TRANSCRIPT
PENSIONS FOR PURPOSE PODCAST SERIES 2, EPISODE 8
THE FUTURE OF CARBON MARKETS

Laasya Shekaran: Hello everyone, and welcome back to the Pensions for Purpose Podcast. I'm your host, Laasya Shekaran and today I am joined by not one, but two wonderful guests from Aberdeen Investments: we have Sustainable Investment Manager, Nick Gaskell here today, welcome Nick.

Nick Gaskell: Thank you for having me, it's nice to be here.

Laasya Shekaran: We also have Fraser Green, who is the Head of Natural Capital Investment, so welcome as well to you, Fraser.

Fraser Green: Thank you, I'm very happy to be here too.

Laasya Shekaran: Now, today we're going to be talking all about carbon markets and natural capital, and if I'm being honest with you all, I often find the topic of carbon markets quite confusing. At a high level, I have questions around what their purpose is, and whether they actually help to reduce real-world emissions, and going into the detail, I find it confusing to understand how they work in practice. How do you go about pricing carbon, what is the current state of carbon markets, and what direction are things going in. Then, of course, how does natural capital fit into all of this, and how should we be thinking about assets that absorb carbon rather than emit it.

I'm really lucky today, I've got the perfect guests on the podcast to help me get a better understanding of all of this. It is going to be a useful conversation for me, and hopefully for all of you as well. Let's start at the beginning, Nick, what is the idea behind carbon pricing, and what behaviour is it meant to drive?

Nick Gaskell: The idea in simple terms, is to put a price on carbon that will ultimately incentivise decarbonisation, and in decarbonisation, there's a concept called a marginal abatement cost curve (MACC) or a marginal abatement cost of carbon (MACC), which is the cost of a given technology or action to produce a decarbonisation impact, and globally, we're at the beginnings of moving up that MACC curve as we go towards net-zero ultimately through this energy transition.

The concept in terms of having a carbon market at any scale, whether it's regional scale or global scale, is to basically find the most efficient pricing of carbon. If we think of it as if we were a corporation, if we have carbon projects impacting emissions. For example, if they're removing carbon by reforesting, and that costs, say $20 per ton, while as a corporation, our costs are marginal abatement cost to decarbonise one time, maybe $50 a ton. It's more economically efficient to incentivise that project to go ahead, and ie there's the concept of carbon credits and the offset carbon market.

Laasya Shekaran: Thanks, that's a helpful explanation. I guess in the world where money talks for decarbonisation to be successful, it needs to be needs to make sense financially, doesn't it. So that example really spells that out, just to understand how this marginal abatement cost curve works. You talked about moving up along it, what does that mean, and why is it a good thing?

Nick Gaskell: Sure, the most efficient way to eventually get to a point where the economy is at net-zero, and therefore not releasing emissions into the atmosphere, and not having that warming effect that we're having, and then mitigating physical climate risks. There's a set of activities across sectors in order to decarbonise, and low points of the cost curve you have renewables now, which basically stand on their own two feet.

Historically, you could have bought carbon credits associated with renewable energy projects, but an important part of carbon offsetting is this concept of additionality, where that carbon finance is actually what is allowing that project to become economic and feasible, but as we move up the MACC curve, we're going to go into much more expensive. If we think about greening steel, or producing green hydrogen for ammonia production, for the fertiliser, supply chain or getting towards a more decarbonised form of aviation and also scaling-up is a significant challenge. So, you have a cost of just one project. But then scaling this up to achieve net-zero across the whole economy. So the most efficient way to use capital to achieve these outcomes is to go up the MAC curve with the cheapest options first, and then moving up it towards the more expensive options, and hopefully over time there's more expensive options also, to an extent, will come down in price as well.

Laasya Shekaran: Ok, that makes sense, and it's reassuring to hear there's a lot of thought already gone into what needs to happen in those sector-based activities for decarbonisation to be successful, and now it's a case of working our way along those different things and ensuring they are affordable as well. If we look at the carbon markets more generally how well established are they, and you mentioned different regions, such as regional markets versus global markets. How does that come into it, too?

Nick Gaskell: Yeah, they've been around for a while, and they have evolved a lot, there are different forms, and there are some good resources out there. The World Bank has some good carbon pricing and carbon market resources, which are good to look at, but carbon markets have been around for a while, they've evolved considerably since the beginnings in the early 1990s.

In more recent memory, we've seen significant criticisms of the voluntary carbon market at a global scale. Some of these, we believe, are quite frankly well deserved, and we believe this critique is healthy for the for the forward projection of the market, and the quality of the carbon credit supply in the market as we move forward, but this coincided with a significant improvement in information and data transparency flowing through the market. An example of this is kind of rating agencies that have popped up and have grown considerably, and what's been interesting in our work is we're finding that more in most markets, we're seeing quality being priced into the underlying carbon credit based on the quality of those projects.

As we look forward, I think it's important to highlight we have in a broad sense, two types of markets, we have a voluntary carbon market, which we've been talking about so far, and then we have a compliance market, both work by incentivising decarbonisation by putting a price on carbon. This concept of marginal abatement costs, and if we think about compliance markets, we have the EU as the largest one, the emissions trading scheme, and essentially this is a regulated scheme. Hence, it's called a compliance market, and it has a cap on the supply of credits, and design is so the cap will fall over time. It should actually represent the marginal abatement costs for the underlying corporates that are exposed to that carbon market based on the cap falling over time.

There are various estimates out there, but the carbon price in the EU has significantly increased over the last 10 years. It's stabilised at the moment between €60-70 a ton, of carbon,

but if we look at how the cap is designed, and assuming not too much changes before 2030, we see the price hitting €100 per ton, which it actually has done in recent memory. Then, we have voluntary markets, where you have projects that can take various forms: reforestation and peatland restoration, particularly in the UK. Those are the main two types of projects, outside of that you have projects like avoided deforestation, cook stove projects, etc more globally, and within those markets there's no single uniform price of carbon, because each of these projects will actually be priced differently.

Typically, it's over the counter bilateral agreements on how those are priced, but as I alluded to earlier, what we have seen is improved data and transparency, and providers of that information leading in the quality of underlying projects starting to flow through into the price of the higher quality. Projects are being priced higher, and there's also a supply and demand element. So, there's less supply of these high-quality nature-based reforestation, pit and restoration projects. They actually at the moment have quite a significant price premium on them, and what we think is potentially quite interesting is we have these compliance markets, we have these voluntary markets, and more and more governments are starting to recognise we have a nature problem associated with the climate problem.

So, if we take Scotland as an example, of Scotland's annual emissions about 15% are just dedicated to degraded peatland. So that is within Scotland and the UK Government's emissions boundary, to eventually get to net-zero, that problem needs to be solved to achieve net-zero. The UK, like the EU, has an emissions trading scheme, they may end up, linking, depending on what governments decide to do in the future, but it's starting to be recognised that well, we could actually link the voluntary markets, so that we don't just have a price which incentivises corporates in the compliance market, but we also have a price in which that capital is flowing to restoring nature and solving other issues as well.

So, there's probably more evolution to come, but what we're really starting to see is, I suppose a maturation of how carbon is actually being priced as a solution to help achieve net-zero ultimately in the long term.

Laasya Shekaran: It does sound like there's been a lot of progress, and, as you say, the maturation we're seeing, is now a good time for pension schemes to be thinking more about carbon markets and perhaps getting their heads around some of all of this?

Nick Gaskell: I think it's a particularly interesting time, because in the compliance markets, we generally have a UK and EU market, where it's mostly the power sector has been exposed to that price. The economic activity of basically producing power and electricity. So to a large extent, renewable energy, natural gas coal, those economics are driving the carbon price to a degree, but the design of those markets are to expand the scope to include the broader economic sector, and we go back to the MAC curve that includes: greening steel, greening ammonia plants, greening aviation and other forms of transport, and those ultimately have a higher marginal abatement cost.

At the same time, we have this potential solution of linking, and we also just have that corporates in general have set these commitments, and there is a large-degree of companies already engaged in the offset market.

The high-level figures are presently about 76% of global emissions are covered by a net-zero target, and 24% of global emissions are covered by a carbon-price mechanism. If you think of yourself as a pension fund and a universal owner of assets, whether it's implicit or explicit, you are exposed to the carbon price today and increasingly so, going forward.

We see this opportunity, particularly in the higher quality nature-based projects as an interesting diversifier in this transition to net-zero, because you can lock in the cost of carbon today. Typically, these projects will have a higher capital cost up front and then over time, receive these carbon credits that ultimately will be an important mechanism, whether that's through the voluntary market or compliance market. Interestingly, as an investor at the early stages of the project level starting there.

You also get this optionality because you effectively earn the projects and the underlying credits. You can decide what to do, sell them into the market, hold on to them, or use them potentially for your own offsetting needs f you have your own net-zero commitments that you need to meet in the longer term as well?

So, we do think this is an interesting time for asset owners to start wrapping their heads around this market.

Laasya Shekaran: Absolutely, something that's been coming up as you've been talking about this is this idea of these high-quality nature-based projects. So, you talked about deforestation and peatland restoration, and in a way, those are things that perhaps we can relate to a little bit more. We all know what nature is, you can always go out and touch it. So how does that fit into all of this, and Fraser, this is a question for you, what are you investing in, and how does natural capital fit into this conversation?

Fraser Green: Yeah absolutely, just following on and ultimately using everything Nick's expressed, looking at how we implement it in practice. In the UK as not just a market, but a location to do this, and why the UK works, and why we should be pushing projects like this in the UK. So Nick referred to, you know the two nature-based codes that are established here: the woodland code and the peatland code, and when ultimately using those in the UK, you're restoring certainly a clear majority of nature in any given circumstance, where you're taking lowlands, uplands, coasts etc. Particularly as you get further north and west, where there are larger areas that are perhaps less economically viable for alternatives. Then, there are opportunities to restore nature, so what we're trying to do, and again, this is going back to the linking that Nick made between the nature crisis and the climate crisis, is to use carbon finance to fund large-scale nature restoration in the UK. We started with a financial model, that we felt was able to bring these projects forward and deliver a financial return over the long-term to our typical client base as an asset manager.

Now that started in 2019, 2020, accelerated through the COVID period like a lot of these strategies, we're fortunate. I work in the real estate investment side of the business, and there's probably no coincidence that there's a land interest with this. So it shouldn't be surprising property investors are among those who are quickest to take this on board. But one of our real estate funds, that had an ambitious net-zero strategy, had already done a robust net-zero audit, understood well, but was conservative about how much decarbonisation they were actually going to be able to take forward over the course of the fund, recognised there was an offsetting need. There were always going to be unavoidable emissions, and decided that, using our model they wanted to do something impactful and proactive, and therefore acquired a large estate in the Scottish Highlands, roughly 1,500 hectares called Far Ralia.

Where we took forward a large-scale, woodland and peatland restoration. I think in total, we planted just over 1.2 million trees, and these are all native trees, this is nature restoration. This is not for timber cropping, so it's 10 or 11 native tree and shrub taxa planting them specifically where they would be expected to grow had they been allowed just to regenerate themselves.

The peatland restoration, we haven't taken forward yet, but we know where we want to do that, and we understand the model which allows it to work. We just haven't done that yet, so that fund obviously expects to generate all its offsetting needs from that project. Now, it could, of course, acquire those offsets off the shelf on an annual budget over the course of the next 20-25 years to get it to the set net-zero. But, of course, it is exposing itself to carbon price inflation, and there's obviously a lack of impact there, because they're not doing anything to accelerate the speed at which we restore nature by funding it now. From a financial perspective as well, they're fixing their cost of carbon by doing it today, ultimately the vast majority of the capital is being is budgeted and spent today.

There are costs in running the project through the decades, but they are de minimis relative to the initial capital outlay. So, there's that capital cost control, you wouldn't have if you were again exposed to the open market. So they took the decision to do that, bought it and you/we still have that asset, and it's been a fabulous experience for us to be able to acquire something, set it up, and set the baselines for what we want to improve from a co-benefit and impact perspective, biodiversity, water, quality, air, quality, water retention and all those ecosystem services which are so important to nature-based solutions as a means of furthering net-zero agendas, so we've done that.

We want now to launch a standalone strategy, which will ultimately do this in isolation rather than being an add on to an existing fund. So, we're trying to raise capital now, the objective of launching this later this year, but predicated on the same model of woodland restoration, peatland restoration. We're looking specifically at doing it in Scotland for various reasons that we can come onto later.

Laasya Shekaran:, A lot of what you've said touches on many of the topical in the pensions industry at the moment, so obviously net-zero and climate change in nature, but also this idea of investing in the UK and specifically local investing. It sounds like you have to understand the region and the local area quite well to do these projects. How do partnership models fit into all of this into some of these ideas?

Fraser Green: Going back to what Nick was saying, there is a sense of a flight to quality obviously there has been a reputational issue with the international voluntary markets, and there's a shift to what is perceived to be higher-quality jurisdictions like the UK. As you say, it's local, it's where are your supply chains, where are your effects? The CO_2 in the atmosphere is a global problem shared by everyone, but if you are setting up projects, you want as many local operations as possible, and that's the shift we're seeing with UK corporates, and indeed with other countries. So, for us,
to fit those criteria of quality and integrity, it is absolutely essential. It can feel sometimes like we're constantly learning how to make a high-integrity project, and what do you have to do to ensure you're going to pass muster, because the greenwashing risk ultimately is so high, and this is the reason why we're seeing a shift from international markets to the local markets. So, what we've done and as our strategy has evolved and is focused now in Scotland, as I explained.

One of the main reasons, aside from the fact that that's where our experience is, we're also a Scottish business. That's where my, and other members of the team's experiences lie, but we formed a partnership with NatureScot, which is the Scottish and Nature Conservation and State Agency.

It's called the Nature Investment Partnership, and they set this up after the UN's Conference of parties (COP26) in 2021, in Glasgow. They set this up with a group called Palladium, who are

project developers internationally, and then we joined ultimately as the investor partner to be able to deliver the pipeline of projects they have been generating. So, ultimately this is a top-down strategy coming from the state, who as you would expect, have an idea of where they want to focus natural capital investment. Where it's needed most is driven by under-threat habitats in need of restoration, or large areas of particularly degraded peatlands, or where there is flood risk downstream for communities. We're looking to bring these projects to bear where they can retain water or alleviate flood damage downstream, or where they're deliverable. We're adding to a scaled area of landscape and habitat restoration, where other private or charitable organisations are already doing rewilding or similar projects like in the Cairngorms. So, we have this top-down strategy, it's something that's trying to be delivered across Scotland, but we've also realised, we can't go into rural areas, albeit with the best intentions and start talking down to local communities about what they we perceive the need. What we've consistently tried to do is to tap into what grassroots organisations that are already doing, and have ideas about what they want to do. They already have projects they have taken through the development stage. They understand what it is required, they know how much it costs, and they know the scale, how many carbon credits, and which habitats they want to support. We're working with them, but ultimately, they're in most respects leading, and we are following their lead because they know best, and in most instances, they'll be the ones that take the projects forward. We'll be funding them, but it's local people, leading other local people, providing the jobs to the local communities, deciding what works best for them and us following on with the investment. Now, clearly, we have set parameters for how it's done, and we need to see a return on the capital to our investors, but we've learned ultimately if you go in as an Edinburgh-based or London-based investment professional, who's never met anyone in a specific part of rural Britain, and start telling them what you want to do, we'll consult with you as a tick box exercise, then you're going to fail, and ultimately, your other partners aren't going to want to work with you. It's essential to work with the people on the ground.

Laasya Shekaran: I think that's so important, and it's a nice story, actually, about how working with grassroots organisations isn't at odds with getting returns, it's actually helping with the success of the project itself.

Fraser Green: You have to consider every aspect of quality and integrity in the project. You have to think, not just about the right tree in the right place, but you have to think of everybody involved around it, and you have to involve them from the outset. Obviously a part of that is not acquiring freeholds, but working with existing landholders, and being able to prove it can be done without being a landlord, you can bring this project finance in, deliver a suitable return and generate all the impacts and co-benefits, but you don't have to make that expensive capital outlay. However also become a landowner, and in some respects start that journey with the community. As something they initially mistrust, if you're able to say, we just want to work with everybody who is already there, then it makes for a more straightforward process.

Laasya Shekaran: Yeah, absolutely, I think there's some interesting theory behind all of this that makes a clear investment case. If you can lock in the price of something that's going to go up in value by a lot over the next few years, just from a pure investment perspective it makes sense to think about it, but also, this idea of investing in local impact and investing for nature and helping to meet your net-zero goals, all of that makes sense, too. If we look at what we can actually do in the real world. What is the opportunity set like specifically in the UK, are there enough opportunities for asset owners to actually do this?

Fraser Green: Yeah, we absolutely think so. In terms of the pipeline of projects in Scotland, some of the high-level analysis, which, of course, doesn't take into account, just the willingness of landowners to take it forward or just the resources anyone can bring to bear in the short

term, but we're talking tens of billions of pounds worth of potential investment, just to give you a soft sense.

NatureScot, have developed a cluster strategy to identify the areas they want to aggregate these projects in and the best progressed clusters. They've spoken to virtually every suitable landowner within them, and found that the hit rate of at least having a conversation that leads to a further conversation is roughly 50/50. I think there's maybe three of the clusters they've done that assessment with, and every time it's basically half the landowners are at least interested in taking it forward.

So if you expand that out to all of the areas of Scotland that are appropriate for this, and to be honest, that is, the majority of Scotland, because they know most of Scotland is under rough grazing, or deer forests or grouse moors, then that is a significant opportunity set, we are looking to raise roughly £100mn. We know what that portfolio looks like for us to invest in terms of scale, and it really isn't a huge amount of land, it sounds like a lot of land in terms of hectare, but in terms of the opportunity set, it's not massive. So, we genuinely perceive it to be a wide and ripe opportunity from a resource perspective.

Laasya Shekaran: Well, this has been a fascinating conversation, and it's helped me understand carbon markets and natural capital, specifically how the UK fits into all of this. I think, anywhere where the UK is perceived to be higher quality for any market is a useful thing for UK investors to explore. Before we finish, it would be good to find out what you would want listeners to take away from this conversation. So, Nick, I will come to you first, and ask what would be the one thing you wanted listeners to take away ?

Nick Gaskell: Yes, I would say it's to take a step back, and look at how carbon has performed over the long-term, particularly in markets that are more established like the EU ETS Compliance Market, and has a track record now, and then to consider what the role of that is going to be in an energy transition, even if we don't get to net zero? One of my pet peeves is the term ‘net zero’, it's ultimately a long-term objective we're trying to get to, but to achieve anywhere near the kind of decarbonisation levels we're going to get required to even get close to net zero, carbon pricing is going to be important along with other policy mechanisms. I think it's just to take a step back, see how that's performed, and some of the more established markets, what is currently existing today, which is this price around quality that we're kind of seeing, and then what's the role going to be going forward, that would be the main thing for me.

Laasya Shekaran: Brilliant, so take a step back and start understanding what is going on here. Fraser, what about you? Same question.

Fraser Green: Yes, I suppose, similarly to Nick, but more from my perspective on the practical side is for the market to understand not all carbon credits are alike as much as anything. And if we can show with our model that a lot of the misconceptions around carbon can be managed, and ultimately, you can find a way for everybody to benefit – landowners, investors, local communities, and biodiversity – and understanding just what the upsides of these various ecosystem services are, to catchments and communities downstream. Unfortunately, there is just too much misunderstanding, and everything tends to get tarred with the same brush, and we need to improve and understanding of the sector.

Laasya Shekaran: Absolutely, I agree, it's clear carbon markets aren't going anywhere, and they're going to be a necessary part of the decarbonisation journey, the journey to net zero, if you don't mind me saying that, Nick, I'm going to have to find out why ‘net zero’ is your pet peeve at some point. So it makes sense for asset owners to really understand this, and

understand what the opportunity set is, to understand not all carbon credits are equal, and equally, see there are so many other positive impacts you can have as well, not just returns, but local community impact, which is something I know lots of pension schemes specifically are thinking about. Thank you so much both for joining us today. This has been a fascinating discussion.

Listeners, if you want to make sure that you never miss an episode, hit the follow button, and remember that you can find us wherever you get your podcasts. Thanks for listening, and we will see you on the next one.