TRANSCRIPT

PENSIONS FOR PURPOSE PODCAST SERIES 2, EPISODE 2

Climate Solutions

Laasya Shekaran: Hello, everyone and welcome back to the Pensions for Purpose Podcast. I'm your host, Laasya Shekaran. Today, we are going to be talking all about investing in the energy transition, and to help us dig into this is our guest for today's episode, Mark Burrows, the Managing Director of Quinbrook Infrastructure Partners. Quinbrook is a value-add investment manager specialising in energy transformation. We'll be learning today that covers an awful lot. Now, in addition to Mark, I'm also joined by my Pensions for Purpose co-host Richard Giles. It is brilliant to have you on the Podcast with me, Richard.

Richard Giles: Hi, Laasya, it is great to be with you. It's the first time we've done this together, and I'm very excited to be working with you.

Laasya Shekaran: Let's go straight into it. Mark, before we start delving into the detail of what investing in the energy transition means, maybe you could tell us a little bit about yourself and why you became interested in this area?

Mark Burrows: Yeah, sure. First of all, thank you very much for having me on. It's great to be here. From my perspective, I've always been interested in the energy transition and first started working in the space back in 2008. There have been so many changes since then, and I think all for the better. I'm hugely excited to talk through examples today and some of the changes.

Laasya Shekaran: Brilliant! Was it unusual entering an industry in 2008, when obviously there was a global financial crisis?

Mark Burrows: I think that's probably right. My job is to speak to pension funds and insurance firms around the world and see who's interested in investing in this space. I use these numbers quite loosely, but I think there were probably about 30 investors that would have taken my call back in 2008, and today there are many thousands that would take my call, and that's a fantastic change that's taken place in the market that I actually think we should all celebrate.

Laasya Shekaran: Yeah, that's such a nice story. Because so often, when we talk about climate change or the energy transition, it always feels very doom and gloom. But that's such a positive story about how much progress has been made.

Mark Burrows: I agree with that, and I think that is going to continue to develop. I joined Quinbrook back in 2016, right at the start. I think energy transition to us is far more than just the movement from fossil fuel to green energy. There are a whole number of different examples that are so important for energy transition, such as the transformation of the heating industry, the transformation of the transport industry, and the transformation of other industrial sectors. Data centres, for example, the decarbonisation of those as well. Also, renewable energy in its own right. Just given the fact that it's an intermittent provider of power, the wind doesn't always blow and the sun doesn't always shine. What this means is that there's a real need for other services as well. Other forms of infrastructure to support this build-out of renewable energy. I'm thinking grid support, batteries short term, but also increasingly longer-duration batteries going forward as well. From a grid stability perspective, we obviously don't want the lights to go out. That's the most important thing. We don't want blackouts. If the sun doesn't shine and there are

blackouts, that's not good for consumers or for industry, and it's no good for investors either. So we look at these assets called synchronous condensers. A synchronous condenser is just a big spinning wheel. It can weigh between 250 and 350 tonnes. It helps to stabilise the grid, to keep the lights on, and to avoid blackouts. There are a number of different areas within an energy transition that I've personally found interesting and loved investing in as well.

Richard Giles: Great Mark, thanks for giving that perspective. I think a wise person once said, we overestimate what we can achieve in the short term, but we underestimate what we can achieve in the long term. So giving that nearly 20 years' experience of being involved in this sector is a good reminder of how much we have achieved.

Richard Giles: I wanted to dig a little bit more into the types of opportunity in this transition that you're seeing, the types of investment opportunity around the world where you look, what sectors you're involved with, and maybe how that has changed over that period you've been working in the energy transition space.

Mark Burrows: From our perspective, the markets we really focus on are the UK, the US, and Australia. Certainly, if you focus in on the UK market, we at Quinbrook, and in previous roles, I have personally been investing in the space since 1998. Now in the UK market since 1998, there have clearly been a lot of macroeconomic changes. There's been a lot of events. Also, different incentive regimes have been put in place to drive investments into, yes, clean energy and luckily, all the other sectors we have talked about as well that the grid supports: batteries, other forms of industrial decarbonisation, transportation decarbonisation. I think the thing to mention here, certainly from a power perspective, is that the cost of building new renewable energy power is now cheaper in so many locations than new fossil fuel power, and that is what has really driven this.

Laasya Shekaran: I think it's a really important point when you think about the financial and economic aspects of this. Because yes, you've got the actual thing that you're investing in, and that's attractive and it gives you good returns. But then, especially when a lot of the time we're talking about large, long-term asset owners, ones that might consider themselves to be universal owners, that broader economic environment of a stable economy relies on energy transition that's successful, relies on a good social foundation, and investments that also help give you that double benefit of the systemic level of financial returns and the actual asset itself and its returns.

Mark Burrows: Yeah, I think that's right. If you think of sustainability from a regional perspective in relation to the metrics I just talked about, the truth is that investing in renewable energy and the associated infrastructure to enhance its build-out requires significant capital. These assets are not cheap. Now, if there's a government drive - whether through pension funds, which I'm sure we'll come on to - towards investing more locally in climate and renewable energy, there's a need to build these renewable power assets in the regions. This creates a potential situation where significant pools of capital flow into the regions, exactly where it's needed from a renewable energy perspective. So, climate investing and regional development are completely intertwined.

Laasya Shekaran: Yeah, that makes a lot of sense. I think it would be helpful if we could discuss what these investment deals look like. As you said earlier, there's much more to

investing in the energy transition than just building wind farms or installing solar panels. There are batteries, the grid, and even things like synchronous condensers. Perhaps you could talk to us about the deal flow and the types of deals you're looking at.

Mark Burrows: Of course. From our perspective, it's a broad spectrum across the energy transition. There are different things we can invest in that we find interesting, and across our 25 years of investing in the space, we focus on long-term contracts and related factors. To give you a simple analogy of what a synchronous condenser does - think of a peloton of cyclists cycling uphill. To maintain the same distance from the cyclist in front, the second rider must pedal harder uphill and brake more downhill. Similarly, a synchronous condenser regulates the grid, ensuring stability and avoiding blackouts.

So, we're building seven of these synchronous condensers, across the UK. We've got four in Scotland, two in Wales and one that we're building in Kent. They are interesting assets. They're unusual assets, but as you said yourself and you picked up, I think it was Richard that mentioned that they've got contracts with the National Grid. So, you must be available to receive those long-term contracts and to receive the inflation linking. We talked about some of the nature-based benefits that can be available to some of our assets. Another asset that we like is battery storage.

Now, when you need to build a renewable energy asset or an associated asset, you need grid connection, you often need water. The perfect bedfellows in this regard are old thermal-fired power stations - coal-fired power stations. There's one particular power station in Uskmouth where we've created local jobs. We work with a local contractor. But most importantly, there's the there's the grid connection: and when the grid connection is in place you're set to install as you need. What is also important is transport: you want to minimise the effects on the local community, while you're building your site. This particular site has an old railway line that's associated with it and there's a significant amount of carbon savings in bringing in construction and what you need for construction on site via that railway, as well as it minimising damage to the local community.

So yes, we're building batteries, we also like to build big solar farms alongside batteries, because they can complement each other. So, when the sun's not shining, you can release power from the batteries and when the sun is shining you can charge those batteries. So, there's several different areas and parts of the market, we're increasingly looking at: the decarbonisation of transport, but actually more broadly from a Quinbrook perspective and you would have seen the announcement from Keir Starmer earlier on Today about the investment that's going into AI in this country. The demand for data centres, as a result of this increase here, and all over the world to be quite honest, is phenomenal. But then you layer into that the need for these things to be decarbonised, there are great opportunities there as well, and we're certainly looking at several in the US. So, it's a huge, interesting space with lots of areas to invest in.

Richard Giles: Great examples Mark, I love it when you talk about cycling, that's a topic I could talk all day about.

Laasya Shekaran: I thought you would like that one, Richard!

Richard Giles: I think it's the first time someone has spoken about cycling on our Podcast, so I'm pleased about that. Also, definitely AI, which is hugely energy intensive, so joining up what's happening on energy policy with AI seems to me to be a critically important issue. In terms of scaling and where we are in terms of the scale of the opportunity and the trajectory that we've been on and how much more is needed to power through this transition that we're on. Mark, what is your sense of somebody who's been involved in this for many years? What's your sense of the scale of where we are today and what needs to happen in the future?

Mark Burrows: I think we're about 50% renewable power in the UK. At the moment, there's obviously a long way to go. The current Government's policy is to have full clean power by 2030, that requires an investment roughly of £40bn a year, which is an increase of three times what we're currently investing. There's also a need for around a £60bn investment into the grid. I think the point is when you're looking to reach net zero, which is obviously the later target, there's just far more that you need to invest into. Yes, power does a lot of the heavy lifting, but clearly, it's the grid, it is the batteries, and the decarbonisation of transport. It's decarbonisation of industry, and all these other sectors and of course, increasingly, as you rightly mentioned the decarbonisation of anything related to providing services for AI, for the data centres. Of course, these data centres need water as well. So, a lot of different requirements are needed. If you were to look at other markets, certainly the US market on a global basis, the numbers are far, far higher. A lot of countries are way behind the UK in their transition to a greener power future.

Laasya Shekaran: On the net-zero point, we talk about reaching this net-zero goal by 2050 goal, but we've also got this interim goal to half emissions by 2030, which is coming around quite quickly, quicker than I feel comfortable with sometimes. Does that mean a lot of investment is needed over the next five years just to get to that point?

Mark Burrows: Yeah, a lot of investment. Yeah, just right across the board investments needed. I think the Government is looking into different solutions, there's a lot of energy going into hydrogen energy, talk of carbon capture and storage as well the electrification of the heating industry. There's also the future for the EV market, how big is that growth?! How are you going to provide the power for that growth? Is there going to be a doubling of the electricity requirements in this country, as well as the need to green that electricity. There's so many different dynamics and there's so much capital needed to go into it.

I think in the UK, I would bring it back to the fact that the capital needed is no longer to build just those large centralised power stations, and then just to send power across the UL, it is to invest that capital in those regions. Ultimately that's where the deal flow is coming from: the concept to have larger pools of capital going to the regions sounds like it could be the wrong way round, but it's exactly what's needed. Given that regional investing can complement climate investing, if that makes sense?

Laasya Shekaran: Building these big data centres in those regions, where there are perhaps big renewable power plants, would that help power them in a greener way.

Mark Burrows: Yes, could do. There are different ways some data centres can be powered, whether they're plugged into the grid, and they are sourcing their power through contracts, which allow them to show they're sourcing their power from renewable energy, or whether they

have a just literally a cable, a direct wire going into the data centre, to provide them with renewable power. There are absolutely different ways of doing it and as the market develops and grows, we'll get better at providing these data centres with the power they need. But one thing is almost for sure, the increased need for power from these data centres is just going to continue to increase.

I suspect the amount of power these things are going to consume is quite scary for a lot of politicians around the world.

Laasya Shekaran: Mark, I wanted to get your thoughts on another area of energy, which is sometimes contentious, so hopefully you don't mind me asking you this. What are your thoughts on nuclear?

Mark Burrows: I think my thoughts in relation to nuclear are, it is the time it takes to get it up and running, which is the main challenge, as well as the cost, of course, but the two things are linked. If you just look at Hinkley that was consented in 2013, I think it was. That's probably not going to be up and running until 2030.

The next site, we think, will come through is probably Sizewell C, which received its consent the year before last, back in 2023. So, on that same timeline, if it does follow that timeline, that's probably 2040, before you're going to see it up and running.

I suppose the next sort of natural question is in relation to small modular reactors, and I think probably what we'd say is, yes, once they're out of R&D, you then can go and find the sites. You then can find the grid connection, which of course is particularly challenging now, in the current market, and at that stage you can go into planning. So, I think, from a nuclear perspective, especially if we're relating them to our targets or to Government policy, I think the main challenge we'll have is around time and costs as well, which are related to that.

Laasya Shekaran: That's a useful insight. Thank you.

Richard Giles: Yeah, we are Pensions for Purpose, so just to bring this back to pensions for a minute, the investment opportunity for pension schemes Mark, where you're working with UL pension schemes to invest in some of these opportunities, how would you see the pensions landscape in the UK, which types of pension schemes are you finding are open to these opportunities?

Mark Burrows: I think the local government pension scheme market for many years are, I don't want to say they're ahead of the game, but they've done a fantastic job in setting their own net-zero agendas at a pension scheme level and then investing in the space.

Now, I think it's a £400bn scheme. Give or take at the moment there's obviously been pooling that's taken place, which thus far has not been mandatory under the pensions review. The consultation is suggesting that goes to mandatory pooling.

Then it's a question for the pools, assuming that goes through, ultimately to continue this investing in net zero based on the conversations with their underlying investment pools and then allay to that is the desire to invest within the regions, and to secure deal flow through the local authorities to secure deal flow through the combined authorities and to secure it from the mayoral authorities.

I think that's closely aligned with what we've been discussing, so do I think that the local government pension schemes through their pools are going to continue to invest significant amounts of capital in this area? Yes, absolutely I do, I think there's a long way to go, a lot of momentum and they're going to do it right across the spectrum: in power, in grid batteries, transport and heating, the whole nine yards. That's just where the need is and also that's where, in our view, the returns are to be had.

I think the consolidation of the defined contribution market, is an interesting one to watch, clearly Richard, this is perhaps more your expertise than it is mine, but just structurally, how they can invest into the space, the type of vehicles that they would need to come through to do so in the UK.

Then it's a question as well of you've obviously got regional investing which does complement climate investing, that makes a lot of sense in the UK. But also, you've got climate investing, which is just broader than that as well. So, you can invest in the energy transition from a global perspective as well.

First of all, the region that you're going to invest into, depending on what happens after the pensions review process, and then it's the structure that you're going to use to access some of these assets. Your return profile as I say whether you're looking for value add, or you're looking for core, or core plus.

And then it's the sustainability metrics that are important to you as an organisation that changes from organisation to organisation, as well as pension fund to pension fund.

Laasya Shekaran: I think that structure is really important, because, as you say lots of these local government pension schemes have net-zero targets, but that's also true of many DC pension schemes, of many corporate DB pension schemes, some of the bulk annuity providers, or actually all of the bulk annuity providers, so finding a way for them to also invest in the energy transition will be really important going forwards.

I wonder about how all this also fits in with just the broader policy environment in the UK, because we do hear a lot about clean power and about energy and being a leader in this space, how could this UK policy environment impact investors that are thinking about investing in the energy transition?

Mark Burrows: I think, from our perspective, or just my view is there's two relevant points of Government policy here. One is the pensions review process that's getting underway at the moment, I think the consultations need to go in by the 16 January.

Events team, Pensions for Purpose: Yes, by the time this episode comes out it'll all be submitted.

Mark Burrows: Well, there you go! It's all about how it feeds through, are the LGPS mandated to pull how the DC Market is going to move going forward, the time it takes for them to pull further, or the time it takes for the DC Market to work together more closely as well, that's going to determine the speed of the capital that goes into this space and we've talked about the short-time horizons to get into this space. People are going to have to go pretty quickly to meet these timelines.

In addition to the pensions reform or the pensions review that's currently underway. It's about those targets that the Government has set. It's about the areas of the energy transition that they're trying to incentivise and are they the right areas. Are they the areas that's going to get us to those targets.

Obviously with clean power by 2030 in the US. You've obviously got the current legislation, which is the Inflation Reduction Act. The new President coming in over there as well. So there's all sorts of different things that can affect this going forward. But clearly we need to go harder and faster if we're going to continue to meet those targets. But I think the point that I would probably make again is just that the two things are linked, the Government policy, the pensions review, climate investing it all hangs together well. I think in that regard I'm pretty positive.

Richard Giles: Yeah, it's good to be positive, and I think there's a lot of talking in the pensions world about transition plans. So I think this is quite likely to be, whether it's the regulator, or the Government encouraging, or mandating pension schemes to put in place a transition plan, which will be another accelerator, I think for investing and moving beyond some of the data and disclosure to investing into this transition. I want to finish Mark, if there's one thing you were to leave our audience with one message, what it would that be?

Mark Burrows: It would be split into two actually, if it's just one key message.

Laasya Shekaran: What were you about to say? It's not going be one, it's going be more than one.

Mark Burrows: Well, I was going split the one message into three parts, but it’s not necessarily entirely related. No, the key message is that, regional investing complements climate investing and from a pensions perspective, that's our greatest chance of meeting the targets that the Government has laid out for us is that sort of recognition that actually, the two things are well linked, and we can all make a lot of difference and generate some very attractive. Why not say that, some very attractive investments going forward as a result of the market and the way it stands.

Laasya Shekaran: Thank you so much for joining us today. It's been an absolutely fascinating discussion. I'll certainly be taking away just how varied the opportunity set is when it comes to investing in the energy transition, and we really like your message about how we need to make sure that the way we think about pensions and about energy transition aren't sort of siloed, but are joined up together. So lots of food for thought for all of our listeners.

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