

# The challenges of decarbonising a Buy & Maintain portfolio

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**Buy & Maintain corporate bond portfolios are expected to form a core component of a defined benefit (DB) pension scheme's overall investments, particularly as they mature and approach their endgame. Climate change risks are particularly relevant for these long-term portfolios as their investment horizon may be 15-20 years out, over which time climate related risks are expected to materialise. As a result, climate change risk management in B&M portfolios is critical. However, there is no simple solution and it will require an iterative discussion with the investment manager to understand any trade offs that need to be considered when implementing climate risk strategies.**

**Focusing on reducing or optimising for specific carbon metrics is relatively straightforward if one just removes high emission issuers or sectors, but this approach may not be true to either the trustees' beliefs or helpful in decarbonising the real economy. Stewardship and engagement are favoured over divestment and play a key role in ensuring companies' progress along their decarbonisation path. Data deficiencies are also a significant issue. The backward nature of environmental, social and governance (ESG) data also means forward looking fundamental ESG analysis of each corporate bond is critical when choosing 'best in class' companies that are progressing along their decarbonisation path.**

## The challenges facing DB scheme trustees

The Pension Schemes Act 2021 received Royal Assent on 11 February and brings greater clarity on the government's policy on climate risk for pension schemes. The regulations will require trustees to identify and assess climate related risks, which they consider will have an impact on the scheme's investment strategy, across all time horizons on an ongoing basis<sup>1</sup>. It also requires them to undertake scenario analyses, as well as selection, calculation and reporting of some climate related metrics<sup>2</sup> and targets.

The resulting raft of climate related governance and reporting obligations needs to be viewed in the broader context of other changes implemented over the past few years. For example, since 1 October 2019, trustees have been required to set out their policies in relation to "financially material considerations" as well as their stewardship and engagement activities in the scheme's Statement of Investment Principles (SIP). Implementation statements, describing how the policies set out in the SIP have been followed, became a requirement from 1 October 2020. The overall regulatory direction is clear — managing ESG risks must now feature highly on trustee agendas.

It is also known that UK DB pension schemes are maturing and indeed many (73% according to Mercer's 2019 European Asset Allocation Survey<sup>3</sup>) are already cash flow negative, where liability outgo exceeds income from investments and contributions. Long-dated corporate bonds managed on a Buy & Maintain basis are an ideal investment for maturing pension schemes as coupon and redemption proceeds can be structured to meet pension liabilities as they fall due. As a result, Buy & Maintain corporate bonds will be a core investment strategy and allocations are expected to increase as schemes approach their maturity endgame. The long-term nature of these portfolios coincides with the time horizon over which climate related risks are expected to materialise. Indeed, the UK has set a goal (enshrined in law) of reaching net zero emissions by 2050, by which time many DB pension schemes are likely to (still) be paying out pensions to their beneficiaries. This means it is critical for Buy & Maintain portfolios to manage climate change related risks. The question is how can this be done in practice?

We shall discuss this using a case study.

### The client's problem...

Janus Henderson was asked to help explore carbon reduction strategies by the trustees and investment consultant of a medium-sized pension scheme with a sterling Buy & Maintain investment grade portfolio. Although the scheme will not be subject to the new regulations until next year, the trustees were keen to start developing their climate risk management approach and get ready for climate risk reporting according to the new regulations. They asked to include various carbon metrics within the quarterly reporting and to also investigate the impact of an immediate 25% carbon reduction on the portfolio and put in place a further 7% reduction target every year thereafter until the portfolio is aligned with the Paris Agreement.

The trustees decided to focus on the absolute emissions and the carbon footprint of the portfolio as well as the Weighted Average Carbon Intensity (WACI)<sup>4</sup> to monitor the portfolio's exposure to carbon intensive assets. The Buy & Maintain portfolio currently provided a source of cash flow to pay pensioner liabilities and therefore the spread and yield earned was crucial to enable the scheme to pay their liabilities as they fall due. They wanted to understand the trade offs involved and whether reducing the carbon emissions would adversely impact the portfolio's yield and spread, or will it be harder for the manager to achieve diversification?

### ...reducing the carbon footprint and the WACI by selling high emitters was no panacea...

A simple way to reduce a portfolio's carbon footprint is to reduce exposure to high emitters. Figure 1 shows the results of our first iteration, where we sold 20 of the worst emitters to see how the carbon profile of the portfolio would change.

Figure 1: excluding the worst carbon emitters

	Sterling index	Sterling index excluding 20 worst carbon emitters	Results
Yield	1.79%	1.80%	Broadly no change
Spread	112bp	113bp	Broadly no change
Average credit rating	A3	A3	No change
Number of issuers	388	368	-20% (excluding the worst carbon emitters)
Scope 1 & 2 emission exposure (tCO <sub>2</sub> e)	22,330	11,482	Large decrease
Total including Scope 3 emission exposure (tCO <sub>2</sub> e)	83,837	50,066	Large decrease
Relative carbon footprint (tCO <sub>2</sub> e/£m)	102.23	51.62	Large decrease
WACI (tCO <sub>2</sub> e/\$m revenue)	210.84	80.74	62% reduction
Exceeds Paris budget	2035	2037	Marginal improvement
Temperature increase by 2050	2 degrees	2 degrees	No real change

Source: Bank of America Merrill Lynch, ISS and Bloomberg, as at 3 March 2021. Note: bp=basis points.

Although avoiding the worst emitters did not have a material impact on the Buy & Maintain portfolio's other characteristics such as yield, spread and average credit rating, it did mean materially reducing exposure to the basic industry, energy and utilities sectors, which was somewhat detrimental to portfolio diversification.

However, the biggest issue with this approach is that it does not address aligning the portfolio with the Paris Agreement — to limit global warming to well below 2 degrees; nor does it help to actually decarbonise the real economy. By excluding high emission sectors, the portfolio lost a large amount of 'carbon budget' that is allocated to high emission sectors; while swapping out these issuers for those with a lower carbon footprint (and a lower carbon budget) does not improve the portfolio's temperature alignment. Furthermore, divesting from high emission industries in a diversified portfolio that resembles the real economy simply passes on the problem to others to solve, who may have even less desire to push these issuers in the right direction along their decarbonisation path.

This led to a discussion among the trustees on whether the addition of this approach actually addressed their objectives as articulated in the scheme's SIP. The trustees felt that integration of climate change risk in the scheme's investment strategy supported the overarching objective to pay pensions as they fall due and that supporting the transition to a low carbon economy would be beneficial to the scheme, while simply excluding the worst emitters merely passed the problem on, rather than help address it.

### ...a more holistic solution?

A more holistic solution was required, which sought to improve key climate related metrics but avoid sector exclusions in order for the portfolio to continue to reflect the real economy and actively finance the transition to a low carbon world. After some discussion, it was decided that targeting the portfolio's alignment with the 1.5 degrees scenario — using forward looking scenario analysis rather than just reducing backward looking carbon metrics, would better reflect both the long-term nature of the portfolio and the trustees' views on their preferred way to integrate climate related risks within their investment strategy. Therefore, it was agreed the manager would try to initially align the portfolio with a 2°C temperature rise and then aim to gradually reduce it to 1.5°C.

The results of the second iteration are shown in figure 2. In portfolio A, we optimised the portfolio from a sustainability, fundamentals, relative value, cyclicity and volatility standpoint, when selecting securities without simply divesting from specific industries. The resulting portfolio saw a small increase in absolute emissions, a fall in WACI and a 0.2 degrees improvement towards aligning the portfolio with the 1.5 degrees scenario.

In portfolio B, to demonstrate how easy it is to 'reduce' carbon emissions by selling a couple of high emission issuers, we replaced a peer group leader (from a transitioning point of view) in cement and an electric utility with companies that have lower carbon footprints. Swapping out these two corporates resulted in a large reduction in all carbon metrics but a much smaller improvement with aligning the portfolio with the 1.5 degrees scenario. This is partly because the way companies rank within their peer groups has an impact on the temperature alignment of the portfolio.

**Figure 2: scenario analysis looking at the trade off between metrics**

	Buy & Maintain portfolio A	Buy & Maintain portfolio B
Yield	1.83%	1.82%
Spread	107bp	107bp
Average credit rating	A3	A3
Number of issuers	112	112
Scopes 1 & 2 emission exposure (tCO2e)	28,587	18,302
Total including Scope 3 emission exposure (tCO2e)	95,560	71,060
Relative carbon footprint (tCO2e/£m)	130.88	83.79
WACI (tCO2e/\$m revenue)	186.34	105.69
Expected temperature increase by 2050	1.8 degrees	1.9 degrees

Source: Janus Henderson, Bank of America Merrill Lynch, ISS and Bloomberg, as at 3 March 2021. Note: bp=basis points.

Although portfolio A has a less favorable carbon profile from the backward looking carbon metrics perspective, it is expected to contribute to a lower temperature increase by 2050. Furthermore, these carbon metrics do not take into effect our proprietary forward looking views on portfolio constituents with respect to their climate strategies and progress on their transition path.

The bottom line here is that decarbonising portfolios is a very complex exercise and does not work in a straight line. In fact, oversimplifying or overengineering carbon reduction in portfolios may be detrimental to performance as well as the real economy by allocating capital away from businesses that are willing and able to transition and need investors to partner with them to deliver their transition. Moreover, where portfolios start from (ie, what they are invested in) is a very important consideration as to the decarbonisation path one may take.

### Data issues and the importance of stewardship and engagement

It should also be noted that the value of measuring and monitoring against these climate related metrics is highly reliant on the quality of a company's disclosures and coverage by data providers. It is also worth noting that a large percentage of carbon data is 'estimated' as opposed to reported. Generally, the availability of climate related data is better for investment grade corporate bonds than other fixed income asset classes but even this means overall coverage falls within the range of 65-85%. Company disclosures can often be 12-18 months out of date, self-reported or unverified. Larger investment grade companies often have the best climate related disclosures, although we expect all companies' disclosures to gradually improve and eventually standardise over time.

The issues around data further highlight the importance of considering a range of different metrics. It also highlights the importance of performing forward looking fundamental ESG analysis on each bond within the portfolio. This is done by Janus Henderson's Global Credit Research Team who will judge how companies are progressing on their transition path towards a low carbon world, while also allowing the very latest climate related information and transition plans to be factored into an investment decision. Overtime, this will eventually be reflected in the climate related metrics and valuations.

Finally, it is important to recognise that both stewardship and engagement play a key role in ensuring companies progress along their decarbonising path, by pushing them in the right direction and holding them accountable for their commitments and goals. The interests of both equity and bond investors coincide and so the credit analysts working together with their active equity colleagues can act as a powerful influence on companies that are slow to change. The trustees of this pension scheme recognised the importance of this and so requested Janus Henderson to provide regular updates on such engagements in both their quarterly investment report and during the annual manager review.

### References:

<sup>1</sup>The requirements will apply to schemes with relevant assets of £5bn+ from 1 October 2021.

<sup>2</sup>A link to the non-statutory guidance from the Pensions Climate Risk Industry Group (PCRIG) containing the definition of the various emissions metrics is given here:  
<https://www.gov.uk/government/publications/aligning-your-pension-scheme-with-the-taskforce-on-climate-related-financial-disclosures-recommendations/part-4-quick-start-guide-setting-metrics-and-targets-to-measure-and-manage-climate-related-risk>

<sup>3</sup>Merger's 2019 European Asset Allocation Survey:  
<https://www.uk.mercer.com/newsroom/73-of-uk-defined-benefit-plans-cashflow-negative-according-to-mercer-research.html>

<sup>4</sup>The formula for WACI — a metric for measuring a fund's exposure to carbon intensive assets is:

$$\sum_n^i \left( \frac{\text{current value of investment}_i}{\text{current portfolio value}} * \frac{\text{company' GHG emissions}}{\text{company's EM revenue}_i} \right)$$

Note: GHG = greenhouse gases.

## Glossary

**Carbon budget:** *the cumulative amount of carbon dioxide (CO<sub>2</sub>) emissions permitted over a period of time to keep within a certain temperature threshold.*

**Carbon footprint:** *the amount of carbon dioxide (CO<sub>2</sub>) released into the atmosphere as a result of the activities of a particular individual, organization, or community. The carbon footprint metric measures how many tonnes of CO<sub>2</sub>e emissions for each million (£m) invested funds.*

**CO<sub>2</sub>e:** *carbon dioxide equivalent or CO<sub>2</sub>e is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO<sub>2</sub>e signifies the amount of CO<sub>2</sub> which would have the equivalent global warming impact.*

**Emission Scopes 1, 2 and 3:** *according to the leading GHG Protocol Corporate Standard, a company's greenhouse gas emissions are classified in three scopes. Scope 1 and 2 are mandatory to report, whereas scope 3 is voluntary and the hardest to monitor.*

- **Scope 1 emissions** are direct emissions from company-owned and controlled resources; ie, emissions released to the atmosphere as a direct result of a set of activities at a firm level.
- **Scope 2 (indirect emissions – owned)** are indirect emissions from the generation of purchased energy from a utility provider; ie, all GHG emissions released in the atmosphere from the consumption of purchased electricity, steam, heat and cooling.
- **Scope 3 (indirect emissions – not owned)** are all indirect emissions not included in scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. Ie, emissions that are linked to the company's operations.

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