in quantitative terms?" So that makes it just harder to comply with these information requests.

Oliver Marchand:
And then we see a movement global to local. Local regulatory bodies are starting to pick up these ideas laid out in TCFD reporting. A specific example is, in the US, the SEC proposed climate disclosure rules for companies. The UK has introduced its own version of the EU SFDR regulations, and it's called the Sustainability Disclosure Requirements, SDR.

Nick Gaskell:
The Sustainable Finance Disclosures Regulation, within which carbon is really just one of the several sustainability related metrics that need to be disclosed, and also particularly interesting in Europe is pressing forward with regards to defining green activities via taxonomies. And that's really useful for investors in order to really understand which activities can be defined as green and as having a positive contribution towards a low carbon transition.

Nick Gaskell:
And from a real economy perspective, I'd also look at the emissions trading scheme as well. That's really having an impact on actual corporate that we as investors would be investing in. And recent announcements have really shown that the EU is quite positively looking to strengthening the ambition of that trading scheme, so they'll be increasing the phase out of free allowances, for example, and replacing that mechanism with a carbon market border adjustment tax, which is effectively an import tax on carbon.

Nick Gaskell:
And that could be quite interesting in its implications for other international jurisdictions where, effectively, businesses that are exporting and doing business with Europe will have exposure to that EU carbon price. And that may prompt domestic policy makers in those jurisdictions to develop their own carbon pricing scheme.

Adam Bass:
Sorry, Nick, but free allowances.

Nick Gaskell:
Certain sectors will be allocated free allowances to emit carbon without having to necessarily pay for those allowances in the market. What it does is it avoids carbon leakage. So basically what carbon leakage is, is regulation in one region being stricter than another. There's an idea that carbon will leak towards regions where that regulation is not as strict, so, basically, firms will move their operations. So in Europe, in the emissions trading scheme, sectors, such as steel, for example, are given free allowances; in contrast, the utility sector has no free allowances.

Nick Gaskell:
I think the key for investors is to really be understanding carbon data and getting to grips with what it actually means, and getting to grips with the different scopes of emissions, right? So in the cases of these carbon markets that we've been discussing, scope one and two will be particularly relevant, for example, with utilities, so a lot of the carbon exposure of utilities will fall into that scope one and two category. But for many businesses, scope three is much more relevant. So for example, oil and gas businesses, what their carbon exposure really is is the use of their actual product. That will really drive whether their scope three emissions are increasing or decreasing, as well as the volume of their sales of that given product.

Adam Bass:
Regulators, companies, and investors around the world still clearly have a lot to figure out, or as Oliver put it...

Oliver Marchand:
Yeah, a lot of climate change related professionals these days are scratching their head to find the right balance between all of these different requirements that they have.

Adam Bass:
Despite that fact, the consensus seem to be that for investors trying to take stock of their portfolio's carbon footprint, PCAF is a giant step forward.

Oliver Marchand:
So one good message is there's only one standard, it's this Partnership for Carbon Accounting Financials, PCAF, standard, so that's really an area where you have to make no choice. When it comes to a certainty, that's hard to get in the climate world. There's hardly anything changing as quickly as the climate domain, but I think I would look for the broadest solution possible as a starting point, and then get ready for possible changes and additions in those tools and standards. The world has understood that climate change needs a rapid solution rather than a perfect solution, and that's essentially what it comes down to.

Adam Bass:
That's all for this week. A big thank you from Joe and me to Nick, Oliver, and Antonios, and to all of you for listening.

Adam Bass:
Next up on the podcast. As I mentioned at the top of the program, we've reached the end of another quarter, and that means we're rolling out the welcome mat for old friends Hitendra Varsani and Mark Carver. We'll get their take on what just happened and what to watch for as we head into the summer. Until then, I'm your host, Adam Bass, and this is MSCI Perspectives. Stay safe, everyone.

TRANSCRIPT

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