Simon Cooper:

Back in 2015, Mark Carney, then the Chairman of the Financial Stability Board and the Governor of the Bank of England gave a speech to the London insurance market, warning of the strategy of the horizon. The tragedy of the horizon was essentially the risk that the insurance market and financial services in the world was heavily exposed to climate change risks and that time was running out to deal with global warming. The precursor to this speech was the Financial Stability Board looked at the global financial crisis and asked themselves what's the next possible big risk that we could be exposed to, that we are currently unaware of? And they identified climate change as an area where the world was potentially sleepwalking into major risks that once they crystallized, it would be too late to actually do anything about them. This was a quite a sobering speech with the aim to make sure the financial industry, as a whole became aware of the potential size of these risks. The fact that they may need to disclose those risks in the future and companies should need to disclose what they're omitting today, but also what their plan to transition to net zero would be in the future. If the world does fail to transition to a low carbon economy, the current projections are that temperatures by the end of the century will rise to just under three degrees centigrade. Current estimates are that the economic hit of a temperature rise of that would over the long term, make the challenges caused by COVID pale into insignificance.

Erick Gustafson:

That's the voice of Simon Cooper who leads the Oliver Wyman Forum Climate & Sustainability Initiative. In the interview you are about to hear, Simon gives a perspective that hits at the core of addressing climate change. It's a perspective that isn't a secret, but it's not getting the buzz that it should. And that is if we really want to reduce the amount of CO2 we put in the atmosphere, there has to be a change in how industries are funded. Meeting the UN's sustainability goals means the global finance sector redirects capital from carbon producing manufacturing and products to carbon neutral or negative ones. Welcome to This Moment Matters. I'm Erick Gustafson. In our conversation with Simon, we start with the idea of the central role that the finance sector has in dealing with climate change.

Simon Cooper:

The financial services is at the heart of change, and this is why regulators and governments are using financial services to drive change. Finance is required by every company. They need to borrow. They need to have investment to fund their business and grow. So it's their lifeline. If the person who's providing the finance is asking you challenging questions about your environmental impact, you better have an answer for that. And if you can borrow money more cheaply because you've got a good answer to that question, then you're going to get a good answer to that question. If you can't borrow money at all, because you don't have an answer to that question, well you're in trouble and you better get one. So if I'm a car company and I'm only working in high emissions internal combustion engines, I'm going to find that financial firms are going to be asking me about my EV strategy and my lower emission strategy because they see the road ahead and they see that electric vehicles are becoming far more popular. And that internal combustion engines are likely to have more taxes applied to them in some countries. They're not even going to be able to be sold in a few years time. So those car companies see a strategic issue and the people they're getting money from are asking them significantly challenging questions about their strategy. So they have to come up with that strategy and evolve. If I'm a steel industry, very high emissions, I recognize that that's under pressure. Things will need to change, and I'm going to need investment to either buy new arc furnaces or to invest in negative emissions technologies. And that money has to come from somewhere. That comes from finance. So essentially financial services by understanding the risks and understanding the opportunities, asks their clients the difficult questions. And leading firms are providing advisory to their clients as well in terms of these are key issues and what

we need to do. And through doing that, they're driving change in the real economy. So that's where financial services' decisions and questions is actually lowering the carbon footprint of vehicles, it's lowering the emissions from heavy industry, it's making our businesses more efficient, et cetera.

Erick Gustafson:

You have a PhD and you were interested in robotics. So what drove that interest at the outset of your education?

Simon Cooper:

That's a very good question. It was just interesting and cool and new. So I was an engineer as an undergraduate and looked at a few of opportunities to pursue that a little bit further. And there's an area called the Robotics Research Group that sounded very interesting and forward looking and I got involved with it that way. So it was really sort of applying some of the skills I'd learned in something that was at the time, very forward looking.

Erick Gustafson:

What was the forward looking bit at the time? This is in the early 90s?

Simon Cooper:

Yeah, that's right. So the research group that I was a part of had developed indoor mobile robots. So robots that you could plant in a room and they could find their way around, map it out and then travel around it quite nicely. And they wanted to take that outdoors. And the outside world is far less structured than a typical room. It doesn't have nice flat walls and 90 degree corners. And so it was the sort of essentially the first part of developing autonomous vehicles. That was the plan, to develop the navigation system so that you could have eventually cars driving themselves around.

Erick Gustafson:

One of the things that's interesting is we talk about driverless vehicles or vehicles of any kind, but ultimately the idea that the internal combustion engine is going to go away. The notion that it's going to go away completely is for those of us of a certain age, it's almost inconceivable. If vehicles are electrified, almost where that electricity comes from is the most important element. Can you talk to us a little bit about the industrial design process and how we are getting to a place where electricity is sort of the dominant driver of development and what that means for climate related changes that are working their way through modern manufacturing?

Simon Cooper:

I think that electrification does underpin our transition to a low carbon economy. If you have an electric vehicle, you buy yourself a Tesla. If that's powered, if it's charged from solar panels, it's absolutely wonderful for in comparison to an internal combustion engine for the climate. But if your electricity is generated from coal fired power stations, then essentially it is still slightly better than internal combustion engine, but not a lot. So the source of your electricity and the use of that electricity is absolutely fundamental to our successful alignment with Paris. And we estimate a third of the gap between today's trajectory and where we need to be by the end of this decade will be driven by increased electrification of our power supply. Basically it will, and it does run through everything that we need to do. So the cement industry, the steel industry are big emitters of emissions, and there's a lot of heat used in the process to generate them. That at the moment is often fossil fuel driven heat and needs

to be changed to electric arc furnaces. The way we heat buildings in the UK, the government's just release the sort of net zero strategy and a core part of that is to replace gas boilers with electric heat pumps. So to move to electricity, to heat our homes rather than gas. And the heating and cooling of building and constructions is another significant emitter. So some people say the strategy needs to be electrify absolutely everything. There may be other technologies. Who knows how important hydrogen is going to be. And we may be driving around in hydrogen fuel cell powered cars in 30 years time, rather than battery electric vehicles. But electricity runs through absolutely everything, and unless we start to produce more from renewable or low carbon sources, so nuclear power, again is something that may be a big source in the future, although that has its own issues. And we electrify everything that we need to, if we don't do that, then we are not going to get anywhere near limiting temperature rises to what we want to do if we're aligned with Paris.

Erick Gustafson:

So Simon, your career path, you're educated in robotics, you joined a financial services consulting firm, and you really sort of drive into financial services consulting. And now you're focused on the impact of business processes on the climate, and trying to understand, really dig in to what processes need to change in order to have a more positive impact on the climate. How did you get to this place where you're sort of transitioning from more or less standard financial services consulting into something that is truly innovative? It's almost hard to articulate to individuals what the area focus is, but how did you happen on it? How did Oliver Wyman react to you bringing the idea to them?

Simon Cooper:

Well, I think, as we said, I've been here for a long time and one of the reasons why I've enjoyed my time, I am still here is that the freedom that you have. If you have ideas, if you have a passion and can make a case for it, then the firm has always been willing to let me pursue that. And so I've always been fairly purpose driven. I've supported a lot of social impact work and helped to develop that as an area in the UK and felt that climate was an area that both I like many, many people, nothing different was very passionate about. But wanted to sort of re-steer my professional life to working to sort of contribute to hopefully solving that as a problem. And again, I'm in no way alone. Lots of people have been working this within Oliver Wyman for way longer than I have. But essentially, I took a leave of absence, handed over my previous role and said that I wanted to focus on this. And again, the firm was very supportive. So I have two areas that I work on. One is very much related to financial services and helping our clients to understand, measure and manage climate risks and manage their transition to low carbon, which is going to be a really important thing for the world in general. But also I work with the Oliver Wyman Forum, where our goal is to identify where some of the key issues are and what's inhibiting action, and then bringing policymakers, private firms and third sector together to try and solve those. So two strings to the bow, both very interesting and I think they do come together. The insights we get from the forum work and the Climate Action Navigator do feed into our client work.

Erick Gustafson:

And our clients are learning from your work too. They are, I think, understanding better, maybe some market challenges they face, or maybe some market opportunities they have. Do you have examples that you can share with us around those sorts of learnings?

Simon Cooper:

If I think of our financial services clients, one of the things that they're being asked to do by regulators is to understand and measure the level of climate risk that they face over not only over the next couple of years, but until mid century. Because obviously things like physical climate risk may take a while to pan out so that we help them to develop those capabilities and to embed them in the way that they're doing business. And by doing that, they're identifying pockets of potential winners, pockets of firms and customers who may struggle, both because transition will put stresses on their business models. Or of course, if you own real estate and your next to a river that might flood with increasing frequency or next to the coast, where there might be erosion or in an area that's exposed to cyclones, then the physical risks to your property and therefore its value are going to be potentially maybe very heavily impacted. And the important thing there is that once, let's call it a bank, understands those risks, they can do something about it. And yes, there is an element of, they need to think about where their lending and the money needs to be safe, but on a more positive note and the opportunity for the banks is really, okay, these companies need to transform their entire business model. We can help advise them and we can help fund them. So we can help that company adapt and to be healthy in the future. And we can support them along that way and increase the power of our relationship. For real estate that's exposed to particular risks, we can help those customers to become more resilient, put up defenses, change the way that they ensure the property, potentially move if the property is going to become uninsurable in the future. So climate change obviously represents challenges, but it represents significant opportunities as well. And we're seeing things like energy companies are looking at how they can change mix from full fuels to renewables. And some of the early movers there are in a really nice position in terms of the technologies and the reputations that they have. So there are some leaders now, there are some firms that are potentially starting to struggle as well, but really I think the key is that everybody needs to essentially recognize that climate is a problem, both the physical side of it and the transition risk side of it. So when policies are going to be introduced to incentivize change, but if you recognize that head on, then there's time to adapt. And there is time to actually use it as a business opportunity as you transform to a low carbon economy. It's not just a risk.

Erick Gustafson:

Yeah. You've said that sustainability is no longer a choice, that employees, customers are going to expect it. And that if companies don't really kind of meet those expectations, there are these economic risks. It's one thing if you are a bank and you're lending to real estate that's exposed to climate change. It's something all together different if you are a complex manufacturer to really understand not only the impact of what your product is on the environment, but maybe the component parts of it that you are dependent upon, whether it's your energy supply, your other suppliers, the transportation, perhaps to market of your product. All of those factors are incredibly complex. How is Oliver Wyman and the Navigator helping our clients to understand the broader impact of their manufacturing?

Simon Cooper:

Yeah, it is the identifying the drivers of your emissions as any type of firm is actually a real challenge. So there are what are called three types of scope of emissions. There's scope one emissions, which is essentially the fossil fuels that you burn yourselves as a company. Scope two emissions are the emissions that are created to generate the electricity that you use. And then scope three emissions is essentially everything else, both on the supply chain and the usage of your products. And the scope three emissions in particular can be a challenge to really identify what those drivers are. So the navigator that we've developed at the moment focuses on scope one and scope two emissions, and allocates those out by region and by industry, and also apportions specific climate actions to each. So identifies what needs to be done to reduce those emissions. In the next version, we're going to layer

insight into scope three analysis as well, which is essentially the emissions of the counterparties and people they're lending money to. So it's the usage of the bank's money or the financial services firm's money and how that then creates emissions. So we help them to understand those emissions of their portfolios and at a sectoral level, what would be a net zero pathway? And what does that mean? How do they have to change their portfolio? And for some firms that would be coal is under pressure as an industry because it's the dirtiest fossil fuel. So many firms are having, either have, or will have exclusion policies to not lend to new thermal coal mines and coal power plants. But the biggest impact that they will have is they can't just say, no, we're not going to lend to anybody anymore. And talking to one client earlier in the week, they're saying, "We've had a relationship with some of these firms for over 150 years. We have relationships with state owned enterprises for long times in those governments. We can't just say, no, we no longer want you." But what they can do is help those firms and those enterprises understand that they need to decarbonize, the steps that they need to take to decarbonize, and they can help fund them along that way. In that way, that's financial services is a real lever to change in the real economy. And that's what the governments or regulators are hoping for themselves.

Erick Gustafson:

Can you tell us in detail what the Climate Action Navigator is?

Simon Cooper:

Yeah, so the Climate Action Navigator is a publicly available web based tool. And what it does is it looks at the current decade and it projects forward, both expected emissions, if we follow the current trajectory. And the trajectory of emissions that we need to be on track or to get on track with the Paris Agreement and limiting end of century temperature rise to 1.5 degrees. So it's based on climate science, we use what's called an integrated assessment model as the basis for the tool. It's global, it splits the world into 12 regions and 23 industries. And importantly, it maps this gap between the projected and the target emissions in 2030 to 17 specific climate actions. So things that are needed to the move to low carbon electricity sources, the need to improve the energy efficiency of industrial processes, the need to reduce food waste and loss. So really it's this one stop shop of information where you can see the trajectory, you can double click on a region, on sectors, on actions and see their quantum, see their impact and understand a little bit more about the challenges and what needs to be done.

Erick Gustafson:

The Navigator reveals this gap between aspirations and reality. Have you in dealing with kind of the climate crisis and with energy crisis, seen any hard choices or any trade-offs just as of late that you care to kind of discuss?

Simon Cooper:

Well, I think it's all about trade-offs. I think the key is that the world reduces emissions whilst not sort of reducing the economy at the same time. So trying to find a way to keep growth going while doing this massive change in terms of how things are essentially wired. It's sort of fairly well known now, I think that to be on a track for net zero by mid century this decade, we essentially have to halve our emissions. We're actually, rather than doing that, we are on track to increase emissions, I think it is by 16% over this decade under current policies. So there is a massive task ahead. It's particularly hard actually if you think of some developing economies. So in Europe potentially, US, in a lot of geographies, we can change and it may be a bit painful, but it could be relatively risk free. In developing economies, you need to think about the stability of energy supply, you need to think about the economic growth and stability

of the country as well as bearing in mind climate is not the only game in town. So what companies are doing and governments are doing are looking at things like the United Nation's Sustainable Development Goals. So just, we need, what's called sort of a just transition to a low carbon economy. So climate is one part of a big jigsaw, and we need to make sure we're balancing all those things as we develop. And that's why one of the reasons, the 4 key themes of COP26 is about making sure that developed economies are providing the funds they promised to developing economies to invest in a secure transition to low carbon economy. I mentioned before, you have banking clients who have made commitments to net zero. They have heavy emitting companies that they have long and very valuable relationships with. And they need to broach that very difficult challenge of we've committed to this, we've got to do this. And at the moment, your business model doesn't fit out so how can we work together? These are things that we need to do together so that we can continue. And that's a very difficult discussion. I think one of the other big, big challenges is we're talking about transformation here. This isn't sort of just changing to lead light bulbs and buying electric vehicles for many companies. It is about investment in new technologies, regearing the way that they run their processes, regearing... many car manufacturers have spent years and years and years developing electric vehicles, and they're now starting to take off, but it's been a big expense and they're still not very profitable for them. And that was a big pump. And some of them did it because they thought it was the future. Some of them did it because they had to. But that's been difficult. And one of the challenges is, is if I've got a business model that seems to work now, you're telling me it's under pressure in the future, but the future's uncertain and not every government is behind this. And we don't know what the policies are going to be. And consumers say they want sustainable choices, but seem to be driven by price. And you're asking me to invest heavily, forego profits today for long term security. That's a pretty bold move and it is a difficult one for people to make. And that's why I think we need firms to be committed, but also finance to be committed and public policy and regulation to be committed as well, to create the environment where there's comfort, that there's stability. There's a sort of as much as possible, a known future, to enable people to invest with more confidence.

Erick Gustafson:

And the Climate Action Navigator can help reveal the path forward by teasing out the impact of particular processes, different forms of manufacturing and investments.

Simon Cooper:

Yeah, that's right. So our hope and intention with the Navigator is as you've mentioned, people recognize that there's a problem and understand that things need to change. One of the inhibitors is this is just a complex field. We've mentioned the uncertainty, we've mentioned scope one, scope two, scope three emissions, and trying to identify where these are from. There are lots of different dimensions at play, and unless you are very, very committed and can spend lots of time reviewing literature, reviewing models, thinking about things, then it can just be just too big and too diverse to actually get a grip on. So the goal of the navigator is to try and to pull all this information into one place, where possible use simple and consistent language, act as a single point of reference where we reference lots of other websites, et cetera, where people can go and get information. But be this one stop shop where you can look and say, okay, this is what is happening, this is what needs to happen, these are the key actions that need to happen and this is some information about them. And our goal is that that can get more people on the same page and can help to accelerate the dialogue that's needed both within industries, but across industry finance and policy makers as well. So try and get people's into a position where we can ... We know what needs to be done. Now, what should we do about it?

Erick Gustafson:

Simon Cooper is a partner at Oliver Wyman, where he works with financial services sector clients and leads climate and sustainability initiatives. This is the podcast This Moment Matters from Marsh McLennan. I'm Erick Gustafson. Thanks for listening.