

## Net-Zero Now: Chapter Five

### Linda-Eling Lee

When the Paris Agreement was first signed in 2015, there were actually very few investors who even knew what their carbon footprint was. Now, we've really come a long way since then, in terms of understanding what the different dimensions of risks are that are associated with climate change. We've also really come a long way to identify and measure where these different dimensions of risks could reside in an investor's portfolio. Now, of course, we also have a very clear goal that we're shooting for, is for an investor's entire portfolio across all asset classes to stay well under a two-degree temperature rise, preferably 1.5 degrees. But even as our understanding has improved a lot and how we measure investment risks associated with climate change has become much more sophisticated analytically, I think investors and companies are now running out of time to mitigate these risks. And they really need to urgently shift into a mode where they can affect large scale decarbonization.

And that's why you're seeing greater adoption among policymakers around the frameworks that are set out by the FTCFD, especially now leading into the COP26 this year, this was raised to net-zero campaign is gaining momentum across the capital market value chain. So, for asset owners, to investment managers to banks and more, you know, everyone is really setting a commitment to Race to Zero. Now, where the first problem lies with this, is that different assets and the different portfolio companies obviously contribute quite differently to that total portfolio emission. And each of them has a very different limit and opportunities in how much and how quickly, they can actually decarbonize. Every company is going to need to set its own net-zero commitment, its own path, which can cover all of its direct and indirect emissions, that spans across the entire value chain. But today, very few companies actually have set these targets.

So, for investors, the question is, you know, how do you actually implement a portfolio where the different parts within the portfolio don't actually have yet this commitment to get to net-zero? So basically, how can you project the progress that you need to make at the portfolio level, if you don't have any level of assurance that the companies in the portfolio are going to make these kinds of ambitious commitments and actually take concrete steps to reach those commitments? So that's a gap between investors who have top down ambitions to reach net-zero across their portfolios, and the bottom up view of companies actually taking insufficient actions so far, to realize their ambition. Well one approach was simply to say, "Well, I would like my portfolio to look like what it should look like in a net-zero economy, you know, really setting concrete target at that end state and then constructing a portfolio that really meets that preset target." So, we could illustrate this with what we would call an index linked approach.

Now, a second approach will be where, depending on what kind of investor you are, how widely invested you are, you may want to take a more active view in terms of how you'd maybe select just those investments in the companies that can really benefit more actively from the transition. And then you could then actively in overtime, overweight your exposures to a higher concentration of those companies. So, we would call this approach, choosing a net-zero glide path. And finally, we know there are a lot of investors who take the point of view of a large universal owner, whose portfolios reflect the full diversification of the world economy; they don't really have the luxury of diversifying away from any externalities. So, these investors believe in corporate change. They have to believe in corporate change in order to reach the desired outcome for their entire portfolio. So, the problem for them really is in

identifying the companies that are maybe the furthest from changing and maybe most in need of change, in order for the investors to actually meet their objectives have a net-zero portfolio. So, engaging with companies, that's the final approach that we will discuss. Let's start by talking about indexes.

### **Guillermo Cano**

When we talk about the transition to net-zero, we've seen that there are important elements investors should consider, such as minimizing transition risk, maximizing green opportunities, minimizing physical risk, and ensuring that companies within an index or portfolio are aligned towards a one and a half or two-degree trajectory. MSCI custom index capabilities can help investors incorporate these objectives in their net-zero index solution. Now, let's look at two potential index linked approaches that center around decarbonization as a way to achieve a net-zero transition. The first option is a periodic rebalancing towards lower emitting companies. So, let's examine a case where we look at companies along segments of higher emitters versus lower emitters. Over time, we're going to eliminate the higher emitters and start adding companies that are lower emitters. Now, the benefit of this example is that is quite simple. It only requires periodically updating historical carbon emissions data per investment. And the portfolio construction methodology that at each rebalancing date, shifts more capital from high emitters to low emitters, in order to achieve the desired annual decarbonization target. The challenge, though, is that over time, it doesn't necessarily shift capital towards companies that decarbonize themselves. So, it could lead to a manner of concentration. And this concentration is because it can be easy to remove those companies that are higher emitters. But perhaps there aren't as many companies that are in the lower emitter segment.

And interestingly enough, it could also be the case that some of the companies that have for example, green opportunities or green technologies, could very well be those companies that are currently in the high emitter segment. So, these increasingly concentrated portfolios capture an ever-smaller fraction of the market in the long run, and the most extreme scenarios could lead to a divergence between the net-zero portfolio and the broader market. Given that, let's look at the second option, shifting capital towards companies that are self-decarbonizing at each rebalance. These are companies that are reducing their emissions over time, even if they're still relatively high. We see that we don't wholesale remove or change the weight in some of these companies that are higher carbon emitters, we start changing them gradually over time. And this is perhaps a bit more challenging, as it requires forward looking estimates on companies, decarbonization pathways. But the benefit or the hope is that we would have a portfolio or an index that would have a risk profile more similar to that of the marketplace, while at the same time taking advantage of opportunities in green solutions. If you'd like to see how decarbonization and other ESG strategies would have affected the past performance of some of MSCI benchmark indexes, we have a tool, Index Builder, that will allow you to do just that, and much more. The takeaway here is that an index linked approach is a great way for investors to reduce the carbon intensity of their portfolios over time, while adhering to their desired risk and performance characteristics.

**Linda-Eling Lee**

Once an investor has decided to pursue a net-zero objective, it's important to define a glide path that helps them reach it.

**Samrabhu Rubandhas**

In order to define a glide path, there are three different variables one needs to look into. These are what investments should I look into in order to make it my portfolio closer to the net-zero objectively? What timeframe do we expect this transition to take place? And once we decide on the timeframe, then you need to be comfortable with the cost that you're going to incur for making that transition. That cost is not just the transaction costs that we will incur. It is also the increased return or the decreased return that we would incur as a result of making those decisions. And defining these three variables will then enable us to create a glide path. So, my objective now is to define how to get to a glide path using MSCI better one and MSCI liquidity metrics, to help you choose your investments, to evaluate the cost of different time horizons, and how do you make the tradeoff between time and cost?

And to redefine the portfolio glide path, we need four different things: time to net-zero, the opportunity cost, the gains and losses that you're gonna make and whether we account for a deviation and how the cost of transaction and how do we want to execute? Do we wanna execute monthly, quarterly, six months, annually? So, what is the transition we're talking about? We're talking about a beginning portfolio that has a very high temperature impact of 3.5 degrees. We're trying to get that to 1.4 degrees. So, what does it mean? I used an optimizer start with the starting portfolio and identified how much do I need to trade on this portfolio in order to make it compliant and what assets am I buying and what assets am I selling to achieve that outcome? While it looked very simple at the top level, once you zoom into the portfolio, there is substantial variation in the temperature of the portfolio. Some assets have as much as 10 degrees impact, some assets are closer to the 1.5-degree mark. I took the portfolio through our liquidity module. And then I said, as time changes how does costs get impacted? And you can see, if I do it instantaneously in one day, it's extremely expensive. On the other hand, if I were to do it over a year, it's roughly a seventh of what we started out with.

So, when I investigated further, I found that the cost of a large cap and a mega cap, on average is about half the cost that you'd incur on smaller assets. So, it's important to understand these assets. And if I have a number of these assets, and purely from a transaction cost perspective, my cost of transitioning is smaller. There is obviously significant skill in execution. And when individuals execute at the best timing, it is possible to do better than a very blind 100% selling of the asset at any given point in time. So, then we looked at sectors and we wanted to see, because the sector profile of the portfolio is changing quite significantly, for example, you're going from quarter the portfolio information technology to close to half an information technology, we are exiting energy stocks. You can see energy has a significantly higher cost. You can see healthcare has the lowest cost. And we would like to use this extra information in order to decide what to trade and when to trade. When we looked at the transaction costs over that time, we find that almost all of the sectors get closer to their lowest values around the three-month mark, except in energy. Energy tends to have a higher cost to our data, its kind of converges down at the two-year mark.

So, our conclusion at this point is we are going to transact around the three-month mark, except in energy. You're gonna transact large cap and mega cap first, and that can even be less than three months in the case of the portfolio that I looked at. And we're going to transition towards a net-zero

portfolio. So now when you look at the final portfolio, I have the, in blue, the final portfolio, and the temperature change impact for all the assets. And I have all of the assets that are hard to get out of to get to this portfolio on a 30-day transition plan.

### **Linda-Eling Lee**

Finally, we look at how investors can engage with companies evaluating their path net-zero, and whether they're ahead of or behind the curve.

### **Chris Cote**

Some companies are still debating whether to take climate risk seriously at all. These challenges bubble up through issuers up to the portfolio level. Given how widespread they are, there's no way for investors to simply optimize their way to net-zero today, it will take engagement and accountability as well. So where to start with engagement? As a first step, it might make sense to see what level of climate risks the companies in your portfolio actually face. At heart, this means greenhouse gas emissions, are they high compared to peers? Are these emissions from their own operations? Or are they embedded somewhere else in the supply chain? Another indicator could be who the decision makers are related to climate risk. If it's not the board or C-suite executives, why not? And on performance, what's been happening recently with emissions? Has the company been reducing its greenhouse gas emissions over the last three or four years say? Or have they been growing steadily over time? If companies have set climate targets at all, how ambitious are they? And how credible? Is the strategy to reach them? Are solutions to decarbonize today already available or are they banking on someone else coming up with a breakthrough in 2045, the technological moonshot to save the day at the last minute.

Finally, taking all of this together, are companies investing today in ways that help them reduce their climate risk now, and in the future? A lot of companies have 30-year capex plans, so investors had better start engaging with them. Now, if we take a look at a company in our sample portfolio, we might take a look at Deutsche Post, for example, you know, a large mail carrier and delivery service, and look at the climate risk that it potentially faces over time. One way to do this is through the climate value at risk measure. And, you know, 1.5 degrees scenario, which is all in line with the Paris Agreement being well below two degrees, you see they face significant risk, not as much as some peers, but up there. And this suggests with the overlay here that a lot of this comes from policy risk. So Deutsche Post operates in countries where the carbon price might increase, or policies are going to be constraining carbon over time. They don't have very much upside from the tech opportunity point of view, and they face moderate risk from extreme weather under physical risks.

So if we have a starting point, that Deutsche Post climate risk is rather serious and it's something that investors can pay attention to that maybe we turn next to performance and look at emissions over time to see you know, again, our their emissions in their operational emissions, which they have direct control over or they embedded more in the value chain, which could or could not be harder to mitigate or reduce. So, looking at scope one and two intensities, Deutsche Post is well above all peers, and they've been relatively flat over time. But I think what stands out is actually their scope three total emissions. This is partially due to the very large size of the company. And its focus on or its partial dependence on air travel, air emission. The company's scope three emissions make up 75% or more of

their total emissions. And the majority of this, the overall emissions are actually from the planes that they fly to deliver their mail.

And you can see here, that here, compared to peers, they have much more emissions from purchased goods, which again, is from the trucks that they drive, the planes that they fly and the ships that they use also. So Deutsche Post faces significant challenge in reducing its emissions over time. And they've addressed this through targets. So, in March 2021, the company came out and said, "We are going to reduce 100% of our emissions, we will be net zero by 2050. And in order to get there by 2030, we're gonna invest 7 billion euros in carbon neutral technologies." And this, you know, could help them but there's a difficult road for them to travel. So, if we look at the company's targets, so they plan to reduce 100% of their emissions by 2050, over most of their value chains. But for an investor looking at this company, one question might be, how are you going to reduce the emissions from air travel which make up the majority of your emissions? So, there are no easy solutions there as they now exist. And this is a challenge that Deutsche Post is going to face as a company and as someone who a company is committed to net zero by 2050. The Pathways aren't easy, and this may be a good opportunity to begin an engagement.

### **Linda-Eling Lee**

Reaching net-zero by 2050 is crucial if we are to continue to live and thrive in a world that is recognizable to us today. We can get there, but only if we all work together and only if the owners of capital allocated to companies that will help further a carbon neutral world. As we move towards COP26 later this year, we really are on the cusp of a tipping point for nature, for our economy and for the world. At MSCI, we hold ourselves to the same high standards that we use to assess issuers climate risks, and we have committed to achieving net-zero before 2040 to our global operations. We call on all stakeholders to embrace and accelerate this revolution away from fossil fuels and toward a net-zero economy. We hope you're going to join us in that call and that you now feel that you have a practical grounding on how to start this transition.

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