CAMRADATA
A With Intelligence Company

Positioning for Net Zero Whitepaper

Sponsored by

AEGON Asset Management

edentree investment management

PGIM FIXED INCOME

Clear and Independent Institutional Investment Analysis

We provide institutional investors, including pension funds, insurance companies and consultants, with data and analysis to assess, research and report on their investments. We are committed to fostering and nurturing strong, productive relationships across the institutional investment sector and are continually innovating new solutions to meet the industry's
complex needs.

We enable institutional investors, including pension funds, insurance companies and consultants, to conduct rigorous, evidence-based assessments of more than 5,000 investment products offered by over 700 asset managers.

Additionally, our software solutions enable insurance companies to produce consistent accounting, regulatory and audit-ready reports.

To discuss your requirements

+44 (0)20 7832 6517
info@camradata.com
LinkedIn
@camradata

camradata.com

Contents

Welcome to CAMRADATA's Positioning for Net Zero Roundtable

Over the past couple of years, a proliferation of companies across all industries have clamoured to establish net zero targets to both attempt to futureproof their businesses and appeal to an increasingly environmentally conscious buying public.

These targets all have a similar aim: to reduce the amount of carbon these companies are responsible for releasing into the atmosphere and the methods for achieving them take many forms.

From offsets to fundamental changes in business practices, companies around the world are (mostly) grappling with how to operate in an environment that has run out of time – so what does this mean for investors?

As a broad theme, net zero is a noble aim for investors too. Many of them understand that profit at the price of environmental catastrophe is a pyrrhic victory at best. Yet, achieving something on paper without real-world impact results in the same outcome.

Investors need to both follow the science and the money to lay the frameworks and processes that will have the impacts they need, while still meeting their basic fiduciary duties.

They need to navigate the greenwashing and weasel words, poor data and broken promises of business along with a rapidly changing and diverging international regulatory agenda and the complexities of consistently evolving evidence and learning.

Strong governance is going to be key to all of this, but flexibility will be important too, as long-term capital allocations stretch well into a future in which our climate will function differently to today.

Against an already complex backdrop of tense capital markets and a "growth at any price" agenda, where can investors find the strategic answers they need?

Meet the Team

Sean Thompson
Managing Director

Natasha Silva
Managing Director, Client Relations

Amy Richardson
Managing Director, Business Development

Sam Buttress
Associate, Business Development

Sarah Northwood
Marketing and Events Coordinator

Orin Ferguson
Associate, Business Development

Positioning for Net Zero Roundtable

The CAMRADATA Positioning for Net Zero Roundtable took place in London in May 2023

Our panellists discussed the latest trends in net-zero investing and highlight the operational challenges that institutional investors must overcome to have a real impact on the world.

Although net-zero investing has been around in one guise or another for many years, the label has gained much traction in the past decade as more schemes consider how they can reduce the carbon footprint of their portfolio.

Paul Bucksey, chief investment officer at pension and retirement tech firm, Smart Pension, and responsible for overseeing its master trust investment proposition, says the popularity of net-zero investment soared after the Paris Agreement in 2015, which introduced tangible goals for reducing carbon emissions.

"Most schemes have committed to net zero by 2050, and we have seen many pension funds in the defined contribution space start to allocate towards investments that at least tilt towards ESG," he explains. "But results have been mixed in terms of what these strategies have achieved. Some allocations look dated and haven't moved on very much."

Climate change is a systemic issue that everyone needs to tackle, explains Bucksey, which is resulting in some interesting investment opportunities particularly in the less liquid private markets space. He says Smart Pension has set itself a 2040 net-zero target, but schemes should not try to be too ambitious.

"You need to be careful not to limit your investment opportunities because if you are too narrow and going too fast for the rest of the world, then that may constrain you a little bit," he says. "Our approach has been successful, however, reducing our carbon intensity by 50% since 2019, but there is plenty more to do."

James Malone, senior associate and ESG specialist at PGIM Fixed Income, says asset owners need to understand the overall picture when it comes to committing to a net-zero target and setting out exactly what their ambitions are.

"There is a lot of misunderstanding of what net zero is and there is no typical approach because the world sadly isn't decarbonising in line with the targets set out in the Paris Agreement," says Malone. "In most regions, we are barely making any reductions and that has real implications when it comes to portfolio construction."

"To build a well-diversified portfolio that credibly aligns with net-zero emissions by 2050, you need to have a sufficiently large pool of companies that are rapidly organically decarbonising at rates far faster than the world currently is, across a wide cross section of the real economy. That is simply not where we are today."

> *"It can be difficult to engage effectively with a wide range of members with different views and that can require strong messaging."*

Amelia Gaston, responsible investment analyst at EdenTree Investment Management, says it is working with clients to come up with plans including short-term goals that will help the firm meet the net zero by 2050 commitment.

"More people seem willing to commit to the headline targets of net zero by 2050, but are not quite able to match it with short-term action," she says. "We are quite concerned about this because all the science says that decarbonisation needs to happen now. We can't afford to wait until 2050.

"We are trying to put more emphasis on short-term action to create a decarbonisation trajectory."

Anne Scott, global client solutions lead at Aegon Asset Management, says its products offer clients interval periods of five years that gradually reduce exposure to laggards or unprepared organisations.

"You need to have several things in your toolkit to align with your investors and take them on the transition journey," she says. "We are looking to develop and build products that support different needs because if you have a set of products that can't meet people's nuanced requirements you will be called an evangelist and miss opportunities to help your clients."

Net-zero drivers

While defined contribution (DC) schemes are obliged to measure, manage and mitigate the climate risks they are exposed to, says Ned Whitehead, senior vice president at consultancy Redington, other asset owners are keen to embrace net zero and work towards the transition to decarbonisation. But they often face considerable challenges.

"It is challenging because this area of investment is complex and nuanced," says Whitehead. "The vast majority of our defined benefit pension schemes are fully aware that their long-term time horizon probably ends before 2050, but they are still trying to contribute where they can. And they are typically doing this as holders of debt, given their obligations to their members."

Smart Pensions' Paul Bucksey says one of the challenges in getting more asset owners to adopt net- zero commitments is explaining to members how important decarbonisation is to them and the wider implications of climate change.

"Some people do not believe, or do not want to believe, in climate change," says Bucksey. "I would be lying if I said all our members are fully behind this, which is why we offer a choice. If people want to pay a bit more to decarbonise faster, they can.

"From a DC perspective, the focus on cost is easing and there are signs it's starting to get a little bit better with the value for money proposals."

He adds: "With most pension schemes, member engagement is difficult. But there are some encouraging signs that climate change and net zero could be something that leads to more successful engagement."

Tim Manuel, partner and head of responsible investment at Aon, says it can be difficult to engage effectively with a wide range of members with different

> *"You look at most big asset managers and the size of stewardship teams versus the size of the sales teams, it tells you a lot about where their priorities lie. Now there is some work going on in the industry on how big a stewardship function should be to be effective."*

views [and that] can require strong messaging."

"Where there is a sponsor that has made a strong net-zero commitment, that can trickle through to what the pension plan is doing," he says. "But one of the biggest drivers of net-zero uptake among schemes has been regulation. Although more of the regulation tends to focus on risk management, it has got more schemes talking about climate change."

"One of the more effective discussions we can have with an asset owner is on climate risk and what that means for the portfolio but then it can develop into something that looks more like a net-zero commitment."

Establish a strong framework

One of the biggest challenges asset owners face is creating and implementing a strong framework that will help them on their journey towards net zero.

"When designing our own climate framework, something we found most helpful was forgetting about net zero by 2050," says EdenTree's Amelia Gaston. "You don't know exactly what it means from an investment perspective and it pushes action out to the long term. It is much easier and more helpful if you focus on what you can do in the here and now, rather than trying to figure out your end goal."

"When asset owners talk about net zero, many don't understand the trade-offs involved in building a portfolio that meets that very specific requirement," says PGIM Fixed Income's Malone. "It's critical to have sober conversations with clients to understand exactly what they want to achieve and the trade-offs involved so we can build ambitious but achievable frameworks."

Dan Mikulskis, partner at LCP, says there are good examples of frameworks in the industry, but there is often no one-size-fits-all solution for all schemes as they will often have different requirements and approaches to reaching net zero.

"A lot of work has been done and a lot of good frameworks exist in the net-zero investment space, for example, science-based targets," he says. "But asset owners and managers are looking at those most relevant to [them] and which they can support.

"It can be quite overwhelming if you have a big portfolio that is invested across public and private markets in every possible sector. What works, [in our experience], are frameworks that can be applied across schemes' entire portfolios."

Best route to net zero

Establishing a strong framework that considers asset owners' wishes is crucial, but there are several ways to achieve net zero as investment strategies evolve and become more sophisticated.

Julia French, deputy manager for responsible investment at Local Pensions Partnership (LPP), says before net-zero targets became widely adopted, divestment was often used as the main tool to pressure companies into changing for the better.

"Divestment was pushed by members and some NGOs as the best way to tackle climate change," she explains. "They would say 'your money supports these polluting activities, so if you pull your money out then that is the best way to make them stop' – it wasn't a very nuanced conversation.

"But now we're reaching a point where we are thinking about 2050, 2030 and the changes we want to see happen in the real world between now and then, not just in our portfolios. So, we need to try and build a case for supporting assets and industries to transition and get the data that shows us what a good transition looks like for them."

She adds: "Everyone needs to be thinking about transitioning, and financial institutions need to ask what levers they can pull to encourage companies to pursue this. We have TCFD and scenario analysis thanks to regulation and a focus on reporting, but that is going to take lots of time and data. Stewardship and allocation [to opportunities] might be a better use of time. Given space, nobody knows what quality engagement looks like."

""If every shareholder or debtholder of a company asks whether it's implementing targets or taking a specific action, the management are going to get the message loud and clear and consider it seriously," says PGIM Fixed Income's Malone. "But expecting them to act based on engagements from one individual investor is crazy. Not to mention there are so many other important stakeholders beyond investors whose voices shape management decisions including employees, local communities and policymakers."

"Asset managers absolutely play an important role and must engage with companies on these issues, but the expectation for us to be driving the change unilaterally is, in my view, extremely unrealistic and inappropriate."

EdenTree's Gaston adds: "Engagement is powerful and investors should use their voice, but it is often collective engagement that can drive change by building up a long-term relationship with a company and supporting them and the work that they're doing."

One of the barriers to effective engagement in recent years has been the lack of resources that some asset managers have dedicated to their stewardship team, particularly in a climate where value for money and a focus on costs have prevailed.

"If you look at most big asset managers and the size of stewardship teams versus the size of the sales teams, it tells you a lot about where their priorities lie," says LCP's Mikulskis. "Now there is some work going on in the industry [on] how big a stewardship function should be to be effective."

"But the reason there are big differences between asset managers in terms of the resources they put into their stewardship team is that asset owners haven't asked about it, so it's been forgotten."

Data and greenwashing

As more asset owners turn to net-zero investing to help them mitigate climate risk and achieve their goals, asset owners must have confidence in the products they choose. One of the challenges they face is greenwashing by some product providers.

"There are two sources of greenwashing – someone who's doing it intentionally and someone who's doing it by accident," says Redington's Whitehead. "Intentional greenwashing can be found through good analysis and due diligence. Accidental greenwashing is by those that are more artificially progressive and claim that the world is a certain way, which starts blinding others in terms of how complex the issues are."

"It is very easy to say that you are changing the world, but it needs to be reined in a little. And I think that will happen over time."

"This industry has generally been good at holding people to account over behaviours that are not aligned with their claims," adds Aon's Tim Manuel. "But it concerns me that the intense scrutiny on greenwashing does make investors more cautious about their ambitions on what they are seeking to achieve."

One of the ways that asset owners can accurately assess the climate impact of the strategies they invest in and their portfolio exposure to climate risk, is through analysis and more accurate data. However, in a nascent area like net zero investing, data quality and availability remain a challenge.

"It is often quite hard to work out what actually is data," says Manuel. "A lot of information is called data when it isn't. There are many providers out there filling the gaps with estimations or extrapolations, but only a small part of that information is actual data. All the rest of it is essentially manufactured in some way. "

"Data is in danger of being a barrier because there is a temptation to spend too much time on it," adds LCP's Mikulskis. "I don't think you learn that much extra."

Many of the metrics used to measure climate risks are backwards-looking and don't consider what is needed to solve the climate change crisis, says PGIM Fixed Income's Malone.

"Carbon footprints are starving capital from the companies and sectors that need it the most, the metals and mining and industrial names making the products and solutions that will decarbonise the world," he explains. "By focusing on the carbon footprint, there is the reverse incentive of removing capital from companies that are trying to do the right thing."

Malone says PGIM Fixed Income is developing an in-house temperature alignment tool, which leverages forward-looking methodologies that take into account the targets and actions companies have made and compares them against science-based, sector-specific decarbonisation benchmarks.

"You can support companies even if they are high carbon emitters today because they are doing the right things," he explains. "Right now, what we typically see is fund managers cutting out a very small portion of companies that make up a massive portion of the benchmarks weighted average carbon intensity and say 'job's finished'. But this does little to support or accelerate the low carbon transition. As more asset owners turn to net-zero investing to help them mitigate risk and achieve their climate goals, we are working to help them better understand the impacts of the products and guidelines they choose and design solutions with better alignment with their intended impacts and goals."

What's next?

As more asset owners set net-zero targets, there is a greater urgency to act now and set intermediate goals. And there are mixed opinions about how the industry will fare in the coming years.

"I am cautiously optimistic in the sense that there will be more good news stories and we will have seen some sectors and organisations make the transition," says Aegon's Anne Scott.

Aon's Tim Manuel believes investors that embrace and plan for net zero may be future proofing their own portfolios.

"Net-zero commitments will translate into risk management or mitigation strategies because it is the investors that have thought most about how their investments interact with climate change and the low-carbon transition, that will be best-positioned for whatever comes next," he says.

Indeed, there will be considerable challenges in the years ahead, says EdenTree's Gaston.

"Net zero as an objective isn't perfect. There's a lot of complexity around it and not everybody fully understands what they are doing," she says. "But you can't wait for it to become perfect because you will never act."

"There are steps you can take now, but if everyone just waits for the data to be completely perfect or for the best approach to emerge, then we will never get to net zero and all the science shows that we need to start acting," Gaston adds.

"I'm hopeful people will start to wake up to this and I do think we're seeing genuinely committed asset managers and asset owners taking net zero seriously."

> *"As more asset owners set net-zero targets, there is a greater urgency to act now and set intermediate goals. And there are mixed opinions about how the industry will fare in the coming years."*

Roundtable Participants

Anne Scott
Global Climate Solutions Lead

Personal Profile

Anne joined Aegon AM in 2005 to establish and lead our middle office delivery teams, later moving into a strategic role providing business development support to the CEO. In 2012, she joined the investment department with a focus on developing front office oversight and relationship management with key counterparties, including managing investment research provision and corporate access across all asset classes. In 2017, Anne led the MIFID II design and structure to manage, monitor and evaluate Aegon AM's investment research consumption.

Anne has also chaired Aegon AM's Investment Research and Execution Oversight meeting and co-chaired the Global Investment Management Risk Control Committee. She has over 25 years' experience in financial services, including positions at Financial Times Information and HSBC Global Fund Services.

Anne will promote Aegon AM's climate transition approach and ensure the consistency and delivery of our climate research. She will also work closely with Aegon AM's 19-strong global responsible investment team.

Company Profile

Aegon AM is an active global investor. Our 380* investment professionals manage and advise on assets of £259 billion* for a global client-base of pension schemes, public funds, insurance companies, banks, foundations, wealth managers, family offices and individuals.

We are a global business with over 1,200* employees across Europe, the Americas and Asia. We organise our investment capabilities around four focused investment platforms where we have deep asset-class expertise: fixed income, real assets, equities, and multi-asset & solutions.
*as at 31/12/22

AEGON Asset Management

Amelia Gaston

Responsible Investment Analyst

Personal Profile

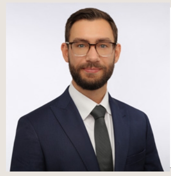
Amelia holds a BA in Geography from Durham University and previously worked as a responsible investment analyst at LGPS Central, one of the UK Pension Pools. Amelia holds the Investment Management Certificate and CFA Certificate in ESG Investing.

Within EdenTree's dedicated Responsible Investment Team, she leads on climate and environmental issues.

Company Profile

EdenTree is an asset manager with a difference. EdenTree has been leading the way in Responsible and Sustainable Investing for 35 years, launching its first responsible fund in 1988. All of it's £3.8bn of assets under management are invested responsibly, sustainably or ethically. Ultimately owned by a Charity, the Benefact Trust, all of EdenTree's distributable profits go back to our charitable parent, and out to good causes.

It is an active fund management business, specialising in delivering client outcomes through the careful selection of intensively screened businesses and assets, irrespective of asset class and market conditions, and at appropriate valuations. EdenTree believes that responsible stewardship and active engagement with companies are critical to achieving superior performance over the long-term.



James Malone, CFA

Senior Associate and ESG Specialist

Personal Profile

James Malone, CFA, is a Senior Associate and ESG Specialist for PGIM Fixed Income, based in London. Mr. Malone is focused on ESG integration and leads sector, thematic and issuer level ESG research across all fixed income asset classes and regions. He also participates in ESG engagements with the credit research analysts and keeps up to date with the latest ESG trends, regulation and market updates.

Prior to joining the Firm in 2021, Mr. Malone was a Senior Global ESG Analyst at Legal and General Investment Management where he was responsible for supporting the development of proprietary ESG scores and solutions, engagement and proxy voting. Prior to that, he was an International Equities Salesperson at Citigroup in Toronto, Canada. Mr. Malone received a Masters degree in the Environment and Development from the London School of Economics, a BA degree in Business from Western University and holds the Chartered Financial Analyst (CFA) designation.

Company Profile

PGIM Fixed Income is a global asset manager offering active solutions across all fixed income markets. The company has offices in Newark, N.J., California, London, Amsterdam, Zurich, Munich, Singapore, Hong Kong, Sydney and Tokyo. As of March 31, 2023, the firm has $793 billion of assets under management including $359 billion in institutional assets, $170 billion in retail assets, and $264 billion in proprietary assets. Over 950 institutional asset owners have entrusted PGIM Fixed Income with their assets.

For more information on PGIM Fixed Income, please visit www.pgim.com/fixed-income.

Positioning for Net Zero Whitepaper 13

Tim Manuel

Partner, Head of Responsible Investment

Personal Profile

Tim Manuel is the Head of Responsible Investment and leads Aon's 20-strong specialist team, which sits at the centre of Responsible Investment expertise across our asset allocation, manager research, investment consulting and fiduciary management teams. Tim is chair of Aon's UK Responsible Investment Committee and a regular contributor to the media, industry research and initiatives designed to advance responsible investment best practice.

Tim has a wide range of experience of working with trustee and corporate clients on all sorts of investment, pensions and sustainability issues.

Dan Mikulskis

Partner

Personal Profile

Dan is a partner at LCP and lead investment advisor, working with investors such as wealth managers and pension funds, and has been advising on investment strategy in various roles for 20 years. Dan is passionate about always helping clients cut through the noise, prepare well for uncertainty and make better decisions.

Dan is a member of LCP's Responsible Investment team, specifically leading thinking around how to invest for Net Zero. Dan has extensive experience of working with larger and more complex schemes, for example he currently advises 4 of the largest 30 pension schemes in the UK.

Dan co-hosts LCP's weekly investment podcast: Investment Uncut, and edits LCP's investment magazine Vista. Dan has contributed to many investment thought leadership reports over the years including industry working groups with the Institute of Actuaries, and is frequently published and quoted in the industry and national press. Dan has been a member of the Pension Regulator's industry panel giving feedback on the proposed new DB funding code.

Julia French

Deputy Manager – Responsible Investment

Personal Profile

Julia is the Deputy Manager for Responsible Investment at LPPI and LPPI's climate change specialist. She is currently spearheading LPPI's net zero target setting programme and supporting preparation for TCFD as well as overseeing the systematic integration of ESG across the business.

Julia joined LPPI in 2021. Prior to that, Julia worked at Isio as their climate change specialist following the completion of a Masters in Climate Change Management and Finance from Imperial College London. Before this she worked for three years as a sustainability consultant at Carnstone Partners, covering a range of projects from developing responsible business strategy and D&I policies through to supply chain risk analysis for FSTE100 and FTSE250 companies.

In addition to her MSc from Imperial College London, Julia holds a BA in Economics and Geography from the University of Leeds.

Ned Whitehead

Senior Vice President – Sustainable Investment

Personal Profile

Edwin helps lead the delivery of Sustainable Investment advice to Redington's clients. Edwin is responsible for supporting asset owners in setting Sustainable Investment beliefs and objectives, integrating ESG factors into investment-decision making, and helping to practice better stewardship and engagement. Edwin works with Redington's largest clients, helping many of them to transition their investment approach to one that is aligned with achieving the goals of the Paris Agreement, which includes moving to net-zero emissions by 2050 or sooner.

Edwin sits on the Scheme Advisory Boards' Responsible Investment Advisory Group for the Local Government Pension Scheme. Edwin recently led the Asset Owners sub-group of the Investment Consultant Sustainability Working Group (ICSWG) - a cross-industry collaboration of 17 UK-based investment consultants.

Edwin joined Redington in 2018. Prior to this, he was an Investment Consultant at PwC and an investment Analyst at Willis Towers Watson before that. Edwin has a BSc in Economics from the University of Warwick, is a CFA charterholder, and was one of the first candidates to pass the CFA UK Certificate in ESG Investing.

Moderator

Paul Bucksey
Chief Investment Officer,
Smart Pension

Elizabeth Pfeuti
Chief Client Officer

Personal Profile

Paul is responsible for the overall strategic design and management of the Smart Pension Master Trust's investment proposition, and its relationships with its fund managers. He is a member of the Trustee Investment Sub-committee, and chairs the Scheme Strategy.

Before joining Smart Pension in February 2019, Paul was a Managing Director at BlackRock (and subsequently Aegon), leading their UK defined contribution workplace pension business. During his time at BlackRock, Paul drove the development and introduction of master trust and income drawdown products, as well as enhancements to the firm's UK target date fund range. He has also held senior positions at Fidelity, AXA and PwC.

Personal Profile

Former Dow Jones staffer Elizabeth Pfeuti is Rhotic's Chief Client Officer and a member of the Rhotic Media executive leadership team. A highly-decorated journalist, Elizabeth has been in financial journalism for around 15 years. At Dow Jones, she covered the asset management, investment banking and investor services beats for Financial News, where she also wrote on a wide range of regulatory themes

She was previously the European Editor for CIO Magazine and boasts an exceptional contact book of buy-side and in-house institutional CIOs and asset management executives. More recently she has worked on corporate briefs for pension consultants, investment banks and asset management groups.

Smart Pension

RHOTIC

Incorporating climate change in fixed income

"Today's deal is to deliver a dual climate and return outcome"

Climate change and the low carbon transition are increasingly important themes for investors and it is broadly accepted that significant action is required to meet the goals of the Paris agreement. As regulatory, societal and investment pressures drive greater awareness of climate-related risks, we are seeing growing scrutiny from regulators and asset owners of climate-related exposures.

This article addresses the question of how climate change considerations can be incorporated within investment analysis and help build more resilient fixed income portfolios.

Assessing climate transition risk

Our global responsible investing team have built a forward-looking research framework that identifies companies with robust and credible plans to transition towards a low carbon economy. Our analysis goes beyond historic emissions to form a forward-looking view of a company's transition readiness*.
The base assessment focuses on three aspects: An understanding of a company's GHG (Green House Gas) targets and ambition; their historic GHG emissions performance; and their overall management policies towards climate transition.

We determine each sector's ability to influence the low carbon transition and categorize these into low and high influence sectors. Rather than focus on 'impact' — which can have many definitions — we use the concept of 'influence'.

High-influence sectors are those which have a greater ability to influence the transition to a low carbon economy and the achievement of global climate goals. We identify these through a mixture of GHG emissions data, ESG metrics and expert opinion.

This influence can be as a result of their operational emissions, for example electric utilities, emissions from the products they sell, for example oil and gas or more indirectly through their ability to influence the activities of others, for example banks.

Rather than simply exclude high-influence sectors from portfolios, our research aims to identify those companies that have robust and credible plans to transition towards a low carbon economy.

Companies in high-influence sectors are then subject to a further sector specific adjustment where the analysis focuses on the key climate issues for each sector, whether that is their direct operational emissions or emissions from products and/or supply chain. In these sectors, it is important to understand the idiosyncratic issues faced by companies and tailor our climate analysis accordingly. As part of these analyses we evaluate a company's strategy to transition to a low carbon economy.

1. Leader	Ready for a low carbon future and actively driving the net zero transition
2. Prepared	Policies, targets and actions aligned toward progress on net zero
3. Transitioning	Demonstrating awareness of transition but a mixed degree of alignment
4. Unprepared	Policies, targets and actions misaligned or unaware of required transition
5. Laggard	Unprepared for a low carbon future and actively working against climate goals

*There is no guarantee that the assessment of a company as a leader, as prepared or as transitioning will continue or that positive results will be obtained from investment in the securities of such companies.

Authors:

Iain Buckle
Head of Credit – UK

Rory Sandilands
Investment Manager

Ritchie Thomson
Senior Responsible Investment Associate

What makes a company's transition plan credible?

The first step to a credible transition plan is robust target setting. We expect to see companies make a commitment to net zero by 2050 at the latest as well as set short and medium term GHG reduction targets aligned to science-based sector-specific decarbonisation pathways.

Having assessed the strength of the GHG reduction targets, companies should clearly set out the actions and levers they intend to use tomeet their targets. A truly credible plan should go beyond simply identifying these actions and should set meaningful milestones, timelines and KPIs in terms of how much each is expected to reduce emissions by and by when, and evidence that sufficient funds are being invested in the plan. In particular, transition plans should focus on absolute emissions reductions rather than offsets.

Fixed income considerations

Investment grade fixed income issuance is dominated by financial companies. Although they typically have very low carbon footprints, from an operational perspective, they play a very important role in financing sectors that may be exposed to climate risks. Understanding the financials and what they are doing regarding climate change is therefore very important for fixed income. In addition, private companies make up a fairly material part of the credit universe. This can pose a challenge from a data quality perspective as climate-related disclosure from private companies is typically not as comprehensive. Engagement can also be a challenge as a bond investor, given the lack of economic ownership and voting rights, so we need to look closely at how we engage with companies on climate transition matters. Given our wider equity and multi-asset capabilities, we can also benefit from our firm-wide engagement activities.

Portfolio implementation

For climate transition focused portfolios, our research is designed to feed through into climate-related guidelines that guide portfolios towards net zero alignment. We set out guidelines with key milestones, guiding the portfolio to steadily improve the exposure to those companies which are better prepared for the transition to a net zero economy. At the outset we place a limit on a portfolio's exposure to companies that are laggards or unprepared for transition to net zero. Our ability to hold such companies diminishes over time.

We set these guidelines to reflect a reasonable pace of transition and encompass issuers from all sectors. They have also been designed to be compatible with emerging net zero market frameworks, such as those from the Paris Aligned Investment Initiative and the Net-Zero Asset Owner Alliance.

We have implemented the climate transition framework in our Global Short Dated Climate Transition Strategy*, although it is designed to be applicable across the maturity, geographic and credit-quality spectrum and within other asset classes. Going forward we can build other investment strategies using this framework according to client demand.

Summary

It is possible to construct a climate transition focused short-dated corporate bond portfolio that does not sacrifice expected yield. Rather than simply exclude companies based on higher carbon emissions, or from the higher influence Sectors, portfolios can be constructed to invest in those companies that have robust and credible plans to transition towards a low carbon economy and therefore be better aligned to investors' net zero goals. This is potentially attractive to investors as regulatory, societal and investment pressures lead to a greater awareness of climate-related risks.

To discuss aligning financial and climate obligations within your fixed income portfolios, please contact your usual Aegon AM representative or visit www.aegonam.com/gsdct

Bringing your content to life

Deliver your thought leadership exclusively to the institutional investor market through the Knowledge Bank feature on CAMRADATA Live.

A free service for subscribing Asset Managers to upload content including articles, whitepapers, podcasts and videos as well as the opportunity to feature in our weekly newsletter with full 360 reporting. Share your knowledge, your way, with the people that matter.

info@camradata.com

CAMRADATA

Diversity for asset managers is at a critical tipping point.

CAMRADATA now hosts the Asset Owner Diversity Charter within CAMRADATA Live, making it free to access for both asset owners and asset managers alike.

The Asset Owner Diversity Charter was formed with an objective to formalise a set of actions that asset owners can commit to improve diversity, in all forms, across the investment industry. It seeks for signatories to collaborate and build an investment industry which embodies a more balanced representation of diverse societies.

info@camradata.com

CAMRADATA

The Missing Part of Net Zero

"Adaptation is essential to build resilience in response to the multitude of challenges that climate change brings."

In terms of climate action, it is almost impossible not to have become aware of the relentless focus on 'net zero' and the explosion of 'net zero' targets within the investment community.

Financial institutions more than ever before are focused on reducing their financed emissions and implementing solutions to mitigate the effects of climate change, with a long-range target of achieving 'net zero', usually by 2040 or 2050. Though welcome, a topic that has been notably absent from this conversation is climate adaptation – an approach just as critical to achieving net zero as mitigation.

The Paris Agreement actually sets out the need for adaptation as part of our climate efforts. Although less talked about, a global goal on adaptation was embedded within the agreement, aiming to increase the ability of all to adapt to the adverse impacts of climate change by enhancing adaptive capacity and resilience, and reducing vulnerability.

Adaptation is essential to build resilience in response to the multitude of challenges that climate change brings. The urgency of this should not be downplayed given that physical climate impacts are already real and are only set to intensify. In 2022, Europe recorded its hottest summer on record and its second hottest year on record, whilst Pakistan experienced severe floods that affected 33m people, and water scarcity in the Horn of Africa intensified the famine which has now affected over 58m people. These physical risks are associated with only 1°C of temperature rise – if we overshoot the recommended 1.5°C, which researchers predict there is a 66% chance of doing so[1] parts of the world may become almost uninhabitable. Under a 'business as usual' scenario, extreme weather events will increase in frequency and intensity, impacting human health, food security and global security as increasing populations compete for increasingly scarce resources.

Author:

Amelia Gaston
Responsible Investment Analyst

As such, adaptation is essential to build resilience to the real impacts of climate change, and improve human outcomes against future disasters. Increasing the adaptive capacity for climate-sensitive regions that face a combination of socio-economic and political constraints is a particularly important effort to prioritise given their increased vulnerability to disaster which compounds the severity of impacts faced.

Despite this urgency, adaptation has not received nearly the attention required. In 2019/20, total climate finance stood at $632bn, of which only $43bn was for adaptation[2]. Despite an uptick in recent years, total adaptation finance remains far below the scale necessary to respond to existing and future climate change need. Indeed, the United Nations Environment Programme's 2022 Adaptation Gap Report estimates that annual adaptation costs will need to be in the range of $160-340bn by 2030 – our current global spending is 5-10x below this.

There are several reasons why mitigation receives more financial commitment than adaptation. At the heart of the problem is that adaptation finance lacks a clear definition. Companies, for example, don't tend to label adaptive activities as such, instead placing them under other headings, such as strategy or risk management. Further, adaptation finance is very context specific. Unlike mitigation, which always has the goal of reducing GHG emissions, adaptation finance can vary hugely in interpretation. For instance, the activity required will depend on the different social, economic and environmental systems at risk, as well as the type, probability and severity of climate impact. This creates an ambiguous investment context that doesn't easily lend itself to the development of strategies designed to target investment in resilience solutions.

Another driver has been the asymmetry between risk vs opportunity when it comes to adaptation. It is common for investors to consider the negative impact of physical climate risk, for example the exposure of assets to flooding or wildfires, but analysis focused on the positive case for investing in climate resilience is less common. For mitigation, the outcomes are both clear and measurable, such as the avoided emissions generated by a renewable energy project. The impacts of key adaptation approaches, however, have not been systematically measured, neither have the full range of environmental and social benefits been monetized. To shift the dial, we need more reliable information on the benefits associated with adaptation to allow investors to make fully informed decisions.

Finally, there is an enduring narrative that for adaptation to move to the forefront it suggests that mitigation has failed. In reality, this dichotomy is far from the truth as there are numerous underappreciated overlaps that both approaches share. For example, coastal wetlands are a huge carbon sink, storing more than two years' worth of global emissions, but they also provide significant defence against sea level rise by buffering storm surges and flooding. A similar narrative is found in sustainable agroforestry solutions. Adding trees to farms and pastures allows farmers to diversify their incomes while their land absorbs more carbon. This mitigates climate change and helps farmers to adapt. Many other integrated solutions exist, suggesting that we don't need to focus on either/or when it comes to mitigation and adaption. Moving beyond this unhelpful divide also brings the role of nature-based solutions into greater focus – another area which has been vastly underappreciated, but with the potential to have a significant impact on the global response to climate change.

The unfortunate reality remains however, that if global inaction persists, we stand more chance of moving into a 'post-mitigation' phase where the only game in town, if our planetary home is to remain viable, is to adapt.

[1] Global warming set to break key 1.5C limit for first time - BBC News
[2] https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2021/
[3] Adaptation Gap Report 2022 | UNEP - UN Environment Programme

Fusion Ignition and its Impact Implications

Investors have been tempted for more than half a century by nuclear fusion's promise of safe, reliable baseload without environmentally harmful emissions or radioactive waste. However, it wasn't until California's Lawrence Livermore National Laboratory announced the first successful "ignition" in late 2022 that fusion entered mainstream discussions. That news has led some to conclude that the decarbonization solution is at hand, potentially de-emphasizing the urgency and perceived benefits of installing new renewable energy. However, the reality is that fusion's remaining challenges are formidable and it will never be the entire solution.

> *"As we monitor advancements in fusion technology, we remain focused on conservation as well as the positive effects of renewable energy sources*

Fusion is effectively the reverse process to fission—instead of splitting a nucleus (of enriched uranium), the nuclei of two or more atoms (of hydrogen isotopes) are combined. If fusion can be scaled, it would offer the primary benefits of fission—reliable baseload with low emissions and a small geographic footprint—without most of fission's drawbacks. Fusion has no real risk of meltdown, generates only low-radioactivity, fast-decaying waste, and does not require enriched uranium. Instead, one of its fuels, deuterium, is abundant in sea water, and experiments to "breed" the other, tritium, on site could enhance energy security.

Although achieving ignition—when fusion outputs more energy than it consumes—is a major milestone, it represents a relatively small step. The reaction depended on lasers, but "ignition" only considers the energy those lasers delivered inside the reactor, not the electricity that powered them. When accounting for the entire operation, the "ignition" consumed about 100x more energy than it created.

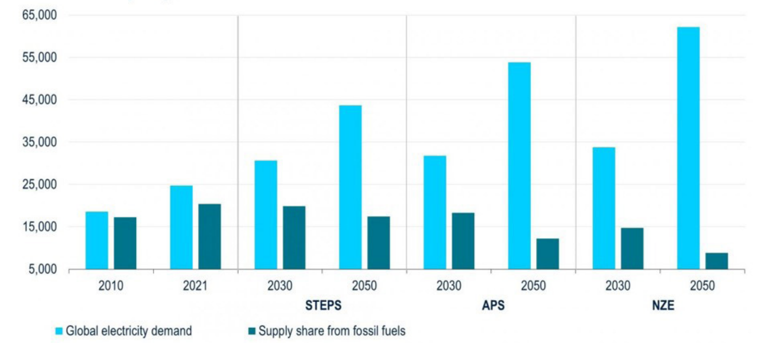
The bigger breakthrough will be when a reactor creates significant net-positive overall energy, which is likely to still be years away (if it happens at all). Once a sustained, net-positive reaction is achieved, nuclear fusion plants must be financed and built. Figure 1 shows that this is no small task considering the supply and demand dynamics. In terms of the latter, electricity demand is projected to surge, especially in scenarios aligned with Paris targets here it would more than double by 2050.

On the supply side, even assuming a very generous 90% efficiency rate, replacing the roughly 2/3 of electricity currently generated by fossil fuels would require almost 2,000 gigawatts (GW) of fusion capacity. However, early prototypes are anticipating capacity factors of just 20-30% due to several factors, including anticipated maintenance, availability of cooling water, and operational needs (e.g., cooling systems and tritium breeding). Therefore, for fusion to be the decarbonization solution, installed capacity would need to reach 10,000 GW before mid-century—a level that exceeds all electricity capacity installed today.

Author:

John Ploeg, Co-Head of ESG Research

FIGURE 1 The Growth in Global Electricity Demand is Expected to Increasingly Exceed Sources Derived from Fossil Fuels (TWh)



Source: PGIM Fixed Income and International Energy Agency, World Energy Outlook 2022. STEPS refers to Stated Policies Scenario, APS refers to Announced Pledges Scenario, and NZE refers to Net Zero Emissions by 2050 scenario.

Another consideration of fusion is that it creates electricity, which only makes up about 20% of global final energy consumption. Fusion is of little help for the other 80% unless that too is electrified. For example, transportation makes up over 25% of energy consumption and more than 90% of this still came from oil products in 2020, versus just over 1% from electricity. A similar story is true for electrification of buildings' heat, where fossil fuels and biomass still dominate. In both cases, electrification is making inroads, but remains well behind the pace needed to achieve the Paris targets. Additionally, around 25% of global emissions are not related to energy at all.9 Thus, even if fusion were viable, investments in electrification and other decarbonization technologies need to rapidly accelerate.

Similarly, fusion (and renewables) cannot help with decarbonization without being connected to consumers. It's an area of severely neglected investment—in its Net Zero Emissions scenario, the IEA estimates investment in grids and transmission needs to more than double by 2030. As a result of the foregone investment, renewable projects in most developed market countries face long connection times, e.g., an average of seven years in the U.S. and the UK. Meanwhile, 774 million people globally still lacked reliable electricity access in 2022.

Even in a best-case scenario where fusion is commercially viable by the late 2030s, it could still take several additional decades to build the initial generation of plants. And several more decades before fusion makes up a material share of the energy mix (to say nothing of the astronomical costs). Meaning that even in this best-case scenario, fusion may not make a significant contribution until late this century.

But time is of the essence. At current rates, the 1.5C° carbon budget is projected to be completely depleted in less than 10 years. At that point, warming of 1.5C° or more will be locked in. To avoid this, immediate emissions cuts on the order 8% per year are needed—making a scenario of abundant fusion energy after mid-century far too late.

This scenario stands in stark contrast to the prospects for existing renewables. The IEA estimates the average time needed to build a new renewable project is now less than two years. The costs of renewables and storage have also rapidly decreased and are expected to continue dropping over time. So, it is possible fusion may not be cost competitive if/when it becomes commercially viable.

The first successful fusion ignition is an undeniable scientific achievement. Yet, it was nowhere close to producing overall net-positive energy, and even if/when that is achieved, it could take several decades more for fusion to make a positive impact on decarbonization. Dwindling carbon budgets are set to be depleted well before then.

Therefore, as we monitor advancements in fusion technology, we remain focused on conservation as well as the positive effects of renewable energy sources. These continue to bring identifiable, positive impacts to decarbonization and those portfolios oriented on achieving positive environmental impacts.

Important Notice

This document is produced by CAMRADATA Analytical Services Limited ('CAMRADATA'), a company registered in England & Wales with registration number 06651543.

CAMRADATA is neither authorised nor regulated by the Financial Conduct Authority in the United Kingdom nor the Securities and Exchange Commission in the United States of America.

This document is a marketing documentation and is not intended to constitute an invitation or an inducement to engage in any investment activity. It is not intended to constitute investment advice and should not be relied upon as such. It is not intended and none of CAMRADATA, its holding companies or any of its or their associates ('With Intelligence Group') shall have any liability whatsoever for (a) investment advice; (b) a recommendation to enter into any transaction or strategy; (c) advice that a transaction or strategy is suitable or appropriate; (d) the primary basis for any investment decision; (e) a representation, warranty, guarantee with respect to the legal, accounting, tax or other implications of any transaction or strategy; or (f) to cause the With Intelligence Group to be an advisor or fiduciary of any recipient of this report or other third party.

The content and graphical illustrations contained in this document are provided for information purposes and should not be relied upon to form any investment decisions or to predict future performance.

CAMRADATA recommends that recipients seek appropriate professional advice before making any investment decision.

Although the information expressed is provided in good faith, the With Intelligence Group does not represent, warrant or guarantee that such information is accurate, complete or appropriate for your purposes and none of them shall be responsible for or have any liability to you for losses or damages (whether consequential, incidental or otherwise) arising in any way for errors or omissions in, or the use of or reliance upon the information contained in this document. To the greatest extent permitted by law, we exclude all conditions and warranties that might otherwise be implied by law with respect to the document, whether by operation of law, statute or otherwise, including as to their accuracy, completeness or fitness for purpose.

CAMRADATA Analytical Services Limited and its logo are proprietary trademarks of CAMRADATA and are registered in the United Kingdom.

CAMRADATA
With Intelligence
One London Wall
London
EC2Y 5EA

+44 (0)20 7832 6500
camradata.com

Join us on LinkedIn