

Buy & Maintain credit strategies play a pivotal role in defined benefit (DB) portfolios. As more DB funds move down the de-risking path and require liability-aware cashflows, the allocations to credit, and Buy & Maintain, have increased. Given the nature of the strategy is to hold bonds to maturity, it is therefore necessary that these products are not only climate aware but are also structured to aid clients in their transition to net zero.

In this piece, we share how clients can begin engaging with their Buy & Maintain managers and offer a case study of a recent mandate Willis Towers Watson worked with a manager to create. While measuring and tracking climate risk presents a continued challenge, there has been movement in the right direction and beginning with a set of baseline metrics can help track progress and maintain momentum over time.

We believe clients who spend the time now to evaluate and engage with managers will be better positioned in the long run to achieve critical climate transition goals.

As an example of what can be done, we have been working with a manager to incorporate decarbonisation in a widely-used Buy & Maintain fund and improve its alignment with the Paris Agreement.

Data, data, data and methodology

The metrics for assessing portfolio emissions are imperfect and coverage is patchy. However, as can be seen from the graphs overleaf, the various metrics are reasonably well correlated. We believe investors should not be overly concerned with individual metrics, as Net Zero 2050 is necessary shorthand for keeping cumulative emissions within a 1.5 degree carbon budget, but rather look at a spectrum to begin monitoring progress. Ultimately, we want overall emissions (usually the numerator of any metric) to reach zero for the good of the planet and we can already take steps to monitor and accelerate this.

From a financial and fiduciary perspective, Climate VaR (the downside risk associated with different climate scenarios) is the key statistic and it is only weakly correlated with emissions metrics (see the *Appendices* for further discussion).

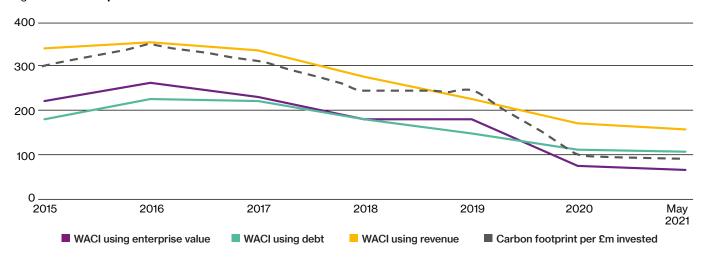
The future emissions pathways of evergreen mandates can only be assessed on the (unrealistic) assumption that the portfolio does not change. But this a run-off mandate, meaning turnover is low and all coupons and maturities are paid out to investors. Therefore it is sensible to look at the pathway assuming cashflows are repaid as expected, in the knowledge that the absolute emissions of the portfolio will eventually be zero.

The portfolio to date

The first graph shows the historic Weighted Average Carbon Intensity (WACI) and carbon footprint data. It implies emissions have already reduced by 50-75% since 31 December 2014 (the data used to assess the 2015 portfolio) and are below the non-gilts universe, which we use as a proxy for the broad opportunity set.

This is a good reduction, partly due to improving data coverage (and the percentage of issuers with targets validated by the Science Based Targets initiative (SBTi) has also increased materially in recent years). For example, the European Investment Bank (EIB), a major issuer in the long sterling universe, which has very low scope 1 and 2 emissions, did not publish data before 2017.

Figure 1. Historical portfolio WACI



Source: AXA IM, Science Based Targets initiative, as at 31 May 2021

Figure 2. Change in metrics

WACI at 31 May 2021	Portfolio	Non-gilts	Portfolio reduction since December 2015	Since December 2019
By Enterprise Value	67.96	72.15	74%	62%
By Debt outstanding	158.76	153.75	55%	29%
By \$m Revenue	106.48	140.12	53%	29%
Carbon footprint per £m invested	92.91	98.63	73%	62%

Source: AXA IM, Science Based Targets initiative, as at 31 May 2021

Figure 3. Portfolio coverage and allocations

Coverage %	Portfolio								
	2015	2016	2017	2018	2019	2020	May 2021	May 2021	
WACI by Enterprise Value	55	55	56	66	74	86	86	77	
WACI by Debt outstanding	55	56	56	66	76	87	87	77	
WACI by \$m Revenue	51	51	51	61	66	74	72	67	
Issuers with SBTi targets %	0	3.4	3.7	3.1	8.0	12.8	22.6	19.2	
Use of proceeds bonds %	0	0	0	0.3	0.6	2.3	3.5	1.7	

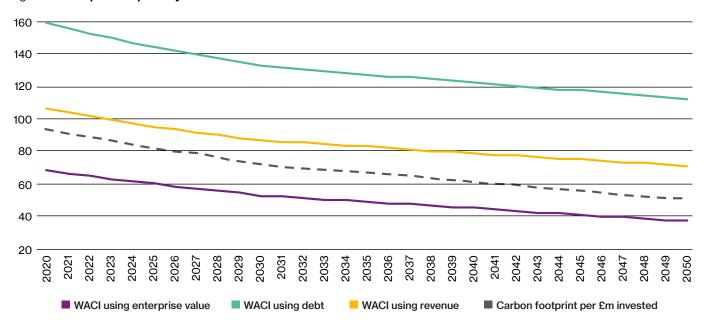
Source: AXA IM, Science Based Targets initiative, as at 31 May 2021

The future pathway

The future emissions of the static (current) portfolio decline smoothly to a 30-45% reduction from 2020 to 2050. The pathway has steepened already in the last couple of years as more issuers set SBTi targets and we expect it to steepen further as more issuers respond to engagement and set formal targets.

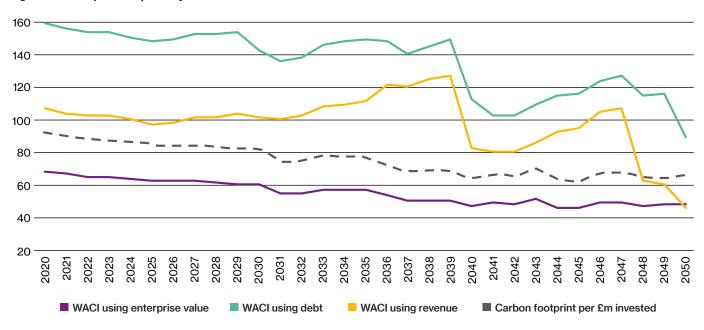
A number of the longer names are high emitters, even though they have some positive climate characteristics. Hence the variable path as these become a larger proportion of the portfolio as it runs off and eventually mature themselves.

Figure 4. Static portfolio pathways



Source: AXA IM, Science Based Targets initiative, as at 31 May 2021

Figure 5. Runoff portfolio pathways



Source: AXA IM, Science Based Targets initiative, as at 31 May 2021

How can we reduce portfolio emissions now and steepen the pathway further?

It would be easy to reduce emissions and steepen the pathway now by selling all the high-emitters and those without Science Based Targets and reinvesting in low emitters and those with SBTis. We do not recommend this as:

- It does little to encourage high emitters to set targets and decarbonise. We believe engagement with high emitters to trigger genuine improvement (rather than divestment of high emitting activities) is a more effective method of accelerating the global path to net zero.
- It will be costly (turning over a material part of the portfolio)
- It will significantly reduce diversification (less than 25%) of the current portfolio has SBTis and less than 20% of the non-gilt universe) and so compromise the ability to achieve reliable long-term cashflows
- It limits the potential for extra yield now from issuers that will respond to engagement, publish emissions data and commit to SBTis in future. For example, SBTi does not currently validate commitments for oil and gas companies but is expected to do so shortly.
- It means selling some issuers that are well aligned with the portfolio intent. For example, the EIB has low Scope 1 and 2 emissions (those directly and indirectly generated

by issuer activities) but no SBTi target, nor is likely to achieve one as SBTi is focused on corporates. On the other hand, it is a high-quality non-corporate issuer with a stable rating that offers long-term

Don't ignore Scope 3 emissions. For example, the financial industry has very high Scope 3 emissions, many multiples of its Scope 1 and 2. Reducing this could have a significant impact on their businesses in the medium term.

diversifying cashflows and finances a significant and increasing amount of green projects. We do not feel selling its bonds to fit a rule would be in clients' interests.

It ignores Scope 3 emissions (those from customers and suppliers). Many climate-focused portfolios have high allocations to financials and service companies, which have low Scope 1 and 2 emissions but very limited disclosed data on Scope 3. For example, few businesses operate without insurance or banking facilities and private persons also have various types of insurance. bank accounts and loans, so it is reasonable to assume the Scope 3 emissions of the global insurance and banking industries each represent a significant proportion of global emissions, many multiples of the industries'



Scope 1 and 2. The financial industry has been slow to consider how they can reduce Scope 3 emissions but we are seeing signs that it is becoming more important and could have significant impacts on companies' business activities and, possibly, future results. We note no bank or insurance company has yet achieved an SBTi-validated target and so a large portfolio allocation should reduce current Scope 1 and 2 emissions now but the future pathway, under our assessment methodology, would be flat.

Our manager research team has assessed the portfolio manager's ESG capabilities as strong and this is already considered in issuer selection and sector allocation. The portfolio has low exposure to basic materials, oil and gas and autos and these are reasonably short maturity as they are cyclical names where the reliability of long-term cashflows is harder to determine. As discussed above, the relatively slow decline in the long-term pathway is due to a few names with reliable cashflows that are in the process of improving their emissions.

We note that electricity transmission businesses are always likely to have high emissions. It is simple physics that running electricity down a wire generates heat, which is counted in Scope 1 and 2 emissions. This is likely to increase as electricity replaces oil and gas and the grid expands, although it can be mitigated by using more efficient technology. Electricity generation is a different matter of course.

We believe engagement should be the next step after integration in rectifying high emissions, with divestment only as a last resort. This is already underway but we recognise it will take time, maybe a few years, to determine which issuers are not receptive to engagement and thus targets for divestment.

But engagement has a wider use than correcting 'problem' holdings. We are trying to get the absolute emissions of the portfolio to zero and therefore engaging with all issuers to publish emissions, set targets and monitor their progress against the targets is good for the portfolio and for the planet. The European business community is already well on the way, with 782 companies committed to reduce emissions and 376 with SBTi-validated targets. Contrary to public perception, North America has started to move although is lagging, with 275 committed and 155 with SBTis, including some of the largest companies. But SBTi targets are only relevant for corporates and we need all issuers to engage in reducing emissions. This will take considerable time and effort and many asset managers have been relatively weak on engagement with non-corporates to date. However, some, including the selected Buy & Maintain manager, have experience doing this successfully.

Owning a portfolio with a good future pathway is not enough, it needs to be monitored and slippage accounted for and remedied. This also needs research and engagement and may not be the best use of time for qualified credit analysts, who have different training and skills. Although managers have been expanding their ESG teams rapidly, wider issuer engagement and more sophisticated analysis on emissions, pathways and Climate VaR may mean they need to be increased further, or these activities outsourced to third-party providers with increased use of collaborative engagement bodies.



New cashflows

With defined benefit pension funds de-risking and thus increasing allocations to Buy & Maintain strategies, we have seen significant growth in related funds and strategies, such as the selected Buy & Maintain product referenced above. The selected fund is rapidly growing and therefore has the luxury of regular inflows that can be used to tilt the portfolio in a more climate-friendly direction.

The portfolio managers are already taking this into account as they tend to buy issuers with disclosed emissions and credible reduction targets, all else being equal. We would suggest managers also consider issuers with a positive engagement profile i.e. those that do not yet publish emissions data or have targets but are receptive and are likely to do so soon. This could be particularly important for US issuers (especially since dollar bonds hedged to sterling have tended to be cheaper than sterling bonds for some time).

While we feel non-greenwashed green bonds have a place in the portfolio, all else being equal, as an indication of the issuer's willingness to decarbonise, we note they do not necessarily reduce current Scope 1 and 2 emissions today as:

- 1. Money borrowed is not necessarily money spent and spending it on a green project could temporarily increase emissions (including Scope 3)
- 2. High-emitting issuers have the greatest need to fund green projects, which could be new assets for future growth rather than direct replacements for existing assets, so it is possible that a green bond portfolio could also be a portfolio with relatively high emissions (at the moment)
- 3. Nearly all bank-issued green bonds are used to finance green lending so they reduce bank Scope 3 emissions but not 1 and 2.

But we do think green bonds should reduce Climate VaR, all else being equal.



Conclusion

Buy & Maintain credit strategies play a pivotal role in defined benefit portfolios. Given the nature of the strategy is to hold bonds to maturity, it is therefore necessary that these products are not only climate aware but are also structured to aid clients in their transition to net zero.

The framework described above is only a first step and will change as data availability and methodologies improve. Nevertheless, we believe it is useful to help clients assess their current portfolio and pathways and set the following initial actions to help move towards net zero.

- Choose metrics for reporting, in the expectation that better data and methodologies will become available and therefore the characteristics, even of a low-turnover portfolio, will change in the short term and the metrics may need to be revised in a few years.
- Engage, engage, engage:
 - Ask managers to provide reporting on current and historic portfolio emissions, including coverage data, issuers with SBTis and green bonds, ideally quarterly:
 - Ask managers to assess the portfolio pathway and Climate VaR of the potfolio and identify issuers that are flattening the pathway or increasing Climate VaR, updating the analysis on a regular basis, at least annually;

- Ask managers to engage with all issuers, including non-corporates, particularly laggards, to increase coverage and set targets and monitor progress. Evidence such engagement on a regular basis, ideally quarterly, recognising it is not necessary to engage with every issuer every quarter;
- Over time, consider divesting from issuers with high emissions or a flat future pathway with no obvious way to mitigate these and from issuers that are resistant to engagement, if this can be done without compromising other desirable portfolio characteristics.
- Similarly, invest new cashflows in issuers with well-defined emissions targets or those that are receptive to engagement and moving in that direction or those that can demonstrate unusual resilience to wider climate transition. Avoid issuers with high emissions or Climate VaR and no clear path to mitigation.
- Consider Buy & Maintain portfolios in a broader Cashflow Driven Investing context. There is scope to introduce Private Debt (and Secure Income) as part of the cashflow solution, which can provide even greater potential to decarbonise portfolios, given the very targeted nature of mandates within these areas and the assets, such as hydroelectric power, that are not directly accessible via liquid credit.

Appendix

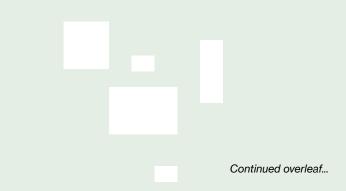
Emissions data metrics and methodology

Data on carbon emissions is improving but still patchy, particularly for bond issuers that do not have listed equity, which can represent a large allocation in a credit portfolio. To arrive at a meaningful level of coverage for current carbon emissions, we have used parent-level data from a variety of sources where available and have also assumed government-related names have the same emissions profile and target as their parent government, if no better data is available. This has resulted in over 85% coverage. which we feel is an acceptable level.

Assessing the future emissions pathway is complex. It is relatively simple to assume emissions remain unchanged for issuers without a well-defined target and assume issuers with a target progress towards it in a straight line. We also assume debt outstanding, Enterprise Value and revenue or GDP will be constant; there are no further portfolio inflows and bond prices (for calculating the value of the portfolio and £m invested) pull to par in a linear fashion. We recognise none of this is likely to happen in practice, but it gives a baseline methodology for assessment.

But the emissions of each issuer 'owned' by the portfolio are only a small proportion of the issuer's total emissions. Therefore, we have looked at

- Weighted Average Carbon Intensity (WACI) using Enterprise Value as the denominator;
- WACI using debt outstanding as the denominator;
- WACI using £m of revenues or £m of GDP as the denominator; and
- Carbon footprint per £m invested.



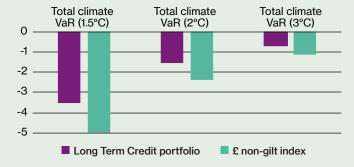
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Climate VaR

Reducing carbon emissions is an important goal but there are other considerations. The portfolio will need to be able to provide reliable cashflows in all markets and a low and reducing emissions portfolio is not necessarily also one with low Climate VaR (the downside risk associated with different climate scenarios). Therefore it is also important to consider resilience to transition and physical risks that may not be captured by emissions data and may be only loosely related to them (such as the risk associated with a wind farm on a coastal flood plain). As a broad rule, we feel resilience in a range of scenarios is likely to be more important than investing in climate solutions for a Buy & Maintain credit portfolio, and solutions are probably more readily available through equity or real asset investments.

Once again, methodologies are in development and coverage is low, with only c.50% of the portfolio and index covered. However, we believe the same basic principle applies: work with the information available now in the expectation it will change over the next few years. So avoid making material changes except to those issuers where there is a clear risk with no obvious way to mitigate it.

Figure 6. Portfolio Climate VaR



Willis Towers Watson's Net Zero commitment

Climate and the move to 'net zero portfolios' have become increasingly important for clients and regulators over the last few years. Willis Towers Watson is a member of the Net Zero Asset Managers Initiative and targeting net zero greenhouse gas emissions by 2050 at the latest, with at least a 50% reduction by 2030 (compared to a 2019 baseline), in our fully discretionary delegated investment portfolios and funds. We are also committed to helping our advisory clients adapt and monitor their portfolios.

Our approach has a few broad guiding principles:

- Decarbonising existing investments (while retaining the 'investment intent' of the mandate)
- Sourcing new investments in long-term climate solutions;
- Evolutions across all areas of our process including:
 - Risk management and asset allocation
 - Manager selection & understanding where engagement is more effective in decarbonising the system vs. applying exclusions (which may be necessary if there are areas less ripe for engagement)
 - Index design
 - Stewardship
 - Policy level engagement.
- We recognise portfolios will not always be ahead of the pathway to net zero, but we believe the destination and the overall trajectory of decarbonisation are more important. That having been said, we believe transitioning quicker but in a thoughtful manner is probably preferable, because there is return by being an early mover and it is better for the environment.



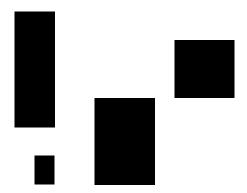
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