Net Zero Investing: Columbia Threadneedle Investments Approach

November 2022

In 2021, Columbia Threadneedle Investments committed to working in partnership with clients to reach net zero* greenhouse gas emissions by 2050 or sooner across all assets under management, as a signatory to the Net Zero Asset Managers Initiative.

We are implementing our commitment in stages, aiming for a robust approach by analysing funds and portfolios individually and ensuring a thorough governance and approval processes in the implementation of our net zero methodology. This paper sets out the approach we are taking, and some of the challenges and methodological choices we are making.

This paper sets out our approach to listed equities and corporate bonds. We also have methodologies in place or under development for other asset classes.

Principles underpinning our net zero approach

We have identified three principles to guide our approach to net zero, which have helped with some of the choices we have made along the way.

*Net zero refers to a state in which the greenhouse gases going into the atmosphere are balanced by the removal out of the atmosphere. Source: As of July 2022 https://netzeroclimate.org/what-is-net-zero/

Three principles underpinning our net zero approach

1 Focus on real-world emissions reductions

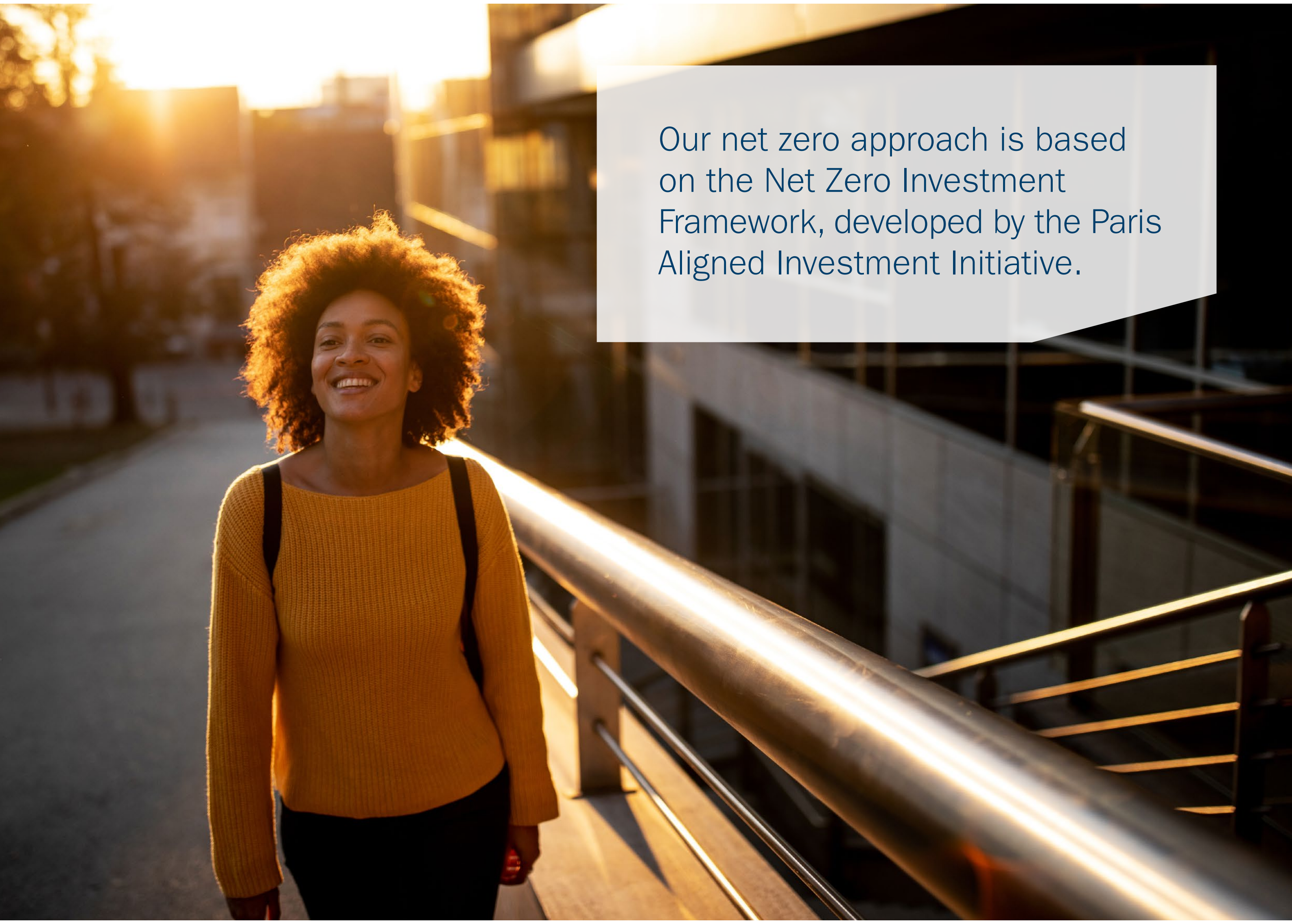
We know that we can cut a portfolio's carbon intensity dramatically by selling companies in highly energy-intensive sectors like electric utilities and industrials, and replacing these with companies in lower-emissions industries. But such portfolio changes alone make little difference in the real world. Our ambition is to use the power of our engagement to influence companies to take action – and as their emissions fall, so too will the carbon content of our investment portfolios. However, engagement can't be open-ended. If companies fail to respond, and remain fundamentally misaligned with a low-carbon future, we will need to re-consider our investments in them.

2 Work in partnership with clients

We remain committed to working with clients and other stakeholders to reach our goal of net zero emissions across all assets under management by 2050 or sooner and continue to discuss our net zero methodology and the implications for individual portfolios with clients and stakeholders, given the need for partnership and approvals. We have provided client briefings on our methodology and have held discussions with a number of clients to work through implementation options and investment impacts. In practice, this collaborative approach means that it may take time for some assets to shift to a net zero approach – which is why we have set an initial target for a proportion of our total AUM which will be covered, with the intention that this will ratchet up over time.

3 Transparency

The risks of `net zero-washing' are real. Methodologies on net zero investing are still emerging, and disclosure by corporates is improving but far from complete. Reaching our goal is also subject to companies operating as expected in relation to transitioning to a net zero economy, availability of reliable data and methodologies across all the asset classes we manage, and potential changes in applicable regulation and client preference. In this context, it is important that we are straight with our clients and wider stakeholders about limitations in our approach, including gaps in data or methodology. We will seek to avoid `black box' approaches, or simple metrics which could obscure a more complex reality.



Our net zero approach is based on the Net Zero Investment Framework, developed by the Paris Aligned Investment Initiative.

Our approach

The basis for our approach for listed assets (equities and corporate bonds) is the Net Zero Investment Framework (NZIF), developed by the Paris Aligned Investment Initiative[1]. We helped to develop the Framework, and co-chair an Implementation Working Group. This group brings together asset owners and managers to discuss a range of issues arising as we put the Framework into practice.

In our own implementation, there were a number of issues and choices, which we set out here, in the interests of transparency and of informing the investor debate.

Whilst we believe our methodology combines the best quality data sources we can identify, we believe that – as in other areas of ESG – data is only the starting point for deeper analysis. No data source is perfect or can fully reflect the complexities of climate change policies at an individual company. However, data models do enable portfolio analysis to be undertaken on a systematic basis, and provide a 'heat map' of where the biggest risks are likely to be – allowing us to prioritise our investment analysis and engagement resources. The data also allows us to report a range of metrics to our clients.

[1] Paris Aligned Investment Initiative – Investing for a net zero future. The Paris Aligned Investment Initiative (PAII) was established in May 2019 by the Institutional Investors Group on Climate Change (IIGCC) to provide a member-led forum to explore how investors can align portfolios to the goals of the Paris Agreement – archiving net zero alignment by 2050 or sooner.

Company-level alignment assessment

Our focus on real-economy reductions led us to place a strong focus on the analysis of investee company alignment with a forward-looking net zero pathway, and the use of active stewardship to drive change at those companies not yet aligned.

Data and metrics

To date our model for listed equities and corporate bonds covers over 7000 companies, and draws in data from a range of sources. Recognising that data may be imperfect, and also that new company commitments will take time to show in the data, we also have the ability to override the model ratings where there is publicly available evidence of a company's policy.

Data sources for company alignment assessment

Climate Action 100+ Benchmark: We see this as the 'gold standard' of company net zero analysis, and use these indicators in preference to any other data source, where available. The Benchmark currently covers 166 of the world's largest-emitting companies.

Transition Pathway Initiative (TPI): TPI has a wider coverage than CA100+, with over 400 companies in high-emitting sectors. TPI is a global initiative led by asset owners and supported by asset managers. Aimed at investors and free to use, it assesses companies' preparedness for the transition to a low-carbon economy.

Science Based Targets initiative (SBTi): SBTi provides an independent methodology and approvals process for companies to set emissions targets in line with low-carbon pathways. Its 'Business Ambition for 1.5°C' pledge is designed for companies prepared to commit to the highest ambition level.

Carbon Disclosure Project (CDP): For more than two decades, CDP has run a global disclosure service, which now covers climate change, water and forests. Investor signatories can access a full download of all data provided in company disclosures.

MSCI ESG: Our main commercial ESG data provider is MSCI. Uses of this data in our net zero tool include company emissions data and the analysis of targets.

We rate companies in 8 categories (2 of which are only rated for Climate Action 100+ companies). These are based on the alignment criteria set out in the NZIF, but with some changes, as set out below. Our decisions on which indicators to cover have been based on a combination of the availability of data and the maturity of assessment methodologies.

	NZIF	Columbia Threadneedle	Metric	Description
■	1	1	Ambition	Ambition to reach net zero emissions by 2050 or earlier
■	2	2	Targets – Interim targets set	Short to medium term emissions targets set
■		3	Targets – Targets aligned	Company targets are driving its emissions intensity consistent with a 1.5 degree industry trajectory (Additional Columbia Threadneedle metric – not required by NZIF)
■	3		Emissions performance	Current emissions intensity performance, relative to targets No reliable data yet identified
■	4	4	Disclosure	Disclosure of Scope 1, 2 and material Scope 3 emissions
■	5	5	Strategy	Strategy in place to achieve targets
■	6		Capex alignment	Not rated, pending further developments in methodology
■	7	6	Policy engagement	Lobbying policy is aligned to net zero emissions Assessed for CA100+ only
■	8	7	Governance	Board oversight; link between climate change and executive pay
■	9		Just transition	Not rated, pending further developments in methodology
■	10	8	Climate risk & accounts	TCFD disclosure Assessed for CA100+ only

■ Columbia Threadneedle core indicators, assessed for all companies, ■ Indicators assessed for CA100+ companies only,
■ Indicators not currently assessed

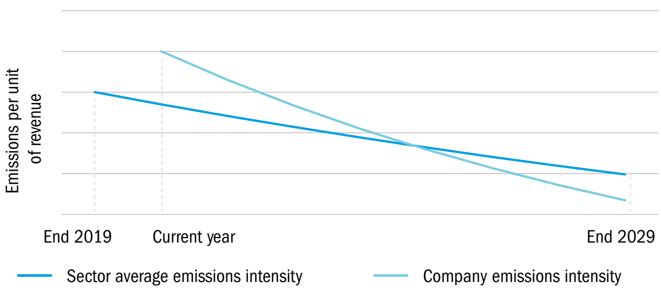
Assessing the ambition of companies' emissions targets

Category 3 – Targets Aligned considers whether companies' medium-term targets are sufficiently ambitious, compared with a 1.5 degree trajectory. Making this judgement is at the core of assessing whether a company's climate strategy is fully net zero aligned, and reflects emerging best practice, such as guidance from the Glasgow Financial Alliance for Net Zero on portfolio alignment[2].

There are significant challenges in making this calculation, as the degree of ambition is not always apparent from companies' own targets and disclosures. Base years vary significantly, and targets can take different forms (for instance, absolute versus intensity targets), as well as covering different scopes of emissions. Some data sources, such as Climate Action 100+, rate this alignment; in other cases, calculations are needed to fill the gap.

Our net zero model's assessment of the adequacy of companies' Scope 1 and 2 targets uses data provided by MSCI ESG, who provide a standardised calculation of 2030 commitments. It compares these company commitments with a 1.5 degree consistent trajectory. This trajectory is calculated on a sector-specific basis where possible, recognising that emissions reductions are more technically challenging in some industries than others. We take sector emissions reductions rates from the International Energy Agency's 1.5 degree report[3]. For those not specified in the report, we use a default rate. We can then construct a net zero aligned trajectory, based on current industry average emissions intensity, and compare this with the portfolio trajectory that considers existing company reduction targets. If the company target is below the net zero trajectory by 2030, then we rate the target as 'aligned'[4].

Assessing company emissions targets



Source: Columbia Threadneedle Investments

At this point in time, we have not included Scope 3 data in this analysis. We hope to build this in for sectors where Scope 3 is particularly material, as better quality data becomes available. However, the model does rate disclosure and target-setting for Scope 3 emissions for sectors where this is most material.

[2] Source: 2022 Concept Note on Portfolio Alignment Measurement, Glasgow Financial Alliance for Net Zero.
[3] Source: Net Zero by 2050 – Analysis – IEA, May 2021
[4] In principle, alignment calculations should be based on cumulative emissions; however we have used point-in-time calculations (in line with, for instance, the Transition Pathway Initiative) for analytical simplicity.

Alignment ratings for companies

Based on the data across these 8 categories, the model gives companies an overall alignment rating. This is based on how many of the above expectations the company meets, with higher standards set for companies in the most emissions-intensive industries:

- **Aligned:** Company meets expectations highly in all relevant categories
- **Aligning:** Company meets core expectations around disclosure, setting targets and strategy
- **Committed:** Company has not yet met these expectations, but has committed to set a science-based target
- **Not aligned:** Company does not meet expectations, and has not committed to set a science-based target

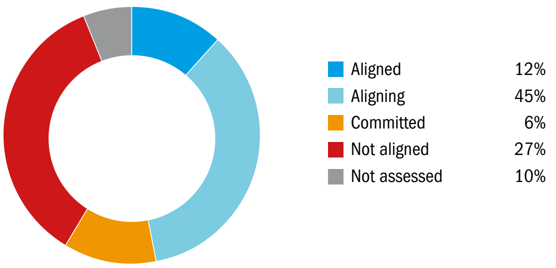
Two categories of companies are not given a rating: companies in the lowest-impact sectors from a climate perspective, and in the finance sector. We see climate change as a critical issue for financial institutions, but the metrics used to judge the adequacy of performance are very different to those for industrial sectors with high direct emissions. The impact of financial institutions comes primarily through their lending and investment policies, and methodologies to judge whether these are 'net zero aligned' are still relatively new, with data on Scope 3 financed emissions very limited. This is an area we will seek to address as our methodology evolves, using some alternative metrics; in the meantime, as described below, we have a particular focus on financial institutions through our engagement.

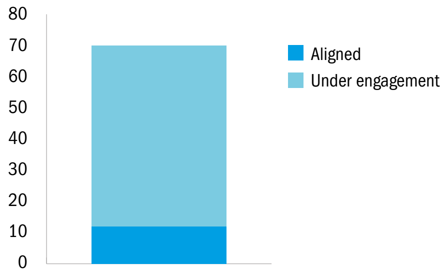
Portfolio analysis and target setting

Once we have established company alignment status, we can analyse how this aggregates to portfolio level, and what actions we will take to improve performance over time.

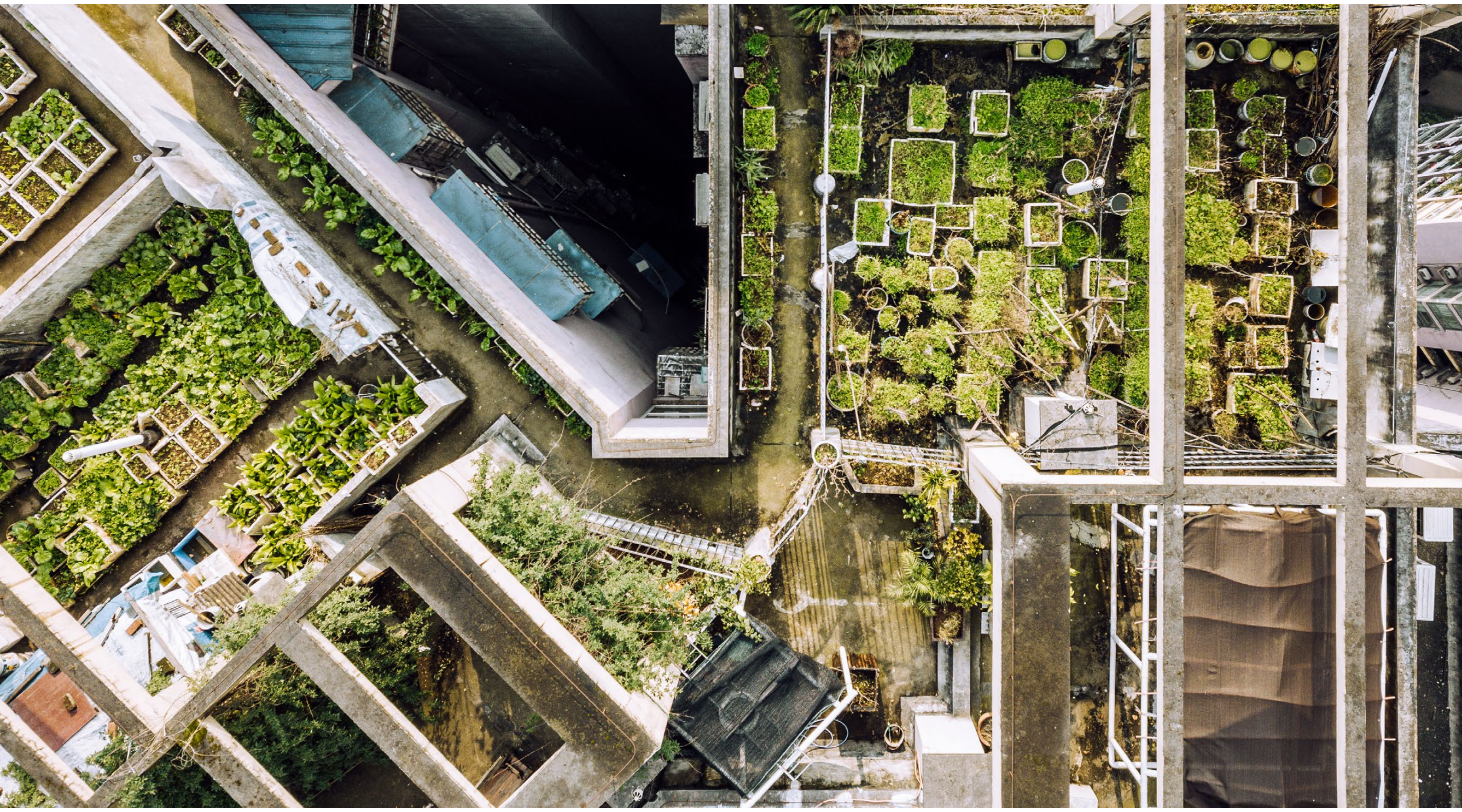
The pie chart shows a representative breakdown of companies in each alignment rating, calculated as a percentage of total portfolio emissions. We will set targets to increase the proportion of companies in the Aligned or Aligning category over time, and will make active use of stewardship to improve the alignment of companies, aiming to have at least 70% of portfolio emissions either Aligned or under engagement for the funds committed to using this net zero framework.

Example of net zero alignment analysis, as a percentage of portfolio emissions





Source: Columbia Threadneedle Investments. Numbers are for illustrative purposes only.



Net zero stewardship

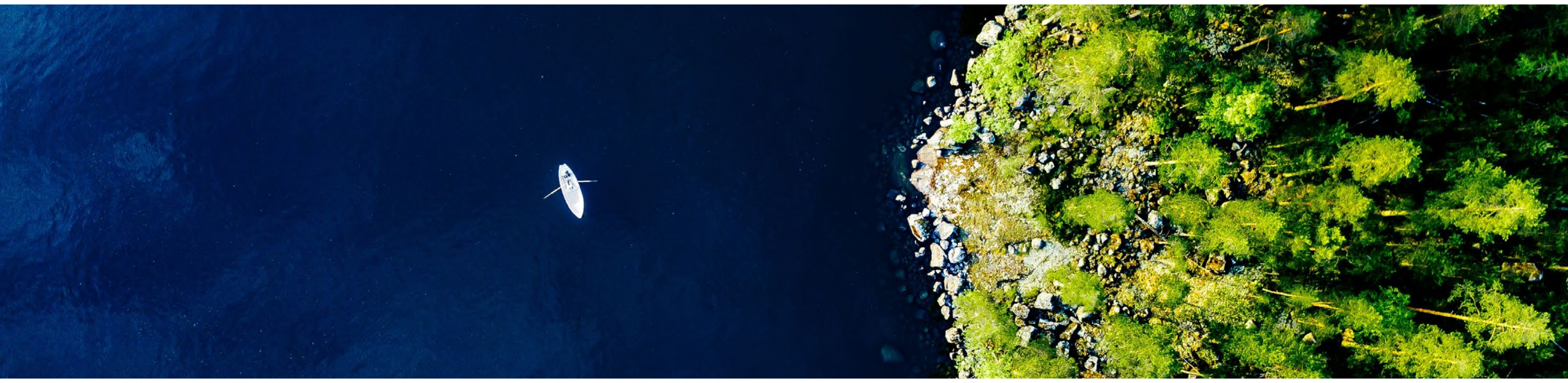
Stewardship lies at the heart of our approach to net zero. We have a broad global engagement programme, with objectives aligned to those of the Climate Action 100+ benchmark, in addition to which we have sector-specific expectations, drawing on the work from organisations such as the Institutional Investors Group on Climate Change (IIGCC) which has developed approaches covering a number of key high-impact sectors.

Our engagement expectations draw on industry best practice standards, in particular those set our in the Climate Action 100+ benchmark. We engage both collaboratively through Climate Action 100+ and other initiatives and one to one with companies.

For strategies committed to net zero, we aim to have at least 70% of financed emissions aligned or engaged. We will take a tiered approach, with the highest-intensity engagement targeted at a selected subset of high-emitting companies. For this focus group, we will consider using escalation strategies, such as buidling collaborations with other investors or supporting shareholder resolutions.

We also have an enterprise-level engagement focus list, where the goal is to work constructively with globally significant high-emitting companies to encourage them to align with a net zero trajectory. Those failing to meet minimum standards despite intensive engagement may be reviewed to see if they are still suitable to be held in portfolios adopting a new zero approach.

Through impactful and targeted stewardship, we hope to influence change at the companies we invest in, and as a consequence achieve improvements in the alignment status of companies over time.



Portfolio-level emissions target setting

As well as the asset-level analysis, we also aim to compare portfolio-level emissions with a 1.5 degree aligned trajectory. We see portfolio level data as an accountability tool, to monitor how well our investment and stewardship activities are working in achieving actual reductions in emissions.

Setting a reference pathway

In terms of understanding the required global emissions reductions, our starting point was the IPCC report, Global Warming of 1.5°C. This report concluded that in model pathways with no or limited overshoot of the 1.5°C limit, global CO_2 emissions need to decline by about 45% from 2010 levels by 2030[5]. Since 2010, however, global emissions have risen from 47.3 $GtCO_2e$ to 52.4 $GtCO_2e$ by 2019. Therefore the required global effort is around a 50% cut in emissions from a 2019 baseline by 2030.

The task then is to translate this global trajectory into a pathway for individual portfolios. There are some key decision points here:

- Which emissions metric to use
- Baseline year and target year
- Whether to account for a portfolio's start point by using a benchmark-relative approach, or to use a self-decarbonisation approach
- If using a benchmark, which one to select

Emissions metric: In line with best practice from the Platform for Carbon Accounting Financials, the metric we will focus on for the emissions trajectory is financed emissions intensity, expressed as CO_2e/\$mn invested.

Financed emissions intensity =

$$\frac{\sum_{c}^{n}\left(\frac{\textit{current value investment}_{c}}{\textit{issuer's enterprise value}_{c}} * \textit{issuer's Scope 1 and Scope 2 GHG emissions}_{c}\right)}{\textit{current portfolio value (in millions)}}$$

The main advantage of this metric is that it is an ownership-based metric, allowing measurement of an investor's share of emissions proportional to its exposure to the investee's total value.

One downside is that the denominator for calculating the intensity measure, $ million invested, is subject to both market movements and inflation, meaning that emissions intensity is likely to change purely due to these factors even if nothing changes in the real world. To counter this, we also plan to monitor absolute emissions, and will seek to apply a normalisation approach to the intensity figure once methodologies are available. We will also measure and monitor weighted-average carbon intensity (WACI) as a metric to help understand climate risk.

[5] IPCC, 'Special Report: Global Warming of 1.5°C', 2018

Baseline and target year: Where possible we will use a baseline year of end-2019. The target year is end-2029.

Benchmark-relative versus self-decarbonisation: There are two types of approach to setting emissions pathways – benchmark-relative, which means comparing a fund's emissions to those of a net zero-aligned representative benchmark; and self-decarbonisation, which means cutting a fund's own emissions by a given percentage, set in line with a net zero pathway.

We have selected a benchmark-relative approach, on the basis that this allows us to make an allowance for the starting point for each fund – meaning that funds that are highly carbon-intensive to start need to cut emissions by more than those which are already well below their benchmark. This is consistent with the way we approach target-setting with companies, where we ask for greater ambition from companies which are above their own sector average.

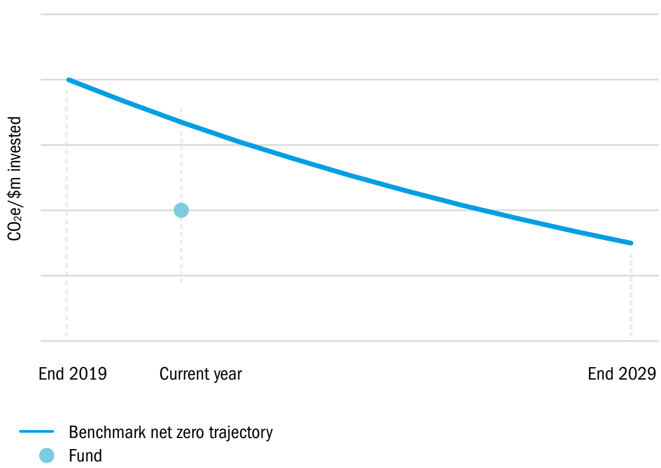
Choice of benchmark: There are various options for what benchmark to compare fund emissions performance with. Options include:

- A benchmark which reflects the whole global economy (such as MSCI World);
- Each fund's own market benchmark;
- An artificial benchmark, constructed to reflect the sectoral and/or regional exposure of each individual fund; or
- A climate benchmark, such as the EU Paris-Aligned Benchmark.

There are advantages and disadvantages to each option. In theory, constructing a benchmark with identical sector allocations to a fund, but using sector-average emissions, would give the most representative starting point for a future emissions pathway. In our internal model, we have calculated a benchmark in this way. However, it is analytically complex both to construct and to communicate, potentially undermining the principle of transparency.

We have chosen instead to use each fund's own market benchmark to construct a future emissions reference pathway. This has the advantage of consistency with the way we analyse and report financial results. Market benchmarks are also chosen to reflect the investment universe of the fund, and so are reflective of regional or country restrictions and differences in average emissions.

Example of a fund's emissions performance versus its own market benchmark



Source: Columbia Threadneedle Investments

The diagram on the previous page shows how these choices shape the emissions pathway. We will seek to keep fund-level emissions within the net zero aligned trajectory, which declines by 50% from end-2019 to end-2029. Whilst the target is some years away, we will monitor and report progress on an ongoing basis.

A key part of monitoring will be to understand not only what changes in emissions intensity have happened, but what the reasons for these are. Some changes in intensity may be due to market movements or inflation (as discussed above); some to sector reallocation or company selection; and some to emissions reductions by our investee companies. In line with the principle of achieving real-world emissions, we will seek to achieve reductions where possible through the decarbonisation of the companies we choose to invest in.

Finally, there may be circumstances where a fund exceeds the pathway, but we believe this is justified from a climate change point of view. In particular, this may occur if a fund manager chooses to invest in some high-emissions companies which we are confident have a strong net zero alignment strategy, but where emissions remain high during a transition period. If this happens, we will be transparent about the reasons why we have taken this decision.

Investments in solution providers

Net zero methodologies have put a heavy emphasis on the decarbonisation of portfolios. However, as investors we also need to focus on our role in shifting in capital allocations toward climate solutions. The scale of capital needed is enormous – for energy systems alone, the International Energy Agency recently estimated[6] that to reach net zero emissions by 2050, annual clean energy investment worldwide will need to more than triple by 2030 to around $4 trillion. Investments will also be needed in adaptation to the changing climate, and to secure emissions cuts in areas including deforestation and land use.

The EU Taxonomy has provided a methodology for classifying climate solutions, with work underway in other parts of the world, such as in Canada and the UK, to develop similar approaches.

For the funds committed to using the net zero framework, we will seek to monitor the proportion of portfolios aligned with climate solutions. More widely across our portfolios, we also seek opportunities to invest in solutions, such as significant investments in the green bonds market.

[6] Net Zero by 2050 – Analysis – IEA, May 2021

Net zero – what next?

Net zero investing has developed extremely rapidly, from being almost a new concept to covering around half the global asset management industry now. Industry standards and methodologies are continuing to evolve, as our understanding of what meaningful net zero investing grows. Gaps in asset class methodologies are gradually being filled, and data is rapidly improving, with mandatory climate reporting being introduced in a rising number of jurisdictions.

We will continue to keep track of these changes, and our own approach will need to be nimble to adapt as the net zero landscape evolves. In line with our commitment on transparency, we will seek to share both the opportunities and the challenges that this new era in investing is bringing, and our success in achieving the real-world outcomes we are striving for.

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