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Portfolio alignment metrics

What are they and how are they used in net zero investing?

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IFoA Net Zero and the
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Contents

Introduction.....	3
What are portfolio alignment metrics?	4
Backward-looking versus forward-looking metrics	4
Main types of portfolio alignment metrics	5
Case study (adapted from a similar case study by LCP).....	6
How are portfolio alignment metrics being used to drive change in investment portfolios?	7
Reporting metrics	7
Verifying if company targets are aligned to net zero	8
Incorporation into investment products	9
How do different regions embrace portfolio alignment metrics?	10
Conclusion.....	11

Introduction

The Net Zero and Implications for Investment Portfolios working party aims to help actuaries improve their understanding of what net zero means for an investment portfolio and key mechanisms to achieve this, as well as key challenges to date and the future outlook for development.

This report is the first in a series exploring different ways investments can be designed and reported on to help achieve the net zero transition. It follows on from the ideas introduced in *Net Zero Investing - a beginner's guide (2022)*, produced by the Net Zero Portfolio Alignment working party¹.

The goal of the Paris Agreement is to prevent global temperatures from rising by more than 2°C above pre-industrial levels and pursue efforts to limit it to 1.5°C above pre-industrial levels. This requires a significant reduction in global greenhouse gas emissions and achieving net-zero emissions by 2050.

Portfolio alignment metrics are forward-looking metrics that are intended to help investors understand whether their investment portfolios are on track to meet the goals of the Paris Agreement and to encourage capital flows towards activities needed for a net zero transition.

In 2020-2022 a number of metrics were put forward by the Portfolio Alignment Team^{2 3} at the Task Force for Climate-Related Financial Disclosures (TCFD) and the Glasgow Financial Alliance for Net Zero (GFANZ)⁴. Since then, companies and actuaries have been exploring the practicalities of these metrics and starting to incorporate them into investment reporting and design, but this has not been without key challenges.

This paper explores the following questions:

1. What types of portfolio alignment metrics are most commonly adopted and why?
2. How are portfolio alignment metrics being used?
3. To what extent are these metrics meeting their intended purpose of encouraging investment portfolios which enable the net zero transition?

¹ Horwitz, B., Turner, J., Bamanian, P., Konwar, P., Murgorgo, D., Mwale, M., Viridi, M., Kitchen, A. 2022. *Net Zero Investing: A Beginner's Guide* [pdf]. Available through: IFoA website <https://www.actuaries.org.uk/system/files/field/document/Net%20Zero%20Investment%20Portfolios%20Report%20v3.3%20FINAL.pdf> [Accessed 7 July 2024].

² Portfolio Alignment Team, led by Blood, D. and Levina, I., 2020. *Measuring Portfolio Alignment: Assessing the position of companies and portfolios on the path to net zero* [pdf]. Available through: <https://www.tcfhub.org/wp-content/uploads/2020/10/PAT-Report-20201109-Final.pdf> [Accessed 7 July 2024].

³ Portfolio Alignment Team, led by Blood, D. and Powis, C., 2021. *Measuring Portfolio Alignment: Technical Considerations* [pdf]. Available through: https://www.tcfhub.org/wp-content/uploads/2021/10/PAT_Measuring_Portfolio_Alignment_Technical_Considerations-9.8.pdf [Accessed 7 July 2024].

⁴ Glasgow Financial Alliance for Net Zero (GFANZ), 2022. *Measuring Portfolio Alignment: Enhancement, Convergence and Adoption* [pdf]. Available through: <https://assets.bbhub.io/company/sites/63/2022/07/GFANZ-Portfolio-Alignment-Measurement-August2022.pdf> [Accessed 7 July 2024].

What are portfolio alignment metrics?

Portfolio alignment metrics assess how well aligned individual companies and investment portfolios are with the net zero goals of the Paris Agreement.

They aim to help investors understand to what extent their investment portfolios are contributing towards the transition to net zero and to direct capital flows towards companies and activities that have a positive contribution towards achieving net zero.

Backward-looking versus forward-looking metrics



Backward-looking metrics

- These are the most well-known type of climate metrics.
- They provide a picture of where the portfolio stands today.
- They are based on the total greenhouse gas emissions associated with the assets underlying the portfolio.
- Such metrics are simple to understand, easy to calculate and enable simple comparisons between investment portfolios.
- However, they are wholly reliant on historical data and so provide no information about what will happen to portfolio emissions in the future.



Forward-looking metrics

- Portfolio alignment metrics are forward-looking metrics.
- These metrics aim to indicate the 'future path' of a portfolio, capturing whether individual companies within the investment portfolio are expected to align with net zero in the future.
- This depends on factors such as the level of decarbonisation commitments made by the particular underlying companies, or the sectors and geographies in which they lie.
- As they are looking into the future, forward-looking metrics tend to use more complex assumptions or calculations.

A company which scores well against a backward-looking emissions metric may perform poorly against a forward-looking portfolio alignment metric. For example, the total emissions of a portfolio may at first sight appear low. However, the total emissions of that portfolio may quickly be overtaken in the race to net zero by another portfolio with higher total emissions today but with underlying assets with more aggressive net zero transition plans.

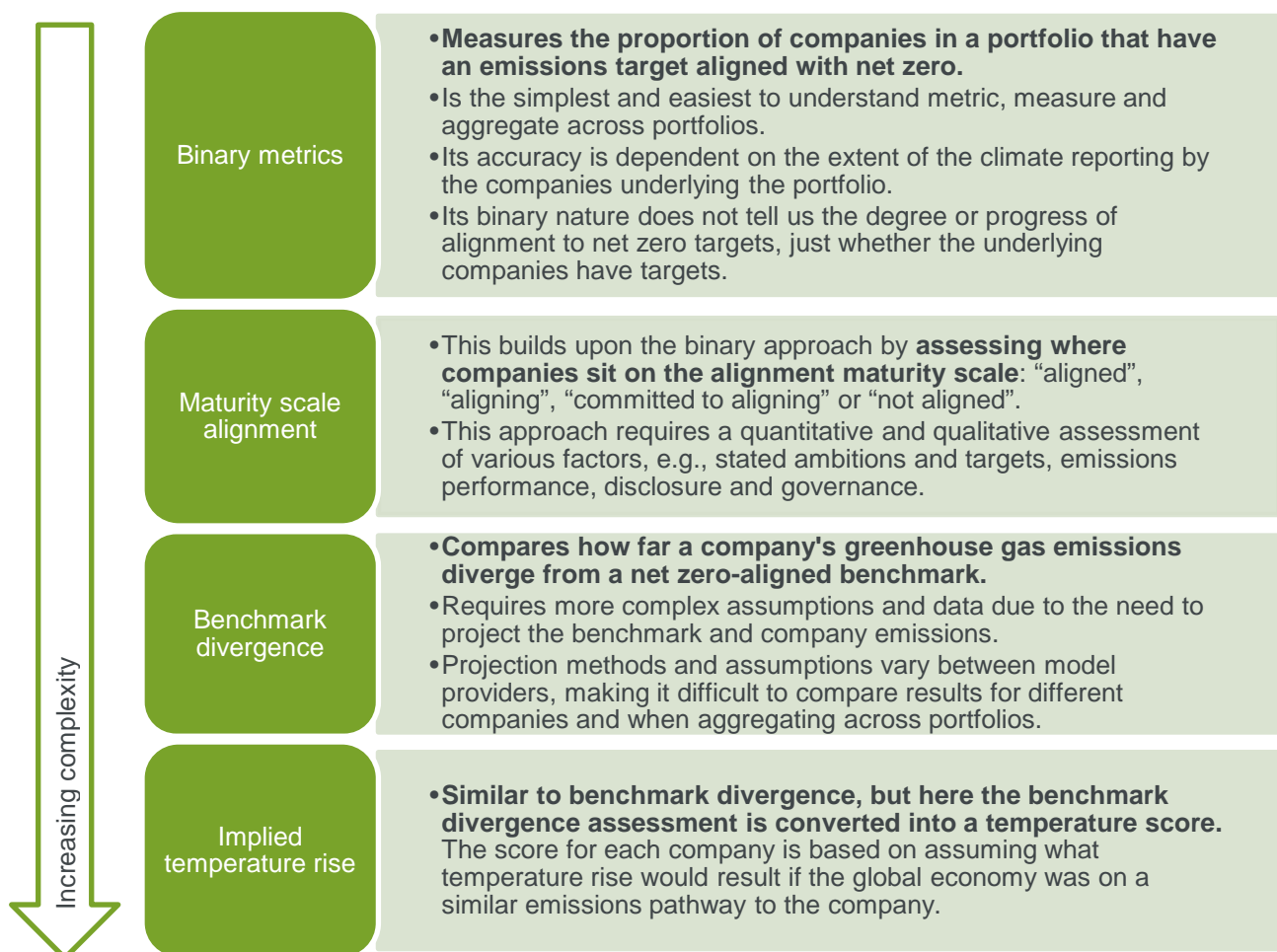
Main types of portfolio alignment metrics

There are several different types of portfolio alignment metrics, each of which have different advantages and disadvantages. Each are assessed at an individual company level and can then be aggregated across portfolios, though some lend themselves to aggregation more than others.

There are four broad types of portfolio alignment metrics: binary metrics, maturity scale alignment metrics, benchmark divergence metrics and implied temperature rise.

No single portfolio alignment metric is perfect, and our understanding is that these metrics were intended to complement one another. While each has disadvantages, together these portfolio alignment metrics provide a more complete picture of portfolio alignment than a single metric.

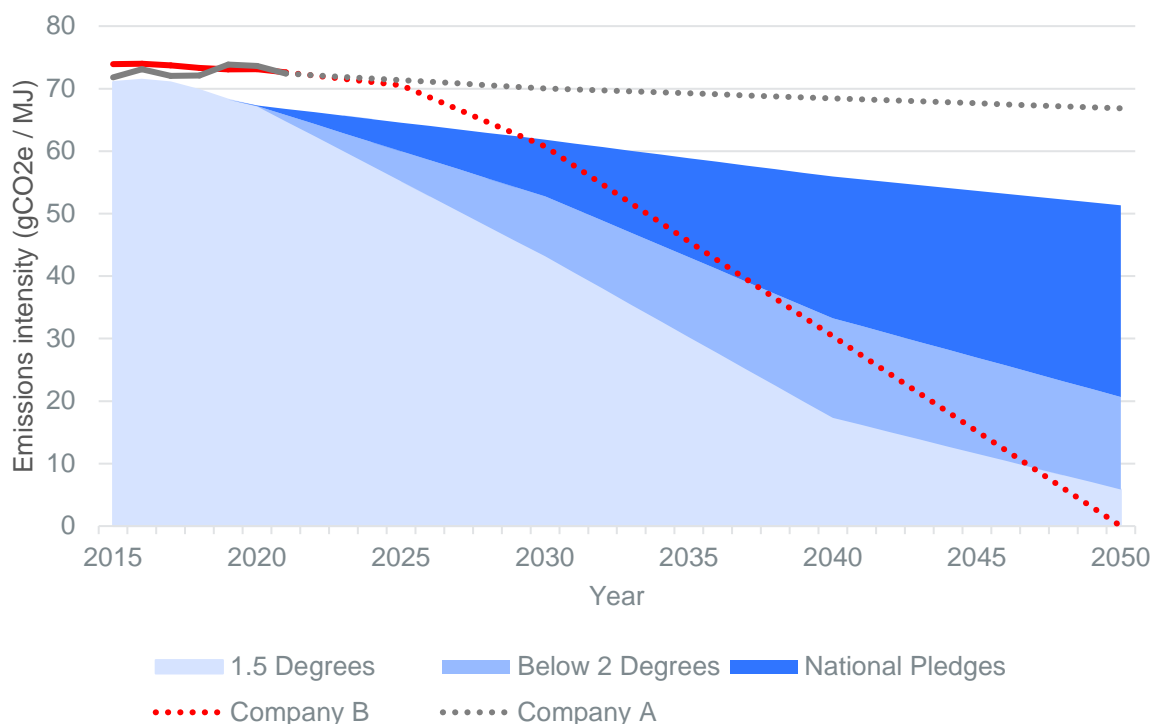
We introduce each type of metric below, with more detail set out in the TCFD and GFANZ papers.



Some types of portfolio alignment metrics have been more widely used than others, which is explored more in the next section.

Case study (adapted from a similar case study by LCP⁵)

Companies in the same sector can perform differently when assessed against the four types of portfolio alignment metrics. The chart shows the projected emissions intensity for two companies in the oil and gas sector, Company A and Company B, against the Transition Pathway Initiative's⁶ three benchmark scenarios (shown by the blue shaded areas). The grey line represents Company A and the red line represents Company B. The solid lines represent reported emissions intensity to 2021 while the dotted lines represent projected emissions intensity from 2021 to 2050 assuming the companies achieve their emission reduction targets.



The table shows the assessment of the two companies against the four portfolio alignment metrics.

	Net zero target? (Binary metric)	Maturity scale alignment	Benchmark divergence	Implied temperature rise
Company A	Yes	Committed to aligning	Not aligned	3.5°C
Company B	Yes	Aligned	1.5°C	1.3°C

- Both companies have set net zero emissions targets.
- Company A is **committed to aligning** because, although it has a net zero target, it has no plan for how it is going to implement it. Company B is considered to be **aligned** towards a net zero pathway because it is on track to achieve its plan for achieving its net zero target.
- Company A is on track for a temperature rise of 3.5°C and so is **not aligned** to a benchmark emissions pathway under the benchmark divergence metric (its projected emissions intensity is above the shaded blue area). On the other hand, Company B's projected emissions are below the 1.5°C pathway in 2050, with an implied temperature rise of 1.3°C.

⁵ LCP, led by Jones, C. and Willis, K., 2022. *Portfolio alignment metrics* [web article and pdf]. Available through: <https://www.lcp.com/our-viewpoint/2022/06/portfolio-alignment-metrics> [Accessed 7 July 2024].

⁶ Transition Pathway Initiative (TPI), 2024. *TPI Online Tool: Publicly listed equities*. [online] Available at: <https://www.transitionpathwayinitiative.org/sectors> [Accessed 7 July 2024].

How are portfolio alignment metrics being used to drive change in investment portfolios?

Reporting metrics

One of the main uses of portfolio alignment metrics is to fulfil climate reporting requirements. Reporting standards generally build on TCFD recommendations⁷, but vary in the detail they require.

The International Sustainability Standards Board (ISSB) published two international sustainability standards in 2023 (IFRS S1: General Sustainability-related Disclosures and IFRS S2: Climate-related disclosures). These standards incorporate the TCFD recommendations. The IFRS S2 guidance for asset managers⁸ includes reporting the amount of assets under management, by asset class, that apply ESG considerations in investment decisions. IFRS S2 does not specify portfolio alignment metrics. However, the UK is one major jurisdiction that has regulations which do:^{9 10}



UK Department for Work & Pensions (DWP) TCFD reporting requirements

- The DWP requires large UK occupational pension schemes to disclose a portfolio alignment metric in their TCFD reports.
- The Guidance for trustees of occupational schemes (October 2022) lists recommended metrics.
- Schemes are required to comply with the requirements “as far as they are able” and justify any assumptions or adjustments made due to gaps in data.



UK FCA ESG sourcebook

- The ESG sourcebook requires large financial services companies, including asset manager and insurers, regulated by the Financial Conduct Authority (FCA) to publish TCFD reports for the entity and its products.
- A TCFD product report, must, “as far as reasonably practicable” include “metrics that show the climate warming scenario with which a TCFD product is aligned, such as using an implied temperature rise metric.”

From a high-level review of publicly available reports, there appears to be fairly equal use of implied temperature rise and binary metrics. Other types of portfolio alignment metrics are rarely used. Regulatory reviews of early examples of climate disclosures¹¹ suggest that there are still significant gaps in the metrics being reported and that they are often not being integrated into companies' overall strategy and the investment decision-making process.

⁷ TCFD, 2017. *Recommendations of the Task Force on Climate-related Financial Disclosures*. [online and pdf] Available at <https://www.fsb-tcfid.org/recommendations/> [Accessed 17 July 2024]

⁸ IFRS, 2023. *IFRS S2 Climate-related Disclosures Industry Based Guidance: Volume 15 - Asset Management & Custody Activities*. [online and pdf] Available at: <https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures/> [Accessed 7 July 2024]

⁹ Department for Work & Pensions, 2022. *Governance and reporting of climate change risk: guidance for trustees of occupational schemes*. [online] Available at: [Governance and reporting of climate change risk: guidance for trustees of occupational schemes \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/111111/governance-and-reporting-of-climate-change-risk-guidance-for-trustees-of-occupational-schemes.pdf) [Accessed 7 July 2024]

¹⁰ Financial Conduct Authority, 2024. *Environmental, Social and Governance sourcebook*. [pdf] Available at: <https://www.handbook.fca.org.uk/handbook/ESG.pdf> [Accessed 7 July 2024]

¹¹ The Pensions Regulator, 2023. *Review of climate-related disclosures by occupational pension schemes*. [online] Available at: <https://www.thepensionsregulator.gov.uk/en/document-library/research-and-analysis/review-of-climate-related-disclosures> [Accessed 7 July 2024]

Verifying if company targets are aligned to net zero

It is becoming increasingly common for companies to seek independent approval of their targets to protect them from greenwashing risk and to improve the reputation with potential investors.

Independent organisations such as **Net Zero Tracker**¹² track which companies have set net zero (or other climate) targets, with Net Zero Tracker estimating that circa 50% of the largest 2000 companies globally have set a net zero target.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

The **Science Based Targets Initiative (SBTi)**¹³ acts as an **external verification body for net zero targets**. Companies submit their targets to SBTi for SBTi to assess whether the targets are sufficiently credible. That is, whether they are in line with the greenhouse gas emissions pathways needed to be aligned with the goals of the Paris Agreement, for that company's geography and economic sector. If the target is sufficiently aligned, then SBTi will approve the targets. However, there has been some challenge

from the industry on the SBTi methodology. This includes the SBTi board's announcement in April 2024 that it was considering accepting carbon offsets to mitigate some types of emissions^{14 15}. Currently, 60% of companies in the SBTi dashboard have approved targets.

Data providers such as MSCI and CDP maintain databases on the extent to which they believe company targets are aligned with the Paris Agreement, based on data from organisations including SBTi and their own in-house methodology. Indicators include binary metrics on whether the targets are SBTi-approved and the implied temperature rise for each company.

Such databases and independent bodies help to inform investors on which companies they are invested in have net zero targets, and whether the pace of change is aligned with net zero. This data can then feed into internal reporting and external disclosures. However, there are some limitations:

1. **Company maturity** – Some companies have decided not to submit their targets to independent bodies for assessment, either because they have not made sufficient progress or lack the data for the assessment. This leads to gaps in available data, giving an incomplete view to investors.
2. **Lack of consensus on net zero scenarios** – different third parties choose different pathways for assessing whether the targets are aligned with net zero. Therefore, a target assessed as net zero in one database may not be in another, making it difficult to compare datasets.

¹² Net Zero Tracker, 2023. *Net Zero Stocktake 2023*. [online and pdf] Available at: <https://zerotracker.net/analysis/net-zero-stocktake-2023> [Accessed 7 July 2024]

¹³ The Science Based Targets Initiative, 2024. *Target Dashboard*. [online] Available at: <https://sciencebasedtargets.org/target-dashboard#> [Accessed 7 July 2024]

¹⁴ Net Zero Investor, 2024. *SBTi CEO to depart in the wake of carbon offsets row*. [online] <https://www.netzeroinvestor.net/news-and-views/briefs/sbti-ceo-to-depart-in-the-wake-of-carbon-offsets-row> [Accessed 16 July 2024]

¹⁵ Science Based Targets Initiative, 2024. *Statement from the SBTi Board of Trustees on use of environmental attribute certificates, including but not limited to voluntary carbon markets, for abatement purposes limited to scope 3*. [online] <https://sciencebasedtargets.org/news/statement-from-the-sbti-board-of-trustees-on-use-of-environmental-attribute-certificates-including-but-not-limited-to-voluntary-carbon-markets-for-abatement-purposes-limited-to-scope-3> [Accessed 16 July 2024]

Incorporation into investment products

Responsible investing is an emerging area in many countries, with most jurisdictions this group researched limited to using qualitative Environmental, Social and Governance themes to construct funds. However, In the UK and EU (and sometimes the US), where responsible investing is more widespread, portfolio alignment metrics are starting to be used in the design of investment products. This was mostly in equities initially, but now products exist across a range of asset classes.

Some common types of fund are set out below (note that the examples are just a sample of funds on the market, not recommendations, and some of the examples may fall into more than one category):

1. Binary metrics in exclusion policies

Several investment managers will only include securities within in high carbon intensity industries within funds if the underlying company has an SBTi-verified target in place. One example of this is Aviva's ESG Investments Baseline Exclusions Policy¹⁶.

2. Overall fund temperature alignment target or emissions benchmark or index

Some funds seek a certain temperature alignment score or level of emissions for the portfolio as a whole, but do not necessarily place restrictions on the securities within the fund. The Robeco SAM Climate Global Credits fund¹⁷ aims for an overall portfolio that has carbon emissions consistent with the Solactive Paris Aligned Global Corporate Index, in order to contribute to a temperature rise well below 2°C . The BlackRock iShares MSCI World Paris-Aligned Climate UCITS ETF¹⁸ seeks to provide investors with a total return, which reflects the return of the MSCI World Climate Paris Aligned Benchmark Select Index.

3. Temperature alignment or binary metric for individual counterparties

Some funds will only include securities if the underlying company is aligned to the temperature goals of the Paris Agreement (for example the Calvert Sustainable Climate Aligned Fund¹⁹ or the L&G Net Zero Global Corporate Bond Fund²⁰) or has a carbon reduction target in place (for example the Schroders ISF Global Climate Leaders fund²¹).

These data-driven metrics and rules are straightforward to calculate for asset managers compared to more subjective active management and may be easier for investors to understand. However, these funds are reliant on the actions of the invested companies to meet their net zero fund objectives and so may not impact the net zero transition without the asset manager also engaging with companies.

¹⁶ Aviva, 2022. *Aviva's ESG Investments Baseline Exclusions Policy*. [pdf] Available at: <https://www.aviva.com/sustainability/reporting/> [Accessed 7 July 2024]

¹⁷ Robeco, 2024 *RobecoSAM Climate Global Credits*. [online] Available at: <https://www.robeco.com/en-uk/products/funds/isin-lu2258387807/robecosam-climate-global-credits-ih-gbp> [Accessed 7 July 2024]

¹⁸ Blackrock, 2024. *iShares MSCI World Paris-Aligned Climate UCITS ETF*. [online] Available at: <https://www.blackrock.com/uk/individual/products/318382/ishares-msci-world-paris-aligned-climate-ucits-etf#:~:text=The%20Fund%20seeks%20to%20provide,rise%20and%20are%20not%20guaranteed> [Accessed 7 July 2024]



¹⁹ Morgan Stanley, 2024. *Calvert Sustainable Climate Aligned Fund*. [online] Available at: <https://www.morganstanley.com/im/en-gb/intermediary-investor/funds-and-performance/morgan-stanley-investment-funds/equity/calvert-sustainable-climate-aligned.html> [Accessed 7 July 2024]

²⁰ LGIM, 2024. *L&G Net Zero Global Corporate Bond Fund*. [online] Available at: <https://fundcentres.lgim.com/en/uk/institutional/fund-centre/SICAV/Net-Zero-Global-Corporate-Bond-Fund/> [Accessed 7 July 2024]

²¹ Schroders, 2024. *Global Climate Leaders: a sub-fund of Schroder International Selection Fund SICAV*. [pdf]. Available at <https://api.schroders.com/document-store/id/624756bd-0f52-4805-8561-e47b9e2f04f6> [Accessed 7 July 2024]

How do different regions embrace portfolio alignment metrics?

There is a split between different world regions in their use of portfolio alignment metrics:

	Advanced	Developing
Example	UK and European Union 	Caribbean and Small Islands 
Level of adoption	<ul style="list-style-type: none"> • Integrated into some regulatory frameworks such as TCFD. • Data and model availability is steadily improving. • Increasingly used by financial institutions to choose more sustainable investment strategies. • Increasingly complex approach used, with detailed methodology intended to lead to transparency and standardization²². 	<ul style="list-style-type: none"> • Less prevalent and sophisticated use. • Limited standardization
Challenges	<ul style="list-style-type: none"> • Complexity acts as a barrier to understanding and effective implementation²³. • Data is only available for some asset classes and geographical areas. 	<ul style="list-style-type: none"> • Short-term focus on economic growth and response to increasing frequency of physical climate risk events rather than on long-term climate strategies. • Less technical expertise, with a shortage of sustainable finance professionals. • Less developed financial systems leading to a slower uptake of global trends and less promotion of the use of such metrics. • Lack of comprehensible and reliable data sources.

The disparity in adoption between developed and developing regions leads to a fragmented global approach to sustainable finance, which could potentially hinder global efforts to combat climate change effectively. Although global regulatory frameworks, such as the IFRS standards, have been developed, this is just a first step to addressing the issue and increasing the use of portfolio alignment metrics. A more globally coordinated approach is still needed, which considers the unique challenges of different regions. This could include:

- 1) International bodies and developed economies sharing expertise and providing training to build local expertise.
- 2) Considering financial incentives for adoption.
- 3) Implementing pilot projects or case studies in less developed regions to provide valuable insights and encourage broader adoption.
- 4) Continuing to develop alternative metrics which require less complex methodology.

²² McKinsey & Company, 2021. *Aligning portfolios with climate goals: A new approach for financial institutions*. [online] Available at: <https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/aligning-portfolios-with-climate-goals-a-new-approach-for-financial-institutions> [Accessed 7 July 2024]

²³ Fulcrum, 2022. *Stars aligning for portfolio alignment*. [online] Available at: <https://www.fulcrumasset.com/global/en/views-and-research/stars-aligning-for-portfolio-alignment/> [Accessed 7 July 2024]

Conclusion

Overall, portfolio alignment metrics are being used to some extent to drive net zero transition in investment portfolios, but in more limited cases than were originally envisioned.

Use within disclosures is mixed. A small number of regulations, mostly in the UK, make it compulsory to include portfolio alignment metrics. However, where such metrics are optional; companies are often choosing not to use them because the complex assumptions and data requirements underlying the metrics make them difficult to calculate and understand. When portfolio alignment metrics are reported it is unclear that they are feeding into strategic investment decisions.

In the UK and EU, the metrics are being used by asset managers to drive portfolio construction decisions and to sell new climate transition funds. Some companies are also using them to verify whether their targets are Paris-aligned.

In other regions, there is less use of portfolio alignment metrics. Without global usage, portfolio alignment metrics will not do enough to encourage investment portfolios which enable the net zero transition, other than at a more regional level. They are more likely to become a technical tool for asset managers with only a limited impact on the transition.

If the investment industry believes portfolio alignment metrics should remain a key approach to facilitate the transition, then more education and better data is needed to encourage take-up across the world, possibly backed up with stronger regulatory requirements.



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