

Striving for a Net-Zero Investment Climate

Disruptive Forces in Investing

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- Anu Rajakumar:** Climate change has been an extremely important topic when it comes to assessing environmental, social and governance factors in investing. According to NASA, 19 of the 21 years in this century alone have been the warmest years recorded to date. The Intergovernmental Panel on Climate Change, or IPCC, anticipates that to maintain a global temperature within 1.5 degrees Celsius of preindustrial levels, net zero global emissions will be necessary by 2050. So, the question remains – what should investors be doing about climate change when it comes to their investment portfolios? And how can these values be aligned with long-term investment objectives? My name is Anu Rajakumar, and I'm joined today by Alex Gitnik, Managing Director and Client Portfolio Manager, and Hank Elder, Vice President of ESG Impact Investing. Gentlemen, thank you for joining me today.
- Alex Gitnik:** Thanks. Great to be here.
- Hank Elder:** Thanks for having us.
- Anu Rajakumar:** So, to give all of us some context, what exactly does it mean to be net-zero aligned within an investment portfolio? Hank, maybe we can start with you.
- Hank Elder:** Sure. So, it's to understand what net zero actually means. So as you've mentioned, Anu, the IPCC and the Paris Climate Agreement both have the goal to limit global temperature increases to 1.5 degrees Celsius by reducing greenhouse gas emissions to a level where any emissions that are emitted are either captured or sequestered by 2050. So, a certain amount of emissions [is] naturally captured every year, and so if you got to this point of net zero, carbon dioxide in the atmosphere would begin to decline and we could avert the temperature increases. What this means in an economy or a portfolio is that absolute carbon emissions from companies need to decline dramatically through 2050 to hit that net zero point. It doesn't mean that they need to be zero at that point in 2050, but it does mean that any emissions from, you know, think applications that are hard to abate like, you know, maybe air travel, heavy industrials like cement – those emissions will need to be captured or sequestered onsite or through other operations. So, to determine if a portfolio is on track to meet this, we can lay out scenarios that are consistent, in both the carbon reductions and carbon intensity reductions. And then the rate at which those declines will determine if we hit a 1.5-degree scenario, a two-degree scenario or something worse. Right now, our analysis of equity benchmarks in the carbon intensity would suggest we're on a 3.5-degree Celsius path, and if we continue under business as usual, that's about where we end up. So, there's still a lot of work to be done to get to that 1.5 or two degrees. 2050 is a long way's away, and so I would point you to more medium-term targets to get a sense of progress. And that essentially equates to a necessary reduction of 50 percent by 2030. So, from current levels, 50 percent lower by 2030 is kind of the 10-year target we all need to keep in mind. And to be clear, a net zero aligned portfolio is different than the day in and day out climate risk analysis that we do across our firm. For instance, a thermal coal exclusion may mitigate some of that climate risk, but just tossing the thermal coal involved businesses out of the portfolio is not going to get a portfolio to net zero. It requires much deeper fundamental analysis and a well-thought out strategy to achieve.
- Anu Rajakumar:** Yeah. Thanks, Hank. Very good reminder actually what you just said there that true ESG investing is about a lot more than just simply excluding certain industries or companies. Alex, turning to you, you're a client portfolio manager focusing on multi-sector fixed income and I understand that you've been interacting with client on net-zero aligned portfolios. Tell us what you've learned about climate interest in this space.
- Alex Gitnik:** Yes, sure. Thank you, Anu. It's all this, that climate transition and net-zero alignment is at the top of many clients' agenda today. It's becoming an ever more important topic and clients get pressure for various areas, from regulators, from shareholders, from society, and they're all looking to become more net-zero aligned. For some clients in some regions it's a more pressing need, so in U.K. for example large pension plans, large institutional investors, uh, now have to report on their exposure to carbon on the carbon intensity of underlying portfolios. So, we view this as a massive change in the institutional landscape. I mean, pension fund trustees are no longer responsible purely for investment returns. They now have dual responsibility for investment performance, as well as for carbon footprint and the path to net zero. So, this is a massive change

of the landscape and that drives more and more conversations that we're having with our clients about climate transition, about alignment to net zero.

Anu Rajakumar: So, actually, let's dig in a little bit more on that. Walk me through a little bit more of the investment framework or the screening process that is considered when we're putting together this kind of a net-zero portfolio.

Alex Gitnik: Yes, absolutely. And, you know, we think first of all that bond investors do indeed have a vital role to play in kind of a pushing society towards net zero. I mean availability of capital is a huge factor which can steer companies, corporate issuers in certain directions. So being trusted with stewardship of clients' assets, we want to invest responsibly, and we want to construct these portfolios in a way that is indeed aligned with the net zero objective. So, what that means in practice? We start off with the minimal level of exclusions. We're not looking to exclude, for example, the whole fossil fuel sector broadly. We think this is not the most constructive approach. That means we would be just passing on this risk to someone else. So, our level of exclusions, as Hank alluded to earlier, is rather minimal, so we remove companies involved in the thermal coal manufacturing, thermal coal utilities, and then we engage with most of the issuers in the portfolio. And engagement is really the key to our process. So, our engagement process focuses on materiality, actually trying to collect more information about the companies, about their path to net zero and perhaps steer them in a certain way which we believe gets them closer on this journey. Our goal is to get everyone net zero aligned in the near-term future, and we don't feel that investors have to choose between investment objective and carbon transition goals. Again, efficiently constructed portfolio can really help investors to achieve both objectives at the same time.

Anu Rajakumar: Maybe, Hank, what kind of tools are helpful as we construct these kinds of portfolios?

Hank Elder: Yeah, I think it's important to talk about, you know, what the analysts have who are implementing a strategy like this at their fingertips. And I'd say the first is the carbon foot printing and carbon emission profile of the portfolio, you know, really has to be the starting point, and so accurate measurement of that is key. In this case, because of ESG integration at the PM level, the fundamental company analysis done by those credit analysts and then some of the exclusions Alex mentioned earlier, the starting point of the portfolio is already 50 percent lower than the benchmark. So, before any net-zero ambitions or strategy come into play, you're starting from a point that has lower carbon emissions and potentially lower climate risk than the benchmark. So, you're starting from a positive place, but you've got to continue to make those reductions. And so that's why we set a 20 percent reduction by 2025 as the near-term target, even though it's still four years away. And then that's aligned with a 50 percent reduction by 2030, which I mentioned earlier. So, it's kind of sticking to that glide path. And importantly, the investment team simulated how that could be achieved in today's market and, you know, how they could maintain the same yield. And they got confidence that that could be achieved, and so that was the kind of the first piece.

The next two pieces is our ESG Quotient, which is our proprietary rating system, where a lot of the company-specific analysis around climate transition alignment feeds into that rating, especially in industries where it's about critical -- so energy, utilities, some of the heavy industrials. So that informs the rating and that helps inform the analyst about what type of companies might be good for this portfolio. And then lastly, we have a tool to look further out in the future, you know, 15 years and beyond, in terms of assessing the transition risk from policy and from business changes, and then also the physical risk from potentially rising sea levels or more extreme weather. That can help identify high-risk issuers for exclusion, but more likely probably for engagement and prioritizing discussions and engagement with that company. So those are the three pieces I would highlight.

Anu Rajakumar: Yeah, sure. Now, you both talked about engagement as a crucial aspect of our process. Alex, are you finding that there are specific industries that tend to be more progressive and likely to focus on transitioning to net zero emissions and are there industries that you're finding are slower to commit?

Alex Gitnik: Yes, Anu. Certainly, this is a great question. And matter of fact, to find that industries, where the problem of carbon transition is the most acute, are the ones who take it seriously and really want to address it. And really, the energy industry is coming to mind, you know. First of all, we see oil companies-- like BP, Total -- already thinking about their net zero transition plans, and already embarking on this journey. So speaking to these companies, regularly engaging with them, we can see the materiality of those plans; sort of to what extent a company wants to stop relying purely on fossil fuels, on oil, and their plans to pivot towards being a net zero energy manufacturer. So effectively, these companies are planning to use this transition period to reinvent themselves from pure oil manufacturers to becoming more diversified energy companies. And we see similar trends in the auto sector, companies looking to steer away from manufacturing traditional vehicles towards electric vehicles. And that's a trend that is picking pace again, it gets support from the regulators in various parts of the world which is one of the reasons why we don't exclude companies broadly. So, we don't want to just divest from fossil fuels broadly today. We prefer to engage with these companies, to understand their plans for carbon transition and if we're satisfied with these

plans, we may actually keep them in the portfolio for as long as we're confident that these companies are genuinely following plans for transitioning to net zero.

Hank Elder: Yeah, I would add two things to that, you know, sitting on the central team here, engage with a whole host of companies, more and more they're asking us, "How should we go about setting targets? What are you looking for? What are the specific things I need to take back to my board of directors or my stakeholders to accomplish this?" And so, what we would say is, you know, we direct people towards the science-based target initiative. That's more than a thousand companies with a market cap of \$15 trillion have committed to setting targets that are aligned with those glide paths that I mentioned earlier. And half of those have already set those targets and the other half have committed to do so after evaluating it. And then lastly, you got to think about it from a portfolio manager's perspective. If you can engage with a company and get them to set a target that is science-based and aligned with net zero, it becomes easier to hold that position over the five-ten years into the future. And as long as you're checking in and they are delivering on those targets, it makes portfolio construction easier and widens the opportunity set. So, we think, analysts, PMs, have a really high incentive to engage.

Anu Rajakumar: 12:07 - Yes, absolutely. I think you made a strong case for kind of how this is being digested from the company perspective and us at Neuberger Berman as an asset manager – hopefully we have listeners, hearing this podcast episode and they're intrigued by the proposition that you've been laying out. What would next steps be if there's an investment professional or a CIO of an organization considering a net zero commitment for their investment portfolio? What would we say is kind of the next steps for them?

Hank Elder: That's another good one. We've given it a lot of thought through our partnerships with clients, you know, going down this path and can recommend a few things. So, I think first, it starts with understanding how the organization or the portfolio's goals are impacted or could be impacted in the future by climate, and then doing an inventory of the current status of the carbon intensity or the absolute carbon emissions, to get a sense for where are you today. Then, you know, I think identifying the tools you want to use to potentially lower that. So what data are you going to use? Is it going to be absolute carbon footprint? Is it going to be intensity of carbon use? Is it future climate alignment through scenario analysis? And then which constraints do you want to put on yourself regarding exclusions that could be used? As Alex mentioned, we've taken a more moderate approach there. Only after all that is done do we think that you can make a decision around if a net zero commitment is feasible or something that the organization wants to achieve. And it should include the scope. So, you know, what percentage of the assets or what parts of the allocation should it include, [and] the timeframe or the end point for when that goal should be achieved? At least one interim target as we mentioned in the next five to ten years to hold the organization accountable in the near-term. And then lastly, responsibility should be designated to someone, either, you know, a chief risk officer, board of directors, something like this. So, once you've done all that, you can get into the implementation phase. And that's going to involve potentially adjusting strategic asset allocation assumptions around risk and return from certain asset classes, and then diving into the actual asset class level implementation. And this is where it comes back to where, within that asset class, there's specific carbon emission reduction targets, and then determining how you want to balance the engagement potential and the exclusions, and then what do you want to do on the other side of the ledger, which is investing in positive climate solutions? So renewable energy, energy efficiency, low-carbon infrastructure, so that all companies and global economies can achieve those goals. And so that is kind of the steps of asset implementation. And then lastly, it comes down to tracking that progress, reporting on it out to the stakeholders and inventorying if it has implications or has had implications on performance and then adjusting as you see fit. So, if you're not achieving the net-zero glide path, what can you do to ratchet up? Maybe you need to exclude more companies if the progress is not being achieved. So, then only at that kind of last stage, if you're still not there, you can go out and purchase auditable and verifiable, high-quality carbon off-sets, but that, we would recommend that as a last resort.

Anu Rajakumar: Awesome. Thank you. Very comprehensive. On the other side of that, I'm sure there are a lot of skeptics out there as well. Alex, how do you address the skepticism that some investors may have with these kinds of net-zero carbon portfolios?

Alex Gitnik: Yes, absolutely. I think the first thing investors have to recognize that it's not going to be a quick win. Right? So, you don't measure your investment performance, week to week, month to month. You typically measure it over the cycle, which is three to five years. So, measuring your success on the carbon transition journey should have a similar horizon, which is why we've introduced this interim 2025 objective, i.e. four years away. So, over this four-year timeframe, we're going to work very closely with the clients and really hold hands on this journey towards making a notable progress to net zero. And we often feel sort of a hesitation or sometimes apprehension towards these types of solutions. And maybe part of the reason for that is that some of the solutions available on the market, which target ESG goals or sustainability goals, have not managed to quite achieve these objectives. But our experience shows that it's actually possible to achieve both investment goals and carbon transition goals at the same time. We think that we are well-positioned towards delivering on both objectives. And, you know, clearly we need to start somewhere. I feel like the more we encourage net-zero investing, the more we can demonstrate

success in achieving these goals, the more investors will ultimately embark on this path. So, don't expect to achieve net zero very quickly, but at least making progress in incremental steps brings us much closer on this journey.

Hank Elder: Yeah, and I would acknowledge there's certainly reason to be skeptical given how dependent the current economy is on carbon emissions. So, you're certainly going to need technology improvements and advancements around carbon capture, emission-free transportation, all of these things. But with enough funding, being tossed around by a lot of major global companies, I think that part, you know, as it scales up, will come into place. I think it's also important to keep in mind, you know, that it can seem a little theoretical thirty years in the future, in the 2050 net zero ambitions. But year to year, as Alex mentioned, you're not measuring investment returns that way, but just in the last five years, since the IPCC put out their fifth kind of comprehensive report, some global changes have narrowed the band of potential scenarios on the upside and the downside. So, the business as usual case five-six years ago was for a 4.5- to five-degree increase in global temperatures. Because of renewable technologies, costs coming down, natural gas and, you know, the expansion of that market, a lot of the coal that was going to be built and forecast to be built hasn't been built. And that's bent the curve so that now, as I mentioned, we're sitting kind of at a 3.5-degree scenario if the policy environment were to stay steady from here. So, there's certainly progress that can be made and we're already making some. You know, we've eliminated some of the best-case scenarios by still waiting to take larger action, but, I think it's definitely achievable. And even if we fall a little short, at least we're close to the goal.

Alex Gitnik: I definitely agree with Hank. I think 2050 perhaps feels like, you know, one generation away, which is why we're focusing on a nearer term objective, 2025, and we're promising to demonstrate a very tangible enhancement in carbon intensity by then. So hopefully we can have another conversation in 2025 and we can report on the progress we have made in these directions.

Anu Rajakumar: Absolutely. I think on that note, you know, hoping for more positive progress, we'll wrap up today's episode. Hank, Alex, thank you very much for joining me. Really interesting to hear your perspectives today, and I'm sure we'll be seeing more investors around the globe interested in implementing these kind of solutions in the years ahead. So again, thank you very much for sharing your insights.

Alex Gitnik: Thank you, Anu. It was great to be here.

Hank Elder: Yeah. Thanks, Anu.

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