

De-Risking? Mind the Carbon!



At times, de-risking a portfolio can be at odds with decarbonizing a portfolio.

Many asset owners want to be aware of their exposure to climate risks and reduce their portfolio's carbon footprint. They may also be interested in shifting from equities into corporate bonds to reduce investment risk. Investors with lifecycle or target date defined contribution funds, for example, may be motivated to lock in equity market gains or reduce risk over time. Others, such as pension plans, may be looking to protect funded status or maintain a surplus. Without careful design and execution, de-risking can move a portfolio's carbon footprint in the wrong direction.

At a basic level, moving away from equities that are dominated by lower carbon sectors (such as technology) toward corporate bonds that are issued by more energy-intensive sectors (such as utilities and industrials) can create tension between de-risking and decarbonizing. While significant opportunities are being created by the need to transition the global economy to net-zero emissions, successful climate transition investing entails three key aspects:

- Decarbonizing the investment portfolio over time
- · Decarbonizing the real economy
- Creating alpha by picking climate transition winners

Using carbon intensity to outline the carbon footprint

There are many ways to measure carbon emissions and a firm's carbon footprint. It gets complicated looking at emissions across the entire supply chain-from cradle to grave, so to speak—as buyers and sellers contribute to carbon emissions. For example, consider the carbon emissions of a gold-mining firm: How much should be attributed to the jewelers who sell the finished product? Carbon intensity is a useful and widely used measure that divides a firm's carbon emissions by a financial metric (revenues or enterprise value, for example) or an operating metric (such as units of production).1 Here we focus on revenue intensity to help address the large number of privately owned issuers in credit markets and the broad markets' disparate activities. Our chosen measure of carbon intensity is metric tons of CO2 equivalent per \$million of revenue. This can be used by investors to assess the carbon footprint of their investments across asset classes.

AUTHORS:

BRIAN JACOBSEN, PH.D., CFA, CAIA, CFP®

+ Senior Investment Strategist

THOMAS LYONS

- + Head of Climate
- + Global Fixed Income Research

EDDIE CHENG, CFA

+ Head of International Portfolio Management

ANDY HUNT, CFA, FIA

- + Senior Investment Strategist
- + Global Client Strategy

MARTIJN DE VREE, CFA, FIA

 Head of Fixed Income Solutions

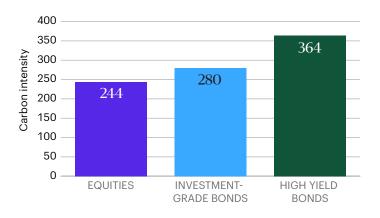
^{1.} Carbon intensity can also be expressed relative to other measures of the size of the business. Observations made and conclusions reached in this paper remain unaltered by the different measurement choices.



How carbon intensity varies by asset class

Carbon intensity can vary widely across asset classes, mostly due to the differences in composition of indexes, especially in terms of the sector makeup of equity and corporate bond indexes (Figure 1).

FIGURE 1: CARBON INTENSITY VARIES ACROSS ASSET CLASSES

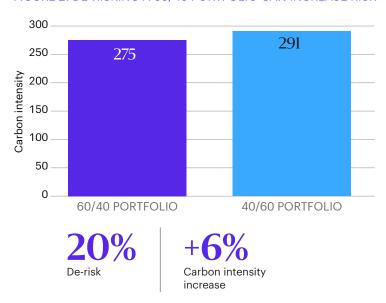


Sources: Allspring and S&P Trucost, 31-Dec-22. Equities are represented by the MSCI ACWI (Net), investment-grade bonds by the Bloomberg Global Aggregate Corporate Index, and high yield bonds by the Bloomberg Global High Yield Corporate Bond Index.

How de-risking can increase carbon intensity

De-risking by moving from equities to corporate bonds can increase the carbon intensity of a portfolio, sometimes significantly so. For example, de-risking a 60/40 stock/bond portfolio to a 40/60 portfolio (reducing equity 20%) may increase the weighted-average carbon intensity of the portfolio by 6% (Figure 2). We note that the increase can be much higher for fixed income portfolios with greater exposure to long corporate bonds (as in the case of a pension plan moving to liability-driven investing), as these bonds tend to have higher levels of carbon intensity.

FIGURE 2: DE-RISKING A 60/40 PORTFOLIO CAN INCREASE RISK



Sources: Allspring and S&P Trucost, 31-Dec-22. Equities are represented by the MSCI ACWI (Net) and bonds by the Bloomberg Global Aggregate Corporate Index.

Carbon-aware de-risking

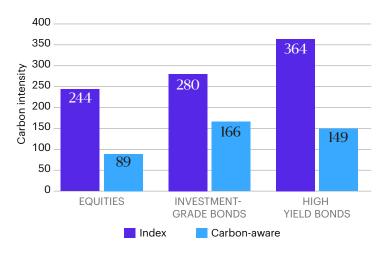
Just as asset classes have different carbon footprints, so do issuers within each asset class. How portfolios are managed within the asset class is important. A carbon-aware management style can make a meaningful carbon impact, and it can benefit the whole portfolio.

Historically, when it came to sustainability and carbon intensity, investors were focused on their equity investments. Today, we see growing interest in considering corporate credit (investment grade as well as high yield) from a sustainability and climate perspective. This is a practical evolution because the carbon intensity of corporate bond issuers can be significant and higher than their equity counterparts due to market composition (Figure 3). Investors also increasingly realize that corporate bondholders also have a role to play in steering capital and affecting decarbonization of the economy.

A carbon-aware management style can make a meaningful carbon impact, and it can benefit the whole portfolio.



FIGURE 3: CARBON INTENSITY VARIES WITHIN ASSET CLASSES



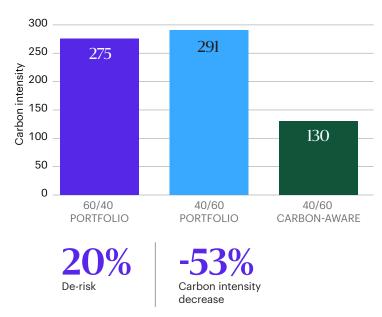
Sources: Allspring and S&P Trucost, 31-Dec-22. Equities are represented by the MSCI ACWI (Net), investment-grade bonds by the Bloomberg Global Aggregate Corporate Index, and high yield bonds by the Bloomberg Global High Yield Corporate Bond Index. Climate-aware equities are represented by Allspring Systematic Edge 2-Degree Global Equity, climate-aware investment-grade bonds by Allspring Climate Transition Global Investment Grade Credit, and climate-aware high yield bonds by Allspring Hypothetical Climate Transition Global High Yield Credit.

Importantly, we believe good investments can align with a carbon-light investment approach under climate transition portfolio management. Allspring's climate transition portfolios have three main characteristics:

- Inclusive not exclusionary. We do not seek to exclude industrial sectors that are high emitters, believing that carbon emmissions are best controlled at the portfolio level. At an industry level, today's most carbon-intense sectors need capital to decarbonize. Excluding them would put upward pressure on capital costs and hinder decarbonization. At a company level, today's most carbon-intensive emitters may offer the best prospects to remove carbon from the economy. And those making the most progress toward a low-carbon future may offer the prospect of superior returns through better risk management and/or opportunity capture.
- O2 Portfolios are measured against standard market indexes.
 In other words, portfolio characteristics are kept in line and managed to outperform familiar and recognized benchmarks while taking on the lowest risk possible.
 Unusual or unfamiliar benchmarks are not required. This makes the approach easy to adopt and oversee.
- O3 Portfolios evolve toward a 2050 goal of net-zero emissions. Inspired by the Paris Accord, this target provides discipline and a long-term focus, aligning the goals of decarbonizing the economy with the investment opportunity set.

Adopting this climate-aware management style seeks the dual objective of de-risking and decreasing the carbon intensity of a portfolio. For example, de-risking the same 60/40 stock/bond portfolio from Figure 2 to a 40/60 climate-aware portfolio (reducing equity 20%) lowered the weighted-average carbon intensity of the portfolio by 53% (Figure 4).

FIGURE 4: A CARBON-AWARE APPROACH TO DE-RISKING CAN REDUCE CARBON INTENSITY



Sources: Allspring and S&P Trucost, 31-Dec-22. Equities are represented by the MSCI ACWI (Net), investment-grade bonds by the Bloomberg Global Aggregate Corporate Index, climate-aware equities by Allspring Systematic Edge 2-Degree Global Equity, and climate-aware investment-grade bonds by Allspring Climate Transition Global Investment Grade Credit.

More than just carbon

Carbon intensity is a useful measure, but it is not the only indication of climate risk:

- O1 Carbon intensity is only one metric relevant to climate, and climate action is only one of the Sustainable Development Goals (SDGs). Investors should carefully consider their wider financial as well as sustainability objectives. We believe well-constructed climate transition portfolios can achieve a good balance across risk, return, carbon intensity, and SDGs.
- We consider direct and indirect emissions in our investment process. Carbon intensity typically focuses on the issuer's direct carbon output in isolation. It is important to consider the whole ecosystem from supplier to end user. One issuer could lower its carbon emissions by simply outsourcing the dirtiest parts of the production process, but that does not mean the issuer has suddenly become "greener." A wider appreciation of the whole financial and corproate ecosystem is important to make the best investment decisions.



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We consider forward- and backward-looking emissions when evaluating issuers, while other asset managers typically rely on historical data. The future will be the primary determinant of climate performance, but how can we know whether issuers are truly making improvements? Today's high-carbon emitters might be the low emitters of tomorrow—if they are firmly set on making changes. Excluding or removing whole industries or sectors because they have yet to achieve carbon goals also removes the ability to incentivize change and capture related returns. Allspring prefers an inclusive approach, whereby we control carbon intensity explicitly at the portfolio level. This provides flexibility to make the best investments we can find to add value, control risk, and align with the goal of decarbonizing the economy.

Decarbonizing: Look ahead, not in the rearview mirror

Merely eliminating exposure to the most carbon-intensive utilities has limitations. Instead of focusing on last year's carbon production, we assess where companies are headed to be on the "right side of change" as companies make efforts to reduce their carbon footprints.

When a company seeks to decarbonize, it needs both a strategy to do so and the financial strength to execute it. Our climate transition credit process evaluates four key elements to aid implementation: strategy and governance, assets and operations, financial profile, and macroeconomic profile. Figure 5 illustrates the score of each element measured on a 1-4 scale. In aggregate, the scores tell us:

- The extent to which an issuer contributes to decarbonization
- How decarbonization affects the issuer's fundamental strength

These scores are not a signal to buy or sell a security in isolation. Investment decisions are made according to a broader analysis that stresses risk-adjusted performance potential and is consistent with the portfolio manager's investment process.

FIGURE 5: ALLSPRING'S CLIMATE TRANSITION FRAMEWORK

ISSUER	CLIMATE PILLAR				COMPOSITE SCORE
	STRATEGY AND GOVERNANCE	ASSETS AND OPERATIONS	FINANCIAL PROFILE	MACROECONOMIC PROFILE	
Utility l	1.4	1.6	2.0	2.0	1.7
Utility 2	2.6	2.0	2.0	2.0	2.2
Utility 3	2.4	2.0	3.0	2.0	2.5
Utility 4	3.0	2.8	2.7	2.0	2.8

Sources: Allspring and S&P Trucost, 31-Dec-22



Mind the risk and the carbon

De-risking a portfolio can inadvertently lead to an increased carbon footprint. But this does not have to be the case. We believe risk reduction, carbon reduction, and opportunity capture can be blended successfully with appropriate climate transition portfolio management.

Much can be done across asset classes to add value and to support the transition to a lower-carbon economy, especially by adopting an active approach to engagement and investing in climate transition leaders. Taking a conscientious approach to building and managing a climate transition portfolio means an investor can aim to de-risk while decarbonizing and capturing opportunity.

For further information

We want to help clients build for successful outcomes, defend portfolios against uncertainty, and create long-term financial wellbeing. To learn more, investment professionals can contact us.

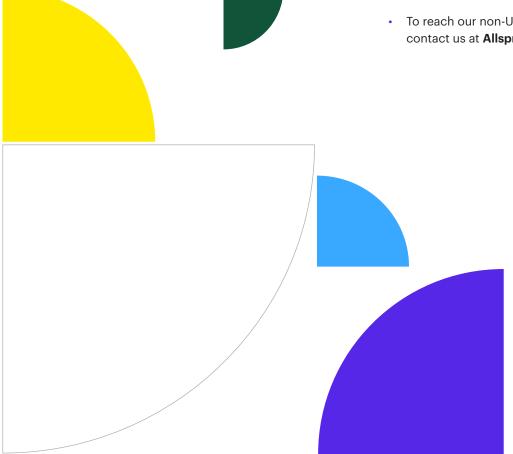
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- To reach our U.S.-based retirement professionals, contact Nathaniel Miles, head of Retirement, at nathaniel.s.miles@allspringglobal.com.
- To discuss sustainable investing solutions, contact Henrietta Pacquement, head of Sustainability, and Jamie Newton, deputy head of Sustainability, at henrietta.pacquement@allspringglobal.com and jamie.newton@allspringglobal.com.

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