

CAMRADATA

Low Carbon Transition Whitepaper

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Welcome to CAMRADATA's Low Carbon Transition Whitepaper

Since the onset of Covid-19, the importance of investing in a sustainable future has become clearer than ever. Many industry players have pledged to integrate ESG criteria across their businesses, while companies and governments alike have made commitments to achieving net zero emissions by 2050 or sooner.

But the world is faced with an uphill struggle if these ambitious targets are to be met, and the future hangs in the balance. Scientists have warned that emissions need to be cut by 45% during this decade for global warming to be kept to a maximum of 1.5C, beyond which the risk of droughts, floods, and extreme heat significantly increases.

With the effects of climate change already evident in various parts across the globe, issues such as severe weather are set to become increasingly disruptive.

Meanwhile, ESG demand continues to rise – but which are the most effective ways to drive change through investment?

Despite the challenges, plenty of opportunities lie ahead for investors. Capital allocation will play a crucial role in the low carbon transition.

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Low Carbon Transition Roundtable

The CAMRADATA Low Carbon Transition Roundtable took place virtually in London on 22 June 2021.



Union's Sustainable Finance Disclosure Regulations (SFDR) in March, and further major policy announcements expected during COP-26 in November, economic decarbonisation gathers apace. Every asset manager and owner represented at the CAMRADATA Low Carbon roundtable this summer has a Net-Zero target in place. But there is still plenty of detailed work to do translating that target into everyday practice and monitoring progress. This is the case at the London CIV, investment manager for the pension assets of London's 33 local authorities. Jacqueline Jackson, head of responsible investment at the London CIV, said it started last year to map out its carbon footprint. She told the CAMRADATA panel that approximately 90% of total assets, including all public securities, had now been analysed. The London CIV now has short-term, mediumterm and long-term targets, against which it will measure year-on-year

With the advent of the European

Evaluating the contributions from each component, which the

"In pursuing its own milestones, the London CIV has to put clients' needs first, while monitoring and gauging both past actions and future intentions of those managers and investee companies."

London CIV is overseeing itself, is complicated. Jackson made the point that there are different methodologies for accounting for carbon exposure. Moreover, as a fiduciary manager, the London CIV has relationships with many thirdparty asset managers and exposure to thousands of stocks and issues. In pursuing its own milestones, the London CIV has to put clients' needs first, while monitoring and gauging both past actions and future intentions of those managers and investee companies.

It is a similar task for other major asset owners, such as NEST, the UK's fastest-growing Defined Contribution scheme. Katharina Lindmeier, senior responsible investment officer at NEST, told the CAMRADATA panel that on its path to carbon neutrality, the £12bn fund expects to halve carbon emissions by the end of this decade.

NEST produces annual targets but Lindmeier noted that these are per individual asset mandate. "We are not comfortable aggregating data at the Trust level," she said.

One reason, Lindmeier noted, was that UK and European managers tended to account for carbon in their portfolios using the Picard methodology. US-based managers, on the other hand, preferred Weighted-Average Carbon Intensity. Another variation among managers - although not on geographical lines - regarded the inclusion of avoided emissions. Lindmeier said that as policy mechanisms for decarbonisation, NEST was keen on neither avoided emissions or carbon offsets.

The CAMRADATA panel then turned to how asset managers can help long-term asset owners in the energy transition. Mahmoud El-Shaer, portfolio manager of Wellington's Global Credit Buy and



"Some Low-Carbon methodologies focus on current emissions and consequently have highly uneven exposure to respective industrial sectors."

Maintain fund, described the firm as a thought-partner to its clients. "Our clients expect us to help them reach their sustainability objectives via reasonable pathways." He gave the example of one client attempting an ambitious decarbonisation target in credit. El-Shaer's first point was that emissions data are always lagging, which matters a lot in a world where so many new targets are being set by organisations and regulators. In the current environment, even a twelve-month delay in reporting data can be meaningful. And in spite of the recognised value of Science-Based Targets via the SBTi, El-Shaer noted that, so far, only about 15% of issuers in the credit universe have produced such targets. Add in the inadequacy of Scope III emissions data reporting and it becomes clear why, for this client, Wellington concentrated pragmatically on Scopes I and II emissions in helping this client.

Wellington's initial work created a portfolio that had just 10% of the emissions of the market index. However, it lacked sufficient diversification by issuer and levels of income to meet the client's needs. The ambitiousness of the decarbonisation was therefore

tempered in order to satisfy these other goals in a revised version. For El -Shaer, the need is for ongoing communication between manager and clients, and he was positive on the future of such collaborations: "Datasets will become richer over time and so tailoring mandates to clients' needs will become more precise," he said. Lionel Pernias, head of buy and maintain fixed income at AXA Investment Managers, agreed that helping clients was about answering their questions. For example, how to mitigate risks while investing in major emitters. Some Low-Carbon methodologies focus on current emissions and consequently have highly uneven exposure to respective industrial sectors. AXA IM has long argued that within the most polluting sectors, such as power utilities, there has to be recognition of those energy providers and distributors genuinely willing to decarbonise; and that this process will take longer than in sectors with lighter footprints. AXA IM thus advocated a new category: transition bonds to distinguish and reward those companies that currently rely on fossil fuels but are making the most effort to change to low carbon efficiently. SSE in the UK is one such utility that AXA

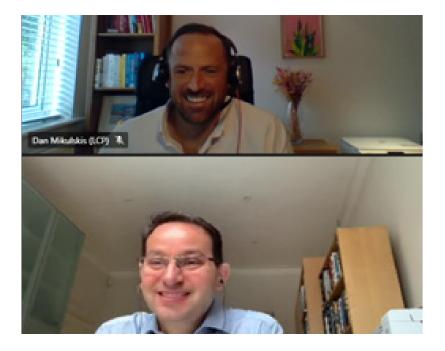
progress.

IM has backed via transition bond participation.

Referencing the challenge of monitoring progress and intentionality, Pernias said that the most important thing was measuring changes over time. Only time presented the proof of what each credit issuer was doing vis-à-vis its stated milestones (AXA IM itself is committed to Net-Zero Carbon for all assets under management by 2050, with shorter and medium-term targets).

Pernias added that as more thirdparty providers and consultancies sprang up to advise on sustainable investments, clients have been asking AXA IM to contrast and compare its data on sustainability against the information and analysis offered by others "because we are well positioned" to do so.

Freddie Woolfe, equities analyst for Jupiter's Global Sustainable Equities Fund, which is already aligned with delivering a 1.5 degree scenario and net-zero carbon by 2050, said the investment team helped clients by aligning their savings with those companies that are leading the transition to a more sustainable world. "This clearly includes the low carbon transition, but our investment approach is centred in a multi-stakeholder approach, so in the context of



decarbonisation ensuring a just transition is key," he told the CAMRADATA roundtable.

Not only does the Jupiter fund have a 76% lower carbon intensity than the benchmark, but it is also liquid and diversified. Woolfe said this made the strategy a genuine candidate for Defined Contribution pension schemes' default global equities allocation.

The importance of sustainability within default funds – which account for the lion's share of DC assets – has been evident ever since high-street bank HSBC's own pension scheme opted for a such a strategy. For Lindmeier, the issue here is double materiality: invested companies might do very well for themselves and their financiers but if the environment is seriously degraded, then financial returns alone cannot be considered in isolation.

She clarified that financial risk and return came first when NEST set its carbon policy. "But given the youthfulness of our members – their average age is 28 – it was decided that Climate Change was a major risk because these people would not be retiring well into the second half of the century," she explained.

Ed Baker, UN PRI's technical head of climate and the energy transition, gave another perspective on double materiality. He distinguished fossil fuels. Pernias said that AXA's own chief economist supports such a mechanism but he quickly added that there was a caveat: this has already been tried – with the Kyoto Protocol back in 1997.

Thus far, success has been limited. "Such an agreement works only in theory," said El-Shaer. "The world is too complex to internalise the costs."

Helen Wiggs, who leads ShareAction's Investor Decarbonisation Initiative, said that there was no 'silver bullet' in the transition to a low-carbon economy but making education on Climate Change mandatory for the members of boards of public companies would be an effective policy. She said this would help to

"Even the largest investors do not have the heft to reduce systemic – or global – threats alone. For this, Baker expected international collaboration at the highest level."

organisation-level risk from systemic risk. "Net-Zero Carbon per organisation does not mean the systemic risk has disappeared," said Baker. Even the largest investors do not have the heft to reduce systemic – or global – threats alone. For this, Baker expected international collaboration at the highest level. "Governments have to meet Paris-Aligned Benchmarks," he said.

International leverage

This brought the conversation onto what 'big levers' could be pulled to mitigate Climate Change more effectively. For all the efforts made thus far to improve sustainability, humanity is still failing to meet internationally recognised scientific targets for curbing greenhouse gas emissions and preserving natural capital.

The CAMRADATA panellists were asked what one policy would most assist the transition to a Low-Carbon world. Pernias started with a form of global carbon pricing based on countries' GDP. This would see richer countries support developing countries to grow economically with less reliance on counter some of the short-

termism still prevalent in corporate culture and financial centres. Baker said: "We know what the solutions will be but the major economies are unwilling to come forward with credible Net-Zero policies." He noted that policies such as fuel-efficiency standards are there but can only be meaningful if countries adopt them. "Among the large economies, only the UK and EU have a track record of meeting their set Climate Change targets," he said.

Jackson said that carbon pricing needed to be holistic to aid the costs of a just transition. She feared that, even if implemented, a carbon tax could be gamed by unscrupulous operators [markets such as the EU's Emissions Trading Scheme has certainly suffered from poor construction]. Jackson reckoned that the G7's recent measure to establish a minimum corporate tax globally was a more realistic first measure than minimum carbon pricing.

Woolfe agreed with Baker and Jackson on the urgency for more international co-ordination to internalise externalities so as to align incentives. "That is needed for a more just transition, whereby richer economies, which have benefitted from the use of carbon in their development, recognise this and co-ordinate global responsibility so that lowerincome economies are not unfairly penalised as they look to continue to develop," he said.

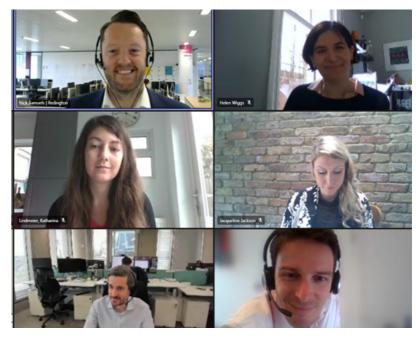
But Dan Mikulskis, a partner at investment consultancy, LCP, warned of the danger of focusing solely on policy action: "The temptation for some clients is to say that this is the government's job, not ours. But investors are taking ownership of their portfolios and their right to influence."

Mikkulskis differentiated between simply buying Low-Carbon funds and establishing a forward-looking alignment framework, as NEST and London CIV have done. While establishing the framework is part of taking ownership, he emphasised that some UK pension schemes are in "pushback" mode and want answers to how climate change represents a strategic risk to them; and how the transition manifests itself in terms of new opportunities. "There is still a debate to be won that Net-Zero Carbon will not compromise long-term returns," he said. "Some clients think this is just putting money into windfarms. Others ask why it can't all be left to their asset managers to decide."

Nick Samuels, head of investment research at another consultancy, Redington, said: "Our clients are not relying on government regulation. The question is how quickly you want to align your own portfolio with decarbonisation and how much 'real world' you want in there, i.e. current high-emitters who need more time to transition."

Samuels said that Redington clients were weighing up their budget to be impactful – beyond simply ESG-aligned. He noted in public equities, however, that impact companies have re-rated

"The temptation for some clients is to say that this is the government's job, not ours. But investors are taking ownership of their portfolios and their right to influence."



because of rising demand. More fundamentally, Samuels raised the conundrum of ascertaining intentionality in listed equities. "Are shareholders being impactful by buying shares or merely benefiting from owning an already-impactful company?" he asked. Redington sees nothing wrong with the latter – once price and value are accounted for - but Samuels said the question was important in terms of defining impact.

As an equity analyst in this space, Woolfe recognised Samuels's point that some companies often cited for their impact were currently priced highly. "We are very mindful of crowding into some names, as well as greenwashing to try to attract capital flows," said Woolfe, "but we don't see a trade-off between genuine Low Carbon transition and long-term financial performance at all." On the fundamental question, he

On the fundamental question, he agreed with Samuels that the most important thing is intentionality. Putting this into practice in Jupiter Global Sustainable Equities, Woolfe noted that the fund's focus on the sustainability of both how companies behave and what companies sell leads it to have low commonality of holdings with peers. Woolfe commented that, while owning large technology stocks might have helped to decarbonise a portfolio, it is important to understand what the drivers behind that are and assess the sector by the extent to which companies are actively seeking to contribute to the transition to a low carbon world.

El-Shaer agreed that mega-tech was not driving decarbonisation. He noted that the one of the most successful examples was a Danish energy provider, which transformed itself from fossil-fuel to a renewable producer.

The rules of engagement

The CAMRADATA panel then discussed how asset managers engage with issuers of stocks and bonds in order to aid the energy transition.

Woolfe said that engagement was an enormously powerful tool. He cited CA100+ as an immensely influential campaigning force on the oil sector, with a domino effect on behaviour within the sector as well as being proof of the wide body of support for decarbonisation across the investor community.

With no retained clients or assets under advice, ShareAction exists to campaign for such beneficial change across a wide range of social and environmental issues. As such, Wiggs said ShareAction



welcomes investor coalitions and looks to them when launching resolutions. Her concern regarded the number of coalitions and alliances springing up. "A degree of transparency is needed on who is leading and who decides crucial steps such as escalation," she said.

Wiggs gave one example regarding Total where the campaign lead had a seat on the board of the energy giant: an obvious conflict of interest, according to Wiggs: "Multinationals and investor campaigns are complicated: it takes time to work through and understand all the considerations."

El-Shaer said that Wellington had approximately 15,000 meetings every year with C-suite executives of corporations around the world. "We are a large asset manager: companies listen to us and we engage with them in a constructive way," he said. These meetings can involve members of Wellington's equity, fixed income and ESG teams together – it's not unusual for up to 30 investors to attend such meetings. The firm also writes a large number of letters to corporations. "The initial purpose of the engagements is informationgathering," explained El-Shaer. They help both manager and company when it comes to goal-setting; ensuring that targets are sciencebased and corporates are aware of long-term risks. When companies set on the path of decarbonisation, El-Shaer said Wellington's role then becomes assessor of the execution

"The reliability of corporate figures detailing sustainability now has the ear of the most powerful people on the planet"

of the policy. "What is important is that our engagement role on emissions reduction reduces the physical risks our clients are exposed to in their portfolios," he concluded.

Pernias said that AXA IM first looks for companies that can most impact the drive to Net-Zero Carbon. In fixed income, the period of most influence is at new issuance. "We encourage these companies to issue green bonds and provide feedback on step-ups in premia on sustainability-linked bonds," he said. AXA IM is assessing which issuers will improve over time. Looking to the long end of the yield curve, Pernias noted that there were already signs that the cost of capital for high-emitting issuers was changing. "What's true for companies is true for investors," he said. He compared sentiment on fossil fuel to tobacco five years ago. That was when cigarette manufacturers saw their debt being downgraded. "We are starting to see a technical discount of longdated, carbon-related issuance," said Pernias. "But the scale of carbon risk dwarfs the health risks from tobacco."

The CAMRADATA panel closed with a return to the opening theme of establishing net-zero carbon

targets and milestones based on as-accurate-as-possible data. Mikulskis made the point that no one should be waiting for perfect standardisation. "We live in an imperfect world." He said that companies select various ways to present their earnings, for example, and everyone is used to evaluating the differently-presented data. "Our industry can get hung up on the false reassurance of data."

Jackson agreed that complexity was no excuse for inaction. "When I started working at Trucost in 2014, companies would use the lack of standardisation on emissions reporting as an excuse to do very little. Climate Change is simply a global emergency [many London boroughs, the CIV's owners and clients, have followed the Mayor of London in making this an official declaration]."

Lindmeier concluded on a positive note that the reliability of corporate figures detailing sustainability now has the ear of the most powerful people on the planet. She referred to the G7's recent endorsement of mandatory disclosure of climaterelated risks by companies: "I don't think five years ago the G7 would have been pronouncing on nonfinancial disclosure," said Lindmeier

Roundtable Participants



Lionel Pernias, Head of Buy and Maintain Credit, London

Managers

Personal Profile

Lionel heads the London-based Buy and Maintain Credit team, with overall responsibility for the performance of UK client portfolios. With direct responsibility for over £10bn of assets, the team has developed a range of sustainable and climateaware fixed income solutions to meet the specific cashflow and other financial objectives of clients such as pension funds and insurers.Lio initially joined AXA IM in 2006 as a member of the UK Fixed Income team, primarily managing insurance portfolios. He was a key member of the AXA IM project team which developed our long-standing Buy and Maintain Credit capabilities to deliver innovative, cashflow-driven credit solutions for UK institutional investors.Now with £344bn of assets focused on helping clients to meet their financial goals sustainably, our Buy and Maintain credit solutions offer the benefits of scale, and quality of portfolio design and implementation, of a well-resourced credit research, management and trading investment platform.Lionel manages both global and sterling credit, including the AXA Sterling Buy and Maintain Credit Fund. Lionel holds a Master's in Financial Markets from the SKEMA Business School.

corporate actions and culture. Whether looking to secure cashflows, enhance growth portfolios or make an impact, our goal is to provide clients with a true value responsible investment solution, while driving meaningful change for society and the environment.

classes.

AXA Investment Managers

AXA Investment

Company Profile

AXA Investment Managers is a responsible asset manager, actively investing for the long term to help its clients, its people and the world to prosper. With over £770 billion in assets, our high conviction approach enables us to uncover what we believe to be the best global investment opportunities across both traditional and alternative asset

AXA IM is a leading investor in green, social and sustainable markets, managing c£500 billion of ESGintegrated, sustainable and impact assets. We are committed to reaching net zero greenhouse gas emissions by 2050 across all our assets, and integrating ESG principles into our business, from stock selection to our

Roundtable Participants



Freddie Woolfe Analyst, Sustainable Investing

Personal Profile

Freddie is an Equities Analyst on the Global Sustainable Equities team. He joined Jupiter in July 2020. Before joining Jupiter, Freddie was Head of Responsible Investment and Stewardship at Merian Global Investors. Prior to that he was a Responsible Investment Analyst in Newton Investment Management's equity research team. Before that he led the UK stewardship team at Hermes EOS.

Freddie has a degree in Modern Languages and an MBA with distinction. He is also a Fellow of the RSA.



Jupiter Asset Management

Company Profile

Jupiter is a specialist, high conviction, active asset manager. We exist to help our clients achieve their longterm investment objectives. From our origins in 1985, Jupiter now offers a range of actively managed strategies available to UK and international clients including equities, fixed income, multi-asset and alternatives. Jupiter is a constituent member of the FTSE 250 Index, and has assets under management of £58.8bn /\$81.0bn /€69.1bn as at 31/03/2021.

Independence of thought and individual accountability define us. Our fund managers follow their convictions and seek those investment opportunities that they believe will ensure the best outcome for our clients. They do this through fundamental analysis and research, a clear investment process and risk management framework, with a focus on good stewardship.

https://www.jupiteram.com/uk/en/ institutional/about-jupiter/



Mahmoud El-Shaer, CFA **Fixed Income Portfolio Manager**

Personal Profile

Mahmoud is a portfolio manager focusing on the management of customized, low turnover and liabilityoriented credit portfolios.

Prior to joining Wellington Management in 2016, Mahmoud was a portfolio manager at Aviva Investors (2010 - 2016), where his responsibilities included leading their Liability-Driven Credit team, which managed the credit portfolios covering liabilities of Aviva's UK, Irish, and French businesses, as well as the Aviva Staff Pension Scheme. Before that, he was a portfolio manager at Swiss Re (2008 - 2009), managing the firm's sterling corporate credit book. He previously worked as a senior investment manager for European investment-grade credit at State Street Global Advisors (2002 - 2008) and as a global fixed income portfolio manager at Salomon Brothers KAG and Citigroup Asset Management (1999 - 2002).

Mahmoud holds a degree in business studies from Johann Wolfgang-Goethe University (1998) and an MBA from London Business School (2007). He is a CFA charter holder and a member of both the CFA Institute and the CFA Society of the UK.

Wellington

Company Profile

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WELLINGTON **MANAGEMENT®**

Management

Tracing our history to 1928, Wellington Management is one of the world's largest independent investment management firms. With over US\$1.2 trillion in client assets under management as of 31 December 2020, we serve as a trusted investment adviser to more than 2,300 institutional clients and mutual fund sponsors in over 60

Our comprehensive investment capabilities are built on the strength of rigorous, proprietary research and span nearly all segments of the global capital markets, including equity, fixed income, multi-asset, and alternative

As a private partnership whose sole business is investment management, our long-term views and interests are aligned with those of our clients. Our commitment to investment excellence is evidenced by our significant presence and long-term track records in nearly all sectors of the global securities markets.

Roundtable Participants



Dan Mikulskis

Investment adviser, Writer, Podcast host

I'm a lead responsible investment advisor to institutions (like pension funds, wealth managers and sovereign funds), helping them focus on long-term investing objectives and manage risk in a world driven by short-term noise. I help my clients measure what matters, prepare well for uncertainty and make better decisions focused on their investment strategy. All views are my own. I have 18 years experience in the consulting and asset management business.

I edit LCP's investment magazine: Vista https://www.lcp.uk.com/ investment/publications/lcp-vistaspring-2021/and host our podcast: Investment Uncut https://www.lcp. uk.com/our-viewpoint/2021/03/ investment-uncut-putting-the-tiktokinto-investing/



Jacqueline Jackson

Head of Responsible Investment

Jacqueline Amy Jackson is the Head of Responsible Investment at the London Pension Collective Investment Vehicle. She leads London CIV's commitment to sustainable finance by developing and implementing strategies designed to mitigate financial risks arising from environmental and socioeconomic issues.

Jacqueline has experience delivering public speaking on sustainability, podcasts on climate change and other environmental publications. Over the last twelve years she has advised institutional investors, corporations and governments on how to interpret exposure and impact associated with natural resource constraints to help inform resilience and identify the transformative solutions of tomorrow.

Prior to joining London CIV, Jacqueline worked in creative advertising, founded an ecommerce website and worked in business development for Trucost and S&P Global.







Katharina Lindmeier

Responsible Investment Manager at NEST

Katharina works in the Responsible Investment team at Nest where she is responsible for Nest's approach to climate change risks and opportunities. Prior to joining Nest in 2019 Katharina worked at RPMI Railpen and Aberdeen Standard Investments.

Katharina holds an MA in Philosophy and Economics from the University of Edinburgh and is studying towards an MSc in Economics and Policy of Energy and the Environment at UCL. She is a CFA charterholder.





Nick Samuels

Head of Manager Research

Nick joined Redington in September 2015 as a Director in the Manager Research team. Now Head of Manager Research, he leads a talented team who help institutional and wealth management clients around the world allocate to the funds that get them closer to their strategic goals. Nick is chair of Redington's Responsible Investment Committee and also a voting member of Redington's Investment Strategy Committee. He works directly with several of the firm's clients in the UK and Europe.

Nick began his investment career in 2000 at Schroders, where he worked on the Asia and Emerging Market equity teams, before moving into manager research roles at investment consultancy Stamford Associates, South African multi-manager Momentum Global Investment Management and US multi-manager SEI Investments.



Roundtable Participants

Helen Wiggs

Head of Corporate Climate

Helen joined ShareAction in 2018 following a career in equity broking at Morgan Stanley and previously, BNP Paribas. After an initial role in Investor Engagement, she was appointed Head of Corporate Climate in 2020 and runs the Investor Decarbonisation Initiative (IDI). IDI is a climate-focused investor coalition, targeting hard-to-abate sectors.

Helen holds a degree in Modern Languages from the University of Cambridge.



Edward Baker

Technical Head – Climate Change and Energy Transition

A seasoned policy and business adviser. Previously led the UK's Foreign Office's work on green finance in China. Now, working for the Principles of Responsible Investment on implementing the TCFD recommendations, scenario planning, China, UK and more.

Moderator



Brendan Maton

Freelance Jounalist

A highly experienced financial journalist with an expansive network of contacts in the UK and across Europe. Brendan has written about pension schemes and national welfare systems from Finland to Greece for 18 years and understands the retirement savings industry in each European country. Brendan has interviewed EU commissioners and national ministers; central bankers; pension scheme heads; insurance chief executives; chief investment officers; actuaries; union officials; professional and lay trustees.He worked at Financial Times Business for eight years, finally as editor-inchief of all international pensions titles. Brendan has spent the last ten years as a freelancer for a number of publications, including Financial Times, Responsible Investor, Nordic region pensions news and IPE. He is also Chief webcast host for IPE. Brendan has acted as conference chair for Financial News, the UK National Association of Pension Funds, Dutch Investment Professionals Association (VBA), Corestone, Insight Investment, Marcus Evans, Robeco Asset Management, Sustainable Asset Management (SAM), Towers Watson.

ShareAction»



IN FOCUS CAMRADATA ROUNDTABLES



CAMRADATA BRINGS TOGETHER EXPERT FUND MANAGERS WITH CAREFULLY SELECTED **INVESTORS IN A STREAMLINED VIRTUAL FORMAT**



"I have taken part in several roundtables over the last 18 months and this was the best orchestrated by far"

Investment Director, UK Consulting firm



"Just a note to say thank you for organising the panel and having me on it. I found the full group discussion super informative."

Portfolio Manager, Global Asset Manager

"The CAMRADATA virtual roundtable went really well, as well as the live events, which was quite surprising! It was informative and interesting, and I know our Fund manager enjoyed being a part of it."

Business Development Manager, UK Asset Manager



Interactive and dynamic debate • A wide array of asset classes covered • Branding, editorial and advertising opportunities as part of all roundtables • Expert investor panels • Ability to connect and network with key stakeholders

To find out more - Natasha Silva (Natasha.silva@camradata.com) would be delighted to speak to you.

How climate metrics can guide institutional investors towards their net zero goals

Every investor is affected by the policy, regulatory and consumer momentum around climate change. The effects will be steadily amplified, and the risks become more visible in every asset class and every portfolio. As the powerful drive to deliver on the targets of the Paris Agreement gathers pace, it is essential for investors to understand where those risks are, how potent they might be, and how they will likely evolve over time.

We typically see three types of investors: Those simply happy to comply with the regulations; others seeking to identify and address climate risks, and; those who decide there is little point running a net zero portfolio in a net positive world and who want to support the wider transition.

In short, no institutional investor can ignore this ubiquitous trend. The physical and transition risks associated with climate change pose a genuine financial risk whichever type of investor you are. The aphorism – 'what can be measured can be managed' – has rarely felt so appropriate.

However, this is still a new and complex area where the available data must be analysed closely to deliver decision-useful insights that can prepare and protect investor portfolios for a net zero world.

Measure for measure

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Three important metrics are a common starting point to assess the climate impact of portfolios:

- decide if a portfolio has reached net zero.
- useful when comparing assets within industries.

In combination, these metrics start to form the basis of climate reporting. Below we set out how this might appear, with additional benchmark performance and coverage data to put the results in context. This kind of reporting can go a long way to meeting the metrics demands of the Task Force for Climate-related Disclosures (TCFD).



Total emissions: The simplest and most fundamental metric. This measures the level of greenhouse gas (GHG) emissions in a portfolio - if you own 10% of a company, you own 10% of its emissions. This datapoint, measured in tonnes of CO2 equivalent (CO2e), will

Carbon footprint: This translates total emissions into a measure per million invested, making it a far better tool for comparisons. Combined with total emissions, it is a favoured measure of regulators including the UK's Department for Work and Pensions.

Weighted Average Carbon Intensity: Known as 'WACI', this looks at the emissions intensity of all issuers in a portfolio weighted by a measure of scale, typically revenues but possibly others such as enterprise value or something sector-specific. It is particularly



Climate reporting – example emissions report

Scope 1 & 2 carbon emissions	Portfolio	Coverage	Benchmark	Coverage	Units
Absolute emissions	36,540	72.0%	50,900	76.8%	tC02e
Carbon footprint	83.7	72.0%	138.1	76.8%	tC02e/m GBP Invested
Weighted Average Carbon Intensity (revenues)	100.6	68.5%	108.6	73.6%	tC02e/m USD Revenue
Weighted Average Carbon Intensity (Total Enterprise Value - TEV)	61.6	72.0%	96.8	76.8%	tC02e/m USD TEV

Source: AXA IM, Trucost, Bloomberg as at 30/06/21. For illustrative purposes only. Scopes 1 and 2 refer to the direct and indirect emissions from business activities. Scope 3 covers emissions attributable to products or services used by suppliers and consumers. Harder to gauge, we urge caution when analysing and reporting these figures.

Risks and resilience

While the 'big three' metrics form the cornerstone of climate reporting, we believe more nuanced measures are required for credit investors to properly assess the financial implications of climate risks.

One route is to use Climate Value at Risk, or CVaR, in effect a scenario-analysis tool to measure how much a portfolio might fall if climate risks are fully priced in today. We can use CVaR to identify the main contributors to risk and better understand the potential financial impacts. Any increase in carbon pricing, for example, could quickly upset business models for high-emitting companies.

An alternative would be to deploy insights from the Transition Pathway Initiative (TPI), an asset-owner-led group that scores companies' preparedness for the low-carbon economy. It is forward-looking, sector-specific, and freely available – its only real drawback is that it looks only at the most material emitting industries. Notably, it doesn't cover financials, which may be financing high-emitting companies.

Assessing a company's preparedness for the low-carbon economy



Source: AXA IM, Transition Pathway Initiative, 30/06/21. For illustrative purposes only. TPI Management Scoring shows portfolio holdings versus benchmark for high emitting sectors, ranked from Level 0: Unaware of Climate Change as a Business Issue, through Level 4: Strategic Assessment to 4 Star, its highest ranking.

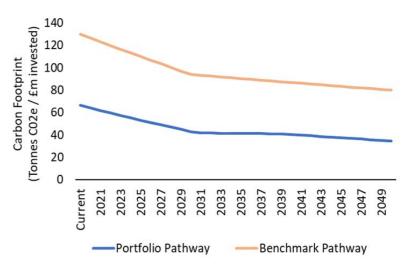
Align at last

At the heart of climate-aware investing is alignment with the net zero pathway of the global economy. To address this, we begin by looking to the Science-Based Targets initiative (SBTi), a third-party provider which checks and approves company targets against Paris Agreement scenarios and across more sectors than the TPI.

We then use the SBTi input to carefully plot how those targets translate into the expected carbon footprint over time. The graphic below indicates how we might assess this in a sample portfolio - we would expect the portfolio pathway to steepen as more companies make commitments, and as engagement work bears fruit.

For institutional investors using buy and maintain credit or cashflow driven investing strategies, we can build a bespoke carbon emissions portfolio integrating their unique goals:

Projected emissions pathway



Source: AXA IM. For illustrative purposes only.

Conclusion

Bruno

Bamberger AXA IM Core Solutions Strategist Investors get it. The Net Zero Asset Managers Initiative now covers some \$43trn in assets under management¹, but this still feels like the drawing of breath before the real work is done. And it is important not to lose sight of perhaps the most fundamental aspect of climate-aware investing: It should not come at the expense of the investors' financial objectives.

To do that, multiple sources of data must be harnessed, analysed, and deployed. All that we have discussed above and more can be combined to form an over-arching climate dashboard that gives institutional investors the opportunity to adapt credit allocations over time and with confidence that they may be better protecting portfolios against one of the most dominant risk factors of our time.

Investments involves risk including the loss of capital.



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How to value the low carbon transition

Sustainable investment aligned with a low carbon transition is increasingly being recognised as an imperative across the world. At Jupiter, we launched our global sustainable equities strategy in 2018, which aligns investors today to delivering net zero by 2050 at a portfolio level. More recently, as a firm Jupiter has announced a commitment to achieving net zero emissions across our full range of investment and operations by 2050, and by the end of this year will define a detailed roadmap including milestones and targets for achieving this. It is heartening to see numerous companies in a wide range of sectors also make net zero by 2050 commitments, but just because there is a 'will' doesn't mean the 'way' is straightforward.

The long road to Paris

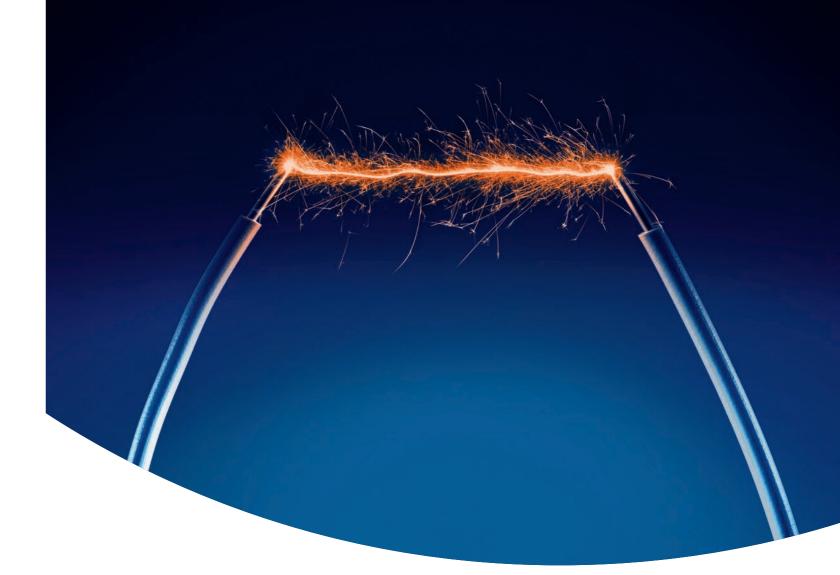
The complexity of the low carbon transition has been highlighted by the International Energy Agency's latest low carbon scenario that delivers net zero emissions (NZE) by 2050. First, it shows the huge system and behaviour changes required to keep on track with delivering the temperature goal of the Paris Agreement, which will present both risks and opportunities for companies in many sectors. Second, it underlines the multitude of pathways to achieve net zero by 2050; there are significant differences in technologies and total energy consumption between NZE and scenarios laid out by the International Panel on Climate Change (IPCC) in its special report on achieving 1.5 degrees warming. Notable, for example, is how much less carbon capture is anticipated in NZE, meaning a much greater prioritisation on real emissions reduction rather than mitigation of the status quo. We firmly agree that this must be the focus.

Despite this complexity, analysing a company's compatibility with a low carbon world is both necessary and very possible in an investment context. To start with, it is important to see a company set a goal of aligning with net zero by 2050. However, a company's compatibility with the low carbon transition is about more than setting ambitious long-term targets. For us as investors, the most pertinent questions relate to how companies are going to decarbonise, and in particular how this is going to be done in a way that is also going to create value for investors.

Long-term targets need to be backed up by shorter-term trajectories that are in line with the latest scientific understanding of the decarbonisation pathways compatible with the goals of the Paris Agreement. Low carbon transition strategies should be actionable and credible, backed up with capital allocation plans that underpin the large investments required by some companies to transition effectively, with convincing evidence that the potential returns on this capital are sufficient to justify its deployment. Reliance on technological development needs to be grounded in what is likely possible. This cannot happen in isolation, as such strategies will not seem credible without being accompanied by governance practices that are aligned with the strategy, such as climate-effective boards, executive incentive structures that support the decarbonisation plans and lobbying practices that promote climate-positive policies.

How to value the low carbon transition

But what does all this mean for valuation? Many of these aspects are, naturally given the uncertainties, subjective and grounded in an investor's belief in the viability and deliverability of the strategy. The increasing uptake of TCFD reporting is very helpful in this analysis, as when done well it gives a good view of the climate risks and opportunities a company is exposed to, and how these risks are being managed and mitigated and opportunities captured. The best reports demonstrate how robust a company might be to various climate scenarios, and help us understand how they are building resilience. As this reporting becomes more prevalent (or even mandated), we expect low carbon transition to be increasingly reflected in companies' cost of capital.



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As with all investing, your capital is at risk.

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"Long-term targets need to be backed up by shorter-term trajectories that are in line with the latest scientific understanding of the decarbonisation pathways compatible with the goals of the Paris Agreement."





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Certain aspects are, however, more quantifiable. For example, to incentivise the transition to lower carbon activities a cost on carbon will be required. There is a wide range of topics that an analyst needs to take a view on in order to incorporate carbon costs into a discounted cash flow valuation. These include how much carbon the company will emit, how much it will cost it in the future once carbon has been priced fully, whether any of those emissions can be reduced and how much it would cost to do that, whether there will be any efficiency gains or otherwise from carbon reduction initiatives, and the extent of the company's bargaining power with its supply chain and customers to understand whether any of these additional costs can be avoided or passed on to the customer.

These considerations are again deeply strategic and require significant knowledge of the company, its industry and broader climate regulations. As an equity analyst dedicated to a strategy that invests in high quality companies leading the transition to a more sustainable world, such topics are what I spend a great deal of time thinking about with the team. If you follow this process through, it is possible to arrive at carbon-adjusted free cash flows, which can then be projected out to the future, discounted back to present value and summed to conclude on a carbon-adjusted valuation.

One of the challenges with the above, in the context of the complexity of the pathway towards net zero, is: how accurate is it possible to be with these forecasts and assumptions? There is a risk of being 'precisely wrong' rather than 'imprecisely right'. For this reason, using a model and flexing the inputs to determine the sensitivities to variables can be as instructive as landing on one single number for valuation. Understanding the limitations of the approach actually helps to make it more useful to investors.

Active is key



Freddie Woolfe Equity analyst, global sustainable equities We believe that active investment is particularly well suited to the low carbon transition. From an investment perspective, and aligning assets with those companies that are leading it, can be a highly complex exercise. To do so effectively requires a detailed analysis involving strategy, finance, technology, climate science and policy, something that we are proud to incorporate in our sustainable strategy.

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A framework for net zero in low turnover credit

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> We believe that climate change poses a material risk to both financial markets and societies at large. In our view, investors have a meaningful role to play in helping achieve the goal of limiting global warming to 1.5 degrees and, in doing so, mitigate risks in their portfolios. Long-term holdings, such as low turnover credit portfolios, are particularly vulnerable as physical and transition climate change risks may, over time, substantially affect the fundamental credit quality and investment risk of issuers.

Finding an effective solution

"A too-narrow

portfolios for low

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Investors looking to decarbonise their portfolios can opt for low-carbon approaches and net-zero solutions, ranging from carbon offsets to net-zero emissions targets over time. Both can play a role in portfolios, with the best fit depending on asset allocators' specific circumstances. Net-zero solutions can be potentially less constrained in how they eliminate carbon and may be better able to capitalise on opportunities and finance the climate transition. Here we outline a practical framework for those investors who are looking to implement net zero in low turnover credit portfolios, which we believe:

- Contributes meaningfully to the climate transition; and
- Does not compromise on investment return and resilience. •

Why net zero, and not low carbon?

A too-narrow focus on optimising portfolios for low carbon may lead to restricting investments in carbon-heavy parts of the market, without solving the broader issue of decarbonising the economy. Not only could this expose investors to concentration risk due to lack of diversification, but, importantly, it means they are not directly financing or benefiting from the climate transition. For cash-flow-aware investors, there are also possible limitations on a portfolio's ability to match future liabilities. Data quality is another major area to consider as climate change data — particularly Scope 3 emissions — is still imperfect.

We advocate a two-pronged approach involving:

- 1. Informed top-down portfolio construction; and
- 2. Bottom-up analysis and engagement.

Portfolio construction

Identify high-intensity sectors

Across the credit universe, different sectors face different levels of transition risk. Analysing sectors by Scope 1+2, and Scope 1+2+3 emissions is a useful starting point to assess such exposure as a highweighted average carbon intensity (WACI) suggests high levels of risk. However, Scope 3 emissions data needs to be interpreted thoughtfully as disclosure is still relatively poor, with the market heavily reliant on third-party estimates.

Understand the idiosyncrasies of each sector

We believe a qualitative evaluation of exposure to transition risk is also essential to determine where each sector is on its transformation journey.

Sector-level emissions data can also mask fundamentally different risk profiles at industry level.

Where sectors face the highest sustainability risks and greatest uncertainty on their transition, therefore presenting the greatest risks to financial returns, we expect to only invest in the leaders within each sector, with the aim of mitigating those risks. Net-zero portfolios can also impose restrictions on absolute sector exposures or on the maturities held.

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Analysis and engagement

Stock selection

We think it is also crucial to differentiate between companies based on their transition risk through rigorous bottom-up credit analysis and engagement. Fundamental analysis may also help investors uncover opportunities to benefit from and finance the transition away from fossil fuels.

Engagement

Figure 1

We believe engagement is the most powerful tool for advancing a net-zero transition and decarbonising portfolios — particularly where investors have a long investment horizon. Divesting from heavy emitters could decarbonise portfolios but may not reduce real economy emissions; portfolios and the overall economy would still be impacted by physical climate risks resulting from those emissions. By getting companies to adopt a credible transition plan, investors can have a broader impact on the net-zero goal and reduce physical risk exposure.

This includes encouraging companies to adopt science-based targets (SBTs). The number of companies with SBTs, or that are committed to acting, has increased from fewer than 100 in 2017 to over 1300 today¹.



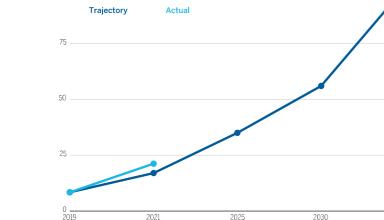
Focus on science-based targets

Focus on science-based targets (%)



Mahmoud **El-Shaer**, CFA Fixed Income Portfolio Manager





Marco Giordano Investment Specialist

For illustrative purposes only. | BBG BC Global Aggregate Corporate Index, as of 30 April 2021 | Source: Science Based Targets Initiative. | 2019 is used as a baseline year. Trajectory represents a linear increase from the baseline year to 100% by 2040. Actual shows the current % of the index which has set science-based targets. Forward-looking statements should not be considered as guarantees or predictions of future events.

Conclusion

Reducing the carbon footprint of investment-grade credit portfolios can be achieved solely with divestment, but at the risk of hindering financial objectives and restricting capital to those companies essential to — or with the biggest potential to accelerate — the low-carbon transition. We believe a net-zero approach should offer a more effective road map to manage climate risks by combining rigorous fundamental research with informed top-down construction and active engagement. While divestment can be used as an escalation strategy, this allows investors to tap into potential opportunities by identifying companies with credible transition trajectories across all sectors and engaging with high-emitting ones. The transition pathway of the corporate universe is complex, and, as investors, it is our role to identify, research and support those companies willing to change and challenge those which are not.

2040

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¹ As of 30 April 2021. | Source: Science Based Targets Initiative (SBTi). The SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF)



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