

The Prudential Assurance Company Limited & Prudential Pensions Limited

2024 TCFD Report

This report, covering reporting period 1 January to 31 December 2024, sets out our disclosures in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) for assets managed and administered by the following entities in accordance with the FCA's Policy Statement 21/24:

- The Prudential Assurance Company Limited (PAC)
- Prudential Pensions Limited (PPL)

The disclosures in this report for the two legal entities, including cross-references to M&G plc group disclosures, fulfil the regulatory requirements under chapters 2.1 and 2.2 of the FCA ESG Sourcebook. They outline how PAC and PPL consider climate-related matters when managing or administering assets, encompassing their approach to governance, strategy and risk management, as well as relevant climate-related metrics and targets.

A handwritten signature in black ink, reading 'Clive Bolton'.

Clive Bolton
Director of PAC and PPL
June 2025

Our climate-related disclosures are consistent with the TCFD recommended disclosures and also reflect relevant TCFD Annex material (set out in the 'Guidance for All Sectors' and supplemental 'Asset Owners' guidance). The table below signposts the location of these disclosures for each entity.

Both PAC and PPL are wholly-owned subsidiaries of M&G plc (herein also referred to as 'the Group'). As such their approach to climate risks and opportunities is aligned with the Group and this report relies on and cross-refers to Group-level TCFD disclosures published in the [M&G plc 2024 Annual Report and Accounts \(ARA\)](#), supplemented by entity-specific information where appropriate. As required by the FCA's ESG Sourcebook, this report covers the disclosures relevant to the assets managed or administered by PAC and PPL. Decarbonisation of operational activity is managed at Group level – more information can be found in the ARA pages 74-76.

TCFD pillars	Recommended disclosures	For further information, please refer to:		
		M&G plc ARA 2024 section	PAC	PPL
Governance	Board's oversight of climate-related risks and opportunities	Sustainability governance: pages 56-57 Climate governance: page 73	This report: pages 4-5	
	Management's role in assessing and managing climate-related risks and opportunities	Sustainability governance: pages 56-57 Climate governance: page 73		
Strategy	Climate-related risks and opportunities the organisation has identified	Our approach to sustainability: pages 30-33 Climate risk management: pages 71-72 Financing the climate transition: pages 67-70	This report: pages 6-7, 16-19	
	The impact on the organisation's businesses, strategy and financial planning	Sustainability and investments: page 59 Our approach to climate change: page 65 Climate risk management: pages 71-72 Climate governance: page 73 Financing the climate transition: pages 67-70		
	Resilience of the organisation's strategy, based on different climate-related scenarios	Climate risk management: pages 71-72 Forward-looking metrics: pages 356-357 Financial statements: from page 185 (Notes 1, 13, 15, 17, 31, 37)		
Risk management	Processes for identifying and assessing climate-related risks	Climate risk management: pages 71-72	This report: pages 8-9	
	Processes for managing climate-related risks	Climate risk management: pages 71-72 Risk management: page 47		
	Integration of climate-related risks into overall risk management	Risk management: page 47 Sustainability governance: pages 56-57		
Metrics and targets	Metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process (Investments)	Climate metrics – investments: pages 77-79 Forward-looking metrics: pages 356-357	This report: pages 10-13	This report: pages 14-15
	Greenhouse gas emissions (Investments)	Climate metrics – investments: pages 77-79	This report: pages 10-13	This report: pages 14-15
	Targets used to manage climate-related risks and opportunities and performance against targets (Investments)	Our climate targets: page 66	This report: page 7	

Introduction

PAC sells savings and investment products to a number of different types of clients, including retail clients, institutional investors such as pension schemes, and investment platforms. These products include With-Profits policies, annuities, and unit-linked funds. PAC has a direct relationship with the policyholder. PPL, a subsidiary of PAC, mainly sells unit-linked investment products.

PAC and PPL form part of the Group's asset owner business (also herein referred to as 'we', 'our', or 'us'). The assets managed and administered by PAC and PPL are primarily overseen by the Treasury and Investment Office (T&IO) function.

Given that the approach to governance, strategy, and risk in relation to the management of climate risks and opportunities is consistent across the two entities, we have deemed it appropriate to prepare one combined report, with separate sections provided for each entity's climate-related metrics.

Governance

The separate PAC and PPL boards are responsible for interpreting and applying the Group sustainability strategy in their respective operating contexts. Accountability for setting the Group-wide sustainability strategy ultimately rests with the M&G plc Board. M&G plc has developed a sustainability framework that groups its activities into two themes – 'Resilient planet' and 'Resilient societies'. 'Financing the climate transition' is a pillar within the 'Resilient planet' theme and builds on the work we already do on climate. Both PAC and PPL boards receive periodic updates on sustainability-related activity, as appropriate. Topics covered in the year included contextualisation of our new hierarchy of climate targets and implementation strategy to deliver on targets.

The entity boards are supported by sub-committees, management-level committees, working groups and teams who oversee day-to-day climate risk integration efforts and execution of associated initiatives and activities.

Key delegations at board sub-committee level are:

- The PAC Risk Committee (with delegated responsibility in respect of PPL) oversees financial and non-financial risks faced by the entities. It is also accountable for overseeing PAC and PPL's compliance with the Group Risk Management Framework, which embeds climate and sustainability considerations, and related policies and practices. The PAC Executive Risk Committee further supports oversight at the entity level, for instance, through regular reviews of PAC's risk profile and key and emerging risks against appetite and the control environment.
- The PAC Audit Committee (with delegated responsibility in respect of PPL) assists the boards in fulfilling oversight responsibilities relating to material entity-level regulatory disclosures in respect of climate and sustainability matters, and associated controls and procedures.

The Independent Governance Committee provides independent oversight of sustainability and stewardship policies on behalf of pension policyholders. In addition, the With-Profits Committee receives sustainability-related updates, as appropriate, for matters relevant to its remit.

Specific sustainability-related responsibilities (also covering climate aspects) have been assigned to management as follows:

- The PAC Executive Committee has responsibility for overseeing progress towards PAC and PPL's strategic business objectives, including tracking the progress of sustainability plans and targets.
- The PAC Executive Investment Committee (EIC) has responsibility for oversight of material ESG risks and stewardship considerations, in line with relevant ESG policies, for the investment portfolios of PAC and PPL.

The EIC is supported by the Treasury and Investment Office (T&IO) teams who have responsibility for our ESG investment strategy and alignment to related policies and standards, as well as selection and ongoing oversight of investment managers.

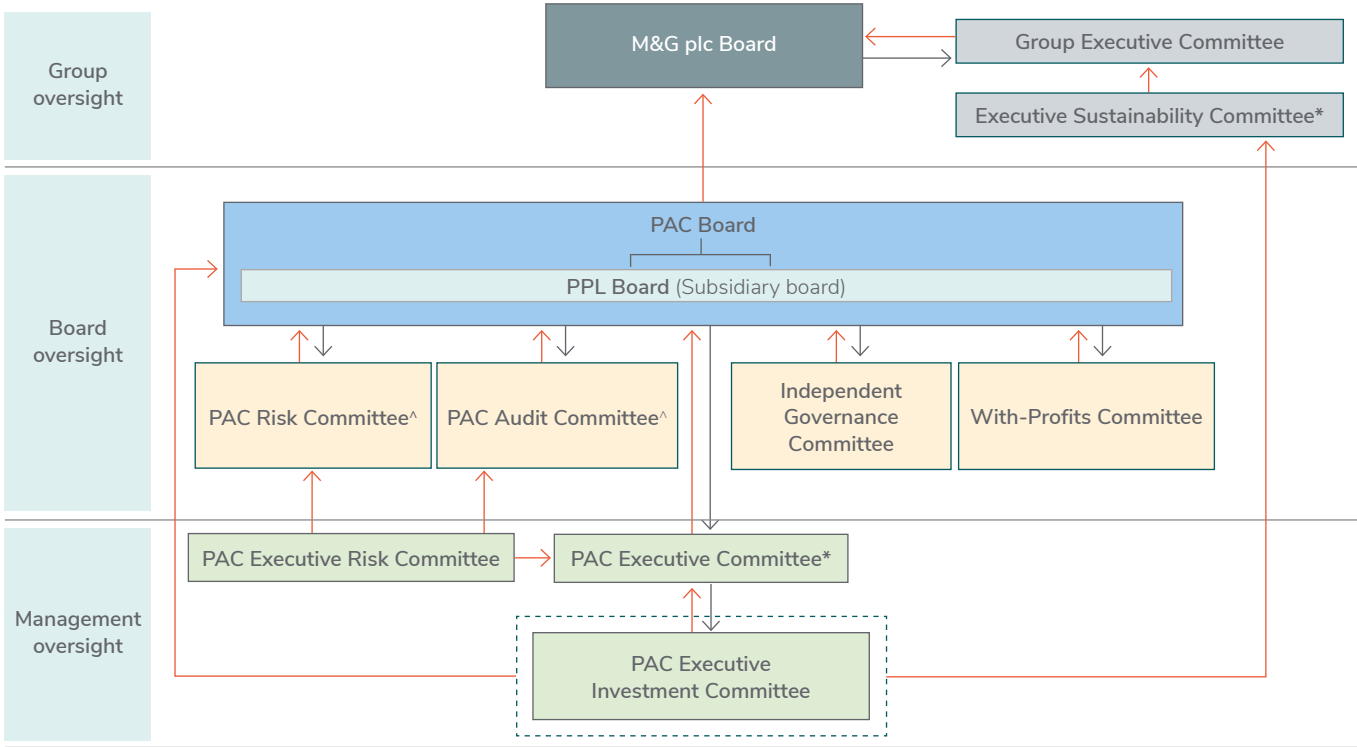
Ongoing communication is key to ensure consistency with the Group-level approach to sustainability. This is supported by cross-committee membership. For example, the CEO of the M&G Life business (of which PAC and PPL are a significant part) chairs the PAC Executive Committee and is also a member of the M&G plc Group Executive Committee and Executive Sustainability Committee (ESC).

The ESC, chaired by the Group Chief Sustainability Officer, is responsible for supporting the successful execution of the Group’s sustainability strategy and oversees the delivery of public commitments and targets. EIC and T&IO representatives also attend ESC meetings and provide regular updates through a standing business update agenda item.

PAC representatives also provide support and input into Group’s thematic climate working group, set up to facilitate delivery of the Group’s sustainability framework and associated actions.

Financial planning is conducted at a Group level, and includes considerations for PAC. The plan includes income or expenditure related to our climate actions where we have a reasonable estimate of the value that is expected to materialise over the plan period (three years).

The chart below summarises the governance structure:



This overview only shows key relevant reporting lines for entities in scope. It does not show all legal entities within M&G’s asset owner business.

↑	Reporting
↓	Delegation – in some instances, as indicated by *, designated accountable executives have certain responsibilities for sustainability and are supported by the executive committee in discharging their responsibilities.
⋮	The Treasury and Investment Office, the in-house investment strategy manager for PAC, is the main coordinator of sustainability and climate-related updates to the PAC and PPL boards and Group-level committees.

^ Has delegated authority from PPL Board

Strategy

PAC and PPL's net zero ambitions support the Group's target to achieve net zero carbon emissions across investment portfolios by 2050, in line with the Paris Agreement. During the year, we have updated our climate approach, to focus on three levers – grow, align and reallocate – aimed at supporting companies that are driving action, while also managing our exposure to transition risks. These levers form the basis of the 'Financing the climate transition' pillar in the Group's updated sustainability framework. Over time, as capabilities evolve, it is expected that further actions and mechanisms to deliver PAC's climate targets can be added.

Grow	Align	Reallocate
We aim to grow the share of funds and assets that support the achievement of climate goals – by increasing the share of funds and assets that are aligned to credible net zero pathways or providing climate solutions, we can support assets that are doing the hard work of delivering decarbonisation in the real economy. How we apply this lever: • We continually aim to develop tools and methodologies to guide our climate strategy, for example, our new asset alignment target (detailed on the next page) is underpinned by the Group's bespoke Transition Assessment Framework rolled out during the year. Drawing on industry guidance issued by the Institutional Investors Group on Climate Change (IIGCC), it is a multi-criteria framework designed to assign portfolio companies an 'alignment level' based on the robustness and ambition of their greenhouse gas emissions targets and transition plan, and has been built by the Group's internal investment manager, with inputs and oversight from the T&IO team.	Through our investment managers¹ we aim to drive engagement with high-emitting companies and assets to seek robust transition plans aligned with climate goals. We also endeavour to collaborate with industry and policy stakeholders to create the right enabling environment for climate action. How we apply this lever: • We rely on appointed investment managers to exercise direct climate engagement and responsible stewardship in line with our policies and objectives. As an asset owner, we set clear expectations of investment managers, communicating annual priorities and meeting on a quarterly or bi-annual basis. • We use our proprietary ESG Scorecard to rate investment managers' ESG propositions, and to determine whether a manager can contribute positively to meeting our climate goals and targets. The assessment criteria is based on an aggregate view of performance against engagements, an overview of the responses from our quarterly ESG Due Diligence Questionnaire, a view of their ESG reporting and any violations of ESG policies / criteria. • We expect managers to actively participate in shareholder voting on our behalf (in line with PAC's Voting Standard which requires a voting approach focused on supporting real world positive outcomes, as systemic risks, such as climate change, can negatively impact the long-term performance of our investment portfolios) and regularly report the results of their voting to us. We are strengthening the link between our Transition Assessment Framework and manager engagement priorities, and will more closely monitor voting and shareholder resolution activities of our managers. • We work with our peers through groups such as the NZAOA and the IIGCC's European Policy Working Group to raise our views with policymakers.	There are uncertainties in the transition to net zero that may create risk to the investments we manage. While we seek to monitor and manage the climate risk characteristics of assets, where engagement fails, we may consider reallocation as a measure of last resort. How we apply this lever: • We believe companies operating in, or dependent on, climate-sensitive sectors such as coal, oil and natural gas, should develop transition plans that ensure they are resilient to climate-related financial risks. PAC's thermal coal approach outlines the criteria by which we screen our public asset investments (spanning both PAC and PPL portfolios) for exposure to coal-related activities. Since 2021, this has resulted in exclusions across our shareholder annuity and with-profits businesses. While we have set explicit criteria for ESG screening, we recognise that active ownership is key, and we will request that our investment managers engage with certain companies that fail our screening. Divestment is seen as an appropriate escalation when we foresee that further engagement practices will fail to yield the desired results, such as the development of a transition plan, and an investment presents an unacceptable level of risk.

¹Whilst we do not engage directly with investee companies, we rely on our investment managers to engage on our behalf. For the proportion of our assets managed by the Group's internal manager, this includes engaging with third-party data providers - for more information on approach, please refer to page 78 of the PAC Stewardship Report 2024.

To better capture actual transition efforts, we have expanded our interim climate targets to a more comprehensive set of indicators, strengthening the link to real-world change. In addition to targeting a reduction in financed emissions by 2030 and 2050, we have developed a new 'asset alignment' target to track the proportion of assets that are supporting the climate transition and are articulating this through our transition plan.

Implementation of our targets is underpinned by the strategy levers described on the previous page. Importantly, there are a range of challenges that may constrain our ability to deliver on our targets, notably insufficient government policy support. This is why public policy engagement and advocacy, to create the right incentive structures for the climate transition, is a key priority for us.

PAC's interim targets (encompasses in-scope PPL funds)

Asset alignment (NEW)	Engagement (UPDATED)	Portfolio decarbonisation ^v
50-70% of financed emissions (Scope 1, 2 and 3) are assessed to be 'net zero', 'aligned' or 'aligning' by 2030 ⁱ . The assets in scope are listed equity and corporate bonds managed by the Group's asset manager on behalf of PAC, where PAC has sufficient investment control ⁱⁱ .	For PAC listed equity and corporate bond assets ⁱⁱ , we aim to maintain at least 70% of financed emissions (Scope 1, 2 and 3) as either assessed to be 'net zero' or 'aligned', or subject to climate-related engagement ⁱⁱⁱ .	For assets managed by the Group's asset manager: – 50% reduction in emissions intensity (tCO ₂ e/\$m invested) for in-scope ⁱⁱ listed equity and corporate bonds by 2030 ^{iv} . – 36% reduction in emissions intensity (kgCO ₂ /m ²) for in-scope real estate assets by 2030 ^{iv} .
i) Our strengthened climate approach rests on our Transition Assessment Framework (TAF), which we use to assess corporate climate targets and transition plans. The framework is based on the Net Zero Investment Framework guidance developed by The Institutional Investors Group on Climate Change (IIGCC). It involves assessing several components of a company's transition plan, including whether they have set science-based targets, actions to deliver their targets and supporting investment. Companies are then assigned an overall level: net zero, aligned, aligning, committed, or not aligned with the goals of the Paris Agreement. ii) Assets in scope at the end of 2024 covered £71bn. Investment control refers to where PAC is able to determine investment characteristics. This includes our With-Profits business, Shareholder and Policyholder annuities, and a portion of our unit-linked business (falling under PPL), including the Prudential Dynamic Growth funds and Non-profit unit-linked funds. In general, PAC does not expect to have investment control over collective vehicles where its assets are invested alongside those of third parties. iii) Includes direct climate-related engagements as well as engagements through collaborative initiatives where the Group's asset manager is actively involved. For the PAC target, it includes engagement by external managers where this aligns with PAC's stewardship priorities. iv) Target measured against 2019 baseline. The portfolio decarbonisation targets cover Scope 1 and 2 financed emissions. v) PAC previously disclosed an interim target on portfolio decarbonisation for defined sectors. Following the introduction of the new asset alignment target, PAC is reviewing the appropriateness of its sectoral decarbonisation targets.		

M&G plc's ARA (pages 65, 67-70 and 71-72) sets out how climate risks and opportunities are being addressed by the wider business, including considerations of time horizons.

Risk management

Identifying and managing climate-related risks is crucial to minimise or mitigate the impacts on the risk profile and performance of investment portfolios. **PAC's ESG Investment Policy** sets out the ESG investment principles we use to inform and guide our sustainable investment practice and climate risk appetite, to ensure relevant ESG factors are integrated into our investment process where appropriate, including our selection and oversight of managers. The ESG Investment Policy is supplemented by assessment criteria used for specific topics, such as coal-related investments in line with PAC's thermal coal approach.

In line with the wider group, we operate a 'three lines of defence' model to govern our approach to risk management, which provides a framework of responsibilities and accountabilities across the business.

From a first line perspective, the T&IO function plays an essential role in supporting the identification and assessment of climate risks. When considering the investment implications of ESG (including climate) factors, we integrate sustainability considerations into our strategic asset allocations by taking into account their effects on our risk and return assumptions. This is so that, when we allocate capital by asset class and investment jurisdiction, we have considered as many investment opportunities and risks as possible. As an example, we integrate ESG considerations via our country risk categorisation framework, which informs our capital market assumptions and expected returns over the long term. Another mechanism is benchmark construction analysis which assesses constituents to consider whether ESG objectives can be met via portfolio exclusion. We also employ climate scenario modelling, as a subset of our capital markets modelling process, to understand the sensitivity of different asset classes and regions to climate risks and thus our overall portfolio exposures. A Group-wide working group has been established, effective from 2025, to monitor developments and best practice in the climate scenario landscape and further enhance inputs that feed into modelling work.

The climate scenario modelling undertaken to inform the strategic asset allocation process is also utilised more widely across PAC to support forward-looking processes which assess the resilience of PAC's balance sheet and business model to climate risk. In particular, our Own Risk and Solvency Assessment (ORSA) and business planning exercise explored the impact of three different transition pathways (based on NGFS scenario sets) and a 'Current Policies' pathway for reporting year 2024. With the likelihood of an orderly transition appearing to be falling, due to the gap between global action and Paris-aligned pathways, we have strengthened our focus on disorderly outcomes by considering two new disorderly scenarios ('Fragmented World' and 'Sudden Wake-up call'). Whilst acknowledging that scenarios modelled represent only four potential outcomes from an extremely wide and uncertain spectrum, the results of our latest modelling indicate that a hot house ('Current Policies') scenario continues to have the most significant impact on our balance sheet, while a disorderly transition is more adverse than an orderly scenario.

Portfolio decarbonisation is one lever we have to manage our transition risk exposures. Decarbonisation is enabled through the ongoing implementation of PAC's thermal coal approach, portfolio reallocations where assets present unacceptable levels of risk (for example across high emitting sectors such as energy and industrials), as well as investee engagement to set and deliver on science-based emission reduction targets. Portfolio financed emissions remain important to establish the overall ambition of our climate objectives, and provide an indicator of progress. However, financed emissions can be volatile and require detailed analysis of the multiple drivers of change, as they may not relate to changes in absolute real-world emissions (eg, market movements and portfolio activity). Our expanded set of targets promotes a more balanced approach that aims to support companies innovating and reducing emissions in the real economy, and allow us to monitor both backward and forward-looking indicators of transition risk. As we develop our transition tools and metrics we may identify new approaches and targets that support our climate ambition.

In respect of portfolio management activity, we seek to identify investment managers that have the people, processes and expertise in place to meet the requirements specified in the investment mandate. To achieve this, our selection process includes a comprehensive assessment against sustainability-specific criteria, to enable an appropriate review of the managers' alignment with our purpose, values and priorities.

Once an investment manager has been selected and onboarded, the Manager Oversight team within T&IO conducts ongoing due diligence reviews. This includes regular meetings and site visits, with sustainability issues being a standing agenda item at quarterly meetings. At the issuer level, we have implemented a quarterly ESG screening process to give appropriate review of broader ESG issues and risks within our investment portfolios. This is characterised by reviewing our holdings, where look-through is available to us, and monitoring their exposures against ESG-specific areas. Where appropriate, we will engage with managers over any notable issues. Although issuer engagements are executed by our asset managers, we hold them accountable for the interactions they have with investee companies, and engage with them to deliver our desired results.

Our Risk and Compliance functions act as the second line of defence, with responsibility for reviewing and challenging risk management practices by the first line and providing guidance. As part of its remit, the Group's ESG Compliance function also monitors emerging sustainability-related regulatory requirements, through horizon scanning, and drives integration across the relevant activities of the business.

The Group's Internal Audit function represents the third line. It supports the entity boards and senior management by providing independent assurance over the first and second lines of defence. For example, assurance activity covers assessment of governance arrangements and control practices as they relate to climate risk, and thematic reviews such as evaluation of regulatory disclosures.

Climate metrics

In preparing our financed carbon emissions metrics we consider the Partnership for Carbon Accounting Financials (PCAF) principles. We report data quality scores for our emissions metrics – covering listed equity and corporate bonds with both a known and unknown use of proceeds and sovereign debt emissions. The score is based on PCAF methodology and ranges from one to five, where one represents the highest data quality and five is the lowest.

In our analysis, 'coverage' refers to the proportion of in-scope assets under management and administration (AUMA) for which we have all environmental, financial, or other such data required in the calculation of the given metric (reported or estimated). We expect further improvements as availability of data improves, and industry guidance extends to a broader range of asset classes. Private asset analysis for PAC is limited to real estate only, with other private asset classes excluded due to data limitations or on a materiality basis.

The metrics presented for PAC and PPL relate to assets managed internally within the Group – externally managed mandates in which PAC and PPL invest are not included. This scope differs from the scope of assets over which PAC's climate targets are set as part of the Net Zero Asset Owner Alliance. We aim to increase the scope of assets reported for TCFD over time through sourcing of data for externally managed mandates.

All figures presented reflect the annual emissions calculated with reference to in-scope AUMA of each asset class as at 31 December for each year.

We use a range of metrics to identify and assess climate-related risks and opportunities across investment portfolios. We monitor Scope 1 and 2 emissions and carbon footprint targets to inform our overall response to climate change, alongside our asset alignment and engagement targets. While we monitor Scope 3 emissions as a proxy for risk exposure to inform targeted actions, there are notable challenges related to data quality and disclosure of this emissions category, which makes it less reliable for decision making.

Information on definitions of metrics reported and limitations relating to data used are detailed in the Group's Environmental Metrics Basis of Reporting ('Basis of Reporting'), published on M&G plc's [website](#). In particular, it should be noted that we use data sourced from third-party data providers (eg, MSCI and Bloomberg) to calculate the emissions metrics. Our Basis of Reporting also sets out our policy on restatements. Details on any restatements and the impact on the previously presented metrics are set out in the relevant section below.

The methodology and data used to assess financed emissions are evolving and maturing, and we expect industry guidance, market practice, and regulations to continue to change. We will continuously refine our approach using appropriate data sources and methodologies available for relevant metrics.

Climate metrics (PAC)

PAC – Listed equity and corporate bonds						
	2024		2023 (restated)		2023 (previously presented)	
	Value	Coverage	Value	Coverage	Value	Coverage
AUMA in-scope for metrics presented (£bn)	69.7	n/a	72.1	n/a	83.8	n/a
Financed carbon emissions Scope 1 and 2 (ktCO ₂ e)	4,977	96%	6,023	95%	6,365	86%
Data quality score – Scope 1 and 2	2.1	n/a	2.2	n/a	2.2	n/a
Financed carbon emissions Scope 3 (ktCO ₂ e)	35,763	96%	34,048	91%	35,431	82%
Data quality score – Scope 3	2.4	n/a	2.2	n/a	2.2	n/a
Carbon footprint Scope 1 and 2 (tCO ₂ e/£m invested)	74	96%	88	95%	89	86%
Carbon footprint Scope 3 (tCO ₂ e/£m invested)	533	96%	517	91%	513	82%
Weighted average carbon intensity (WACI) Scope 1 and 2 (tCO ₂ e/£m sales)	146	93%	164	93%	164	83%
Weighted average carbon intensity (WACI) Scope 3 (tCO ₂ e/£m sales)	871	93%	1,019	93%	1,030	82%

For 2024, we observed a fall in Scope 1 and 2 financed emissions compared to restated metrics, in part driven by reduced exposure to certain high-emissions intensity issuers. The increase in Scope 3 financed emissions results from higher coverage and increased reported emissions for some large contributors in this emissions category. More broadly, we expect Scope 3 emissions to fluctuate in the near term, reflecting volatility from evolving Scope 3 reporting methodologies and improvements in measurement data (for example, companies reporting across more Scope 3 categories).

Restatement of 2023 metrics previously presented

We have undertaken a review of our approach to asset classification in order to more closely align to PCAF guidance. This review led to the removal of some assets from what had previously been included in the scope of our reporting for listed equity and corporate bonds. As a result of this change, we have restated the 2023 metrics previously presented. The change in asset classification has resulted in a reduction in the value of assets in-scope (14%), however the impact on our reported absolute emissions is smaller (4%) as the majority of assets removed did not have emissions data coverage. Of the assets removed from scope, we have presented green, social and sustainability bonds (where there is a known use of proceeds) as a separate asset class this year – the emissions relating to these can be found below. Further details are set out in the Basis of Reporting, available online.

PAC – Green, social and sustainability bonds				
	2024		2023	
	Value	Coverage	Value	Coverage
AUMA in-scope for metrics presented (£bn)	2.5	n/a	2.3	n/a
Financed carbon emissions Scope 1 and 2 (ktCO ₂ e)	81	95%	61	71%
Data quality score – Scope 1 and 2	2.2	n/a	2.4	n/a
Financed carbon emissions Scope 3 (ktCO ₂ e)	475	93%	390	67%
Data quality score – Scope 3	2.6	n/a	2.3	n/a
Carbon footprint Scope 1 and 2 (tCO ₂ e/£m invested)	33	95%	37	71%
Carbon footprint Scope 3 (tCO ₂ e/£m invested)	200	93%	252	67%

This asset class has been separated from listed equity and corporate bonds and presented here for the first time as explained in the previous section – they relate to listed corporate bonds where there is a known use of proceeds covering green, social and sustainability bonds. The increase in Scope 1 and 2 financed emissions can be primarily attributed to higher in-scope AUMA and data coverage – these drivers also impact Scope 3 financed emissions to some extent, with Scope 3 emissions typically exhibiting more volatility in the near term.

PAC – Sovereign debt						
	2024			2023		
	Value		Coverage	Value		Coverage
	incl. LULUCF ²	excl. LULUCF ²		incl. LULUCF ²	excl. LULUCF ²	
AUMA in-scope for metrics presented (£bn)	19.1		n/a	17.0		n/a
Financed sovereign production emissions Scope 1 (ktCO ₂ e)	4,775	4,598	99.5%	4,095	3,934	99.4%
Data quality score – production emissions	2.0	2.0	n/a	1.9	1.9	n/a
Financed sovereign consumption emissions Scope 1,2,3 excl. exported emissions (ktCO ₂ e)	5,156	4,981	99.5%	4,440	4,282	99.2%
Data quality score – consumption emissions	4.0	4.0	n/a	4.0	4.0	n/a
Weighted average sovereign production intensity Scope 1 (tCO ₂ e/PPP-adj GDP (USDm))	0.2	0.2	99.5%	0.2	0.2	99.4%
Weighted average sovereign consumption intensity Scope 1,2,3 excl. exported emissions (tCO ₂ e/Capita)	10.2	10.4	99.5%	9.9	10.2	99.2%

We have updated our process for collecting sovereign debt emissions data this year, sourcing data from a third-party data vendor in place of manual sourcing across publicly available data undertaken previously, which is largely driving the variances from prior year. Other smaller impacts come from more recent data being available, and different estimation methodologies being used by the data vendor compared to those sourced for 2023 outputs.

PAC – Real estate (private assets)						
	2024		2023 (restated) ³		2023 (previously presented)	
	Value	Coverage	Value	Coverage	Value	Coverage
AUMA in-scope for metrics presented (£bn)	14.3	n/a	14.4	n/a	14.4	n/a
Financed carbon emissions Scope 1 and 2 (ktCO ₂ e)	26.6	100%	30.3	97%	30.3	97%
Financed carbon emissions Scope 3 (ktCO ₂ e)	200.4	100%	235.5	97%	265.9	97%
Carbon footprint Scope 1 and 2 (tCO ₂ e/£m invested)	1.9	100%	2.2	97%	2.2	97%
Carbon footprint Scope 3 (tCO ₂ e/£m invested)	14.0	100%	16.9	97%	19.1	97%

Real estate assets recorded a decrease in emissions over the year against restated metrics, supported by energy efficiencies implemented by our investment managers. The values are also expected to vary year on year as they rely on data collected from property occupiers.

²Land Use, Land Use Change and Forestry (LULUCF)

³We have restated 2023 outputs for real estate to reflect actual emissions data obtained after the reporting period, where estimated data had been used in the 2023 calculations.

Climate metrics (PPL)

2024 is the second year that we have presented results for PPL, allowing us to report year-on-year movements for the first time. The methodology applied to the PPL metrics below is consistent with that of the PAC metrics for 2024. PPL funds primarily operate in public markets (specifically, corporate bonds), so do not have material exposure to private assets. The in-scope AUMA presented for listed equities and corporate bonds below does not include PPL's exposure to funds where we have not been able to source look-through data.

PPL – Listed equity and corporate bonds						
	2024		2023 (restated)		2023 (previously presented)	
	Value	Coverage	Value	Coverage	Value	Coverage
AUMA in-scope for metrics presented (£bn)	1.4	n/a	2.2	n/a	2.5	n/a
Financed carbon emissions Scope 1 and 2 (ktCO ₂ e)	43	88%	155	92%	177	93%
Data quality score – Scope 1 and 2	2.3	n/a	2.5	n/a	2.5	n/a
Financed carbon emissions Scope 3 (ktCO ₂ e)	308	88%	596	86%	656	87%
Data quality score – Scope 3	2.6	n/a	2.4	n/a	2.4	n/a
Carbon footprint Scope 1 and 2 (tCO ₂ e/£m invested)	34	88%	78	92%	78	93%
Carbon footprint Scope 3 (tCO ₂ e/£m invested)	244	88%	322	86%	309	87%
Weighted average carbon intensity (WACI) Scope 1 and 2 (tCO ₂ e/£m sales)	87	82%	117	89%	120	90%
Weighted average carbon intensity (WACI) Scope 3 (tCO ₂ e/£m sales)	654	82%	675	89%	659	89%

2023 outputs have been restated as a result of the asset reclassification exercise described for PAC, which similarly encompasses PPL's assets. Overall, lower in-scope AUMA and the impact of PPL no longer holding certain positions are largely driving the lower emissions year-on-year when compared to restated figures. Fluctuations in asset market values and a reduction in holdings in some high-emissions intensity issuers have also contributed to the variances.

PPL – Green, social and sustainability bonds				
	2024		2023	
	Value	Coverage	Value	Coverage
AUMA in-scope for metrics presented (£bn)	0.2	n/a	0.2	n/a
Financed carbon emissions Scope 1 and 2 (ktCO ₂ e)	7	96%	9	93%
Data quality score – Scope 1 and 2	2.2	n/a	2.8	n/a
Financed carbon emissions Scope 3 (ktCO ₂ e)	46	96%	31	87%
Data quality score – Scope 3	2.7	n/a	2.8	n/a
Carbon footprint Scope 1 and 2 (tCO ₂ e/£m invested)	33	96%	46	93%
Carbon footprint Scope 3 (tCO ₂ e/£m invested)	209	96%	165	87%

This asset class has been separated from listed equity and corporate bonds and presented here for the first time as explained on page 11. The lower Scope 1 and 2 financed emissions are mainly caused by shifts in the green bond portfolio exposure. Shifts in portfolio exposures (as well as increases to reported emissions within top contributors) similarly explain the higher levels of Scope 3 emissions.

PPL – Sovereign debt						
	2024			2023		
	Value		Coverage	Value		Coverage
	incl. LULUCF ⁴	excl. LULUCF ⁴		incl. LULUCF ⁴	excl. LULUCF ⁴	
AUMA in-scope for metrics presented (£bn)	0.8		n/a	0.9		n/a
Financed sovereign production emissions Scope 1 (ktCO ₂ e)	124	124	100%	142	141	100%
Data quality score – production emissions	1.0	1.0	n/a	1.1	1.1	n/a
Financed sovereign consumption emissions Scope 1,2,3 excl. exported emissions (ktCO ₂ e)	172	171	100%	180	179	100%
Data quality score – consumption emissions	4.0	4.0	n/a	4.0	4.0	n/a
Weighted average sovereign production intensity Scope 1 (tCO ₂ e/PPP-adj GDP (USDm))	0.1	0.1	100%	0.1	0.1	100%
Weighted average sovereign consumption intensity Scope 1,2,3 excl. exported emissions (tCO ₂ e/Capita)	9.0	8.9	100%	8.2	8.2	100%

We have updated our process for collecting sovereign debt emissions data this year, sourcing data from a third-party data vendor in place of manual sourcing across publicly available data undertaken previously, which is largely driving the variances from prior year. Other smaller impacts come from more recent data being available, and different estimation methodologies being used by the data vendor compared to those sourced for 2023 outputs.

⁴Land Use, Land Use Change and Forestry (LULUCF)

Portfolio alignment and scenario analysis

In addition to backward-looking metrics, which indicate the current emissions profile of an asset or portfolio, we also use forward-looking metrics to assess transition alignment and potential impacts on asset values over time by leveraging scenario analysis tools.

The key forward-looking metrics that we monitor for public assets are:

- Asset alignment: this metric is new for this year – it is based on our Transition Assessment Framework (TAF) and captures several components of a company's transition plan, including whether they have credible science-based targets, actions to deliver their targets and supporting investment. It shows the percentage of public asset financed emissions (all GHG scopes) that we have assessed to be 'not aligned', 'committed', 'aligning' or 'aligned' with climate goals based on the TAF.
- Implied temperature rise (ITR): this metric is an attempt to estimate the temperature trajectory an issuer or portfolio is on, providing a simple measure of alignment with the Paris Agreement goals.
- Climate adjusted value (CaV): this metric is equivalent to value at risk (VaR), but is calculated on a bottom-up basis, by assessing the impact of different climate scenarios on a company's financial position and market valuation. Unlike our top-down ORSA scenario modelling, which is about testing the resilience of our balance sheet, this exercise is more focused on interrogating our portfolios, to understand potential risk exposures and outliers, including so-called asset stranding where issuers could experience a significant deterioration in their financial strength and prospects.
- Private asset climate hazard exposure: this data shows potential physical climate risk impacts across private fixed assets, covering real estate. Physical risk exposures assessed include climate-related natural disasters, such as storms, flooding and wildfires.

We use Aladdin Climate to model CaV across our listed equities, corporate debt and sovereign debt portfolios as well as ITR for public market issuers where data is available. It assesses the financial impact of climate change based on the Network for Greening the Financial System (NGFS) scenarios: orderly, disorderly and hot house, with orderly and disorderly being based on transition impacts and hot house being based on physical impacts.

For private assets, global insurance broker and risk adviser, Marsh, have assessed our real estate exposure to physical climate risk. Marsh uses XDI, a climate risk analysis platform, which quantifies the cost of extreme weather and climate change impacts to physical assets, taking into account asset-specific information. The scenarios used in this model are based on Representative Concentration Pathway (RCP) 2.6 and 8.5, as produced by the IPCC. These broadly align to the public asset orderly and hot house scenarios. The output of this model is limited to the identification of risk level, with the results for assets that have been classified as at high risk from climate-related hazards being presented on page 19.

As with any model, the scenario analysis results are heavily influenced by the assumptions made. We recognise that the climate models are based on stylised scenarios, and attempt to capture the possible future interplay between physical climate impacts, policy and regulation, and consumer behaviour, amongst other factors, at a global scale. The scenarios are not predictive, but rather help us explore a range of potential outcomes and act as a useful tool for interrogating and understanding how climate-related developments could impact the assets we manage and administer.

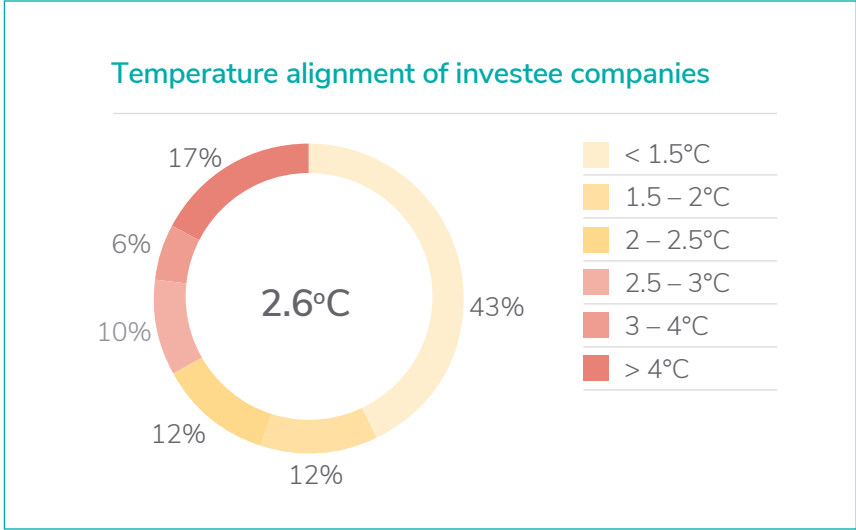
Scenario analysis results are presented at a PAC level, with the results capturing PPL's portfolio as a subsidiary entity. Real estate assets modelling is shown for PAC, reflecting its largest private asset class for which emissions can be calculated.

Transition Assessment Framework (public assets)

Our strengthened climate approach rests on our Transition Assessment Framework (TAF), which we use to assess corporate climate targets and transition plans. The proportion of financed emissions from issuers that are 'aligning', 'aligned' or 'net zero' under the TAF is a new interim target for in-scope assets (see page 7). We are targeting a range of 50-70% by 2030. At the end of 2024, 39.8% of financed carbon emissions associated with in-scope assets (£71 billion) were either aligning or aligned. No issuer assessed has reached net zero emissions.

Implied temperature rise – PAC (public assets)

As part of our modelling, we have calculated the implied temperature rise (ITR) for each individual issuer where data is available, covering 98% of listed equities and corporate bonds for PAC, as at 31 December 2024. The chart below shows our relative ITR exposure based on portfolio weightings to a range of temperature levels.



TAF alignment	2024
Not aligned (%)	46.2
Committed (%)	14.0
Aligning and aligned (%)	39.8

The analysis shows that the investee companies are aligned to a broad range of temperature outcomes. While 55% of the modelled AUMA is projected to achieve alignment with a 2°C world by 2030, 23% of modelled assets exceed 3°C. The weighted average warming potential across modelled issuers is 2.6°C. This represents a minimal increase in the overall portfolio's temperature alignment from 2023 (2.5°C).

While the average across our modelled assets is higher than the Paris Agreement goals, this is consistent with the broader economy and therefore not surprising at this stage in the climate transition. We would expect the figure to improve as we work to meet our interim asset alignment, engagement and decarbonisation targets using the levers within our climate strategy framework.

We acknowledge that ITR is subject to a range of inherent limitations, including the absence of a commonly accepted calculation approach, and sensitivity to sector emissions assumptions. ITR by its nature is a point-in-time metric and therefore does not account for likely changes to our portfolios. We do not use ITR in isolation but believe it provides useful indications of alignment when viewed in conjunction with other information. For a more detailed overview of ITR limitations, please refer to M&G plc's ARA (page 80).

Climate adjusted value – PAC (public assets)

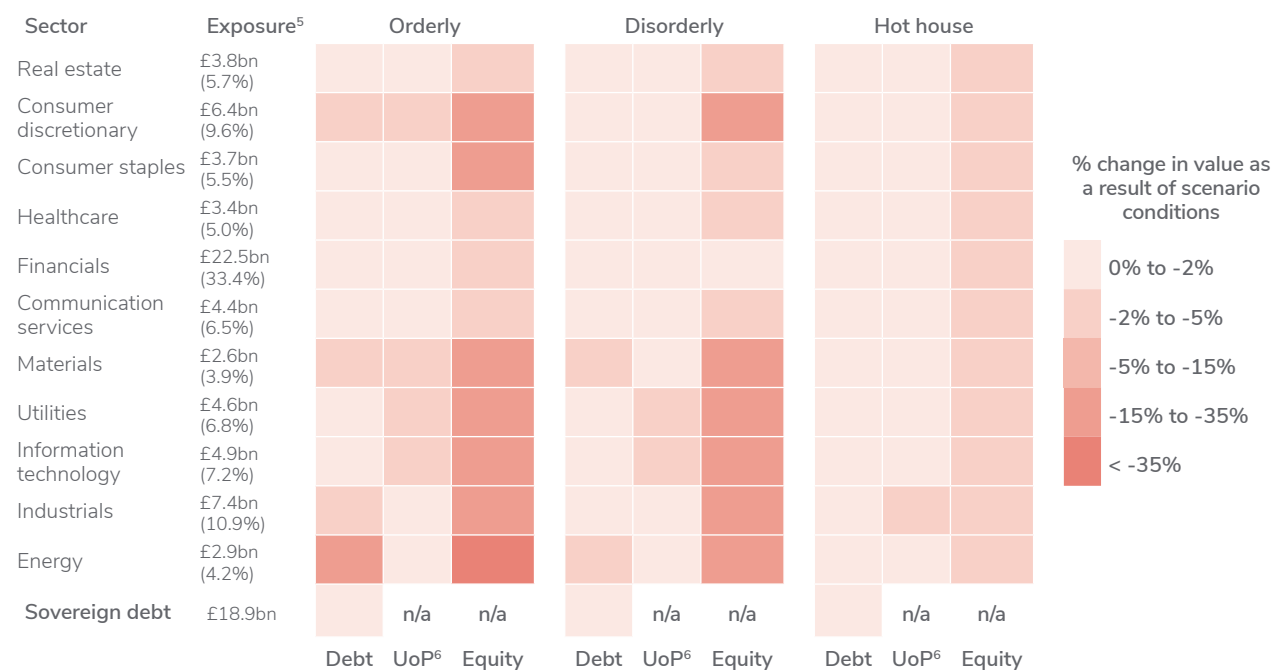
As part of our forward-looking analysis we model our public asset portfolios (listed equities, corporate debt and sovereign debt) against three scenarios to help us to assess the relative financial impacts of climate change across different global decarbonisation outcomes. This analysis is based on a bottom-up approach, and provides estimates of the financial impact on all issuers modelled, including on asset valuations.

The adjusted value is calculated separately for physical and transition risks – the orderly and disorderly scenarios presented in the heatmap reflect transition risk impacts only, with a coverage of 94%, and the hot house scenario reflects physical risk impacts only, also with a coverage of 94%.

We recognise that the outputs from this analysis are subject to limitations, and the results should be interpreted with these in mind, for example, the model very likely understates the physical risks in this scenario, including potential climate system tipping points and second-order impacts on economies. Further details on limitations of the modelling can be found in M&G plc's ARA pages 358-359. Given the significant complexity and uncertainties involved in modelling climate impacts, these results need to be viewed alongside other qualitative and quantitative information.

The modelling shows that equity valuations are affected the most across all three scenarios, with the corporate debt transition-related impacts concentrated in a few

Climate adjusted value impact by sector (current to 2050)



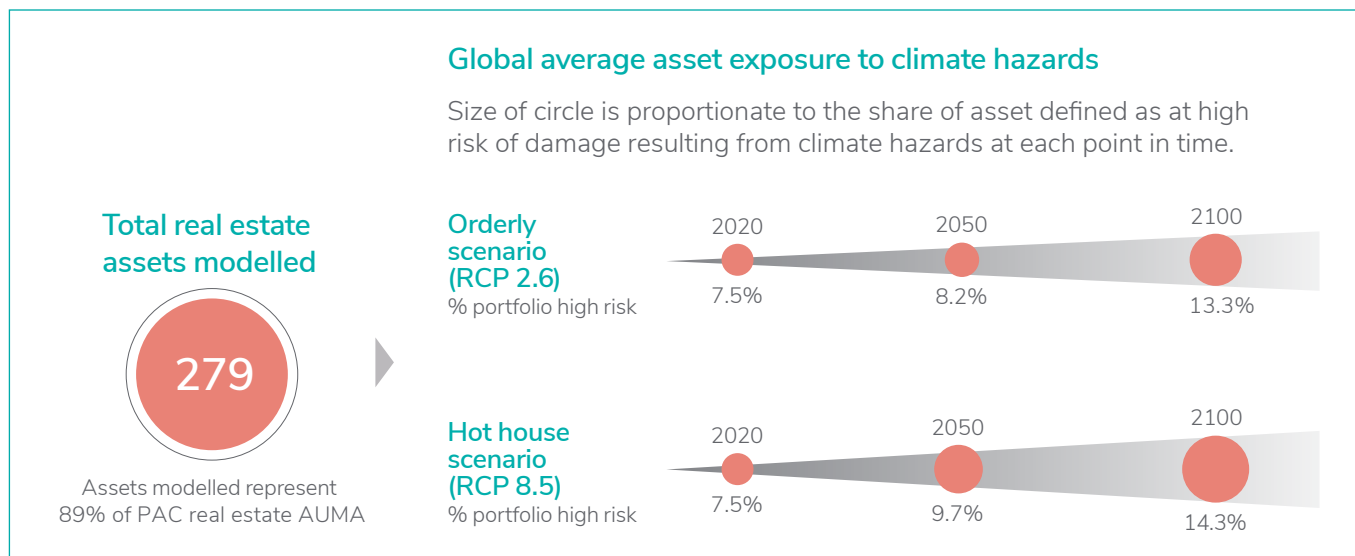
sectors. The valuation effects on known use of proceeds are more muted, reflecting smaller transition and physical risk exposure of this group of assets. Sector-wise, orderly and disorderly scenario impacts are most pronounced in the energy (excluding listed corporate debt with known use of proceeds) and materials sectors – where significant change is required to align with the transition. The consumer discretionary and industrials sectors are also more severely impacted by transition effects, and we have relatively higher exposures to these sectors. In the hot house scenario, the results continue to indicate that the negative impacts on asset values will be felt more evenly across all sectors given that the model only considers physical risk impacts (with weak global efforts to transition).

⁵Issuers with no sector designation (£0.8bn, 1% of AUMA) are not included in the heatmap. Exposure refers to the proportion of modelled listed equity and listed corporate bonds with known and unknown use of proceeds AUMA (£67.4 bn) invested in each sector, including those with no sector designation. Exposure percentages do not include sovereign debt.

⁶Known use of proceeds (UoP) refers to green, sustainability and social bonds, where the debt funding is tied to specific sustainability-related objectives. For sovereign debt the results do not differentiate between known and unknown use of proceeds.

Scenario modelling results – PAC (real estate – private assets)

The analysis below presents the proportion of PAC's directly owned real estate equity portfolio impacted by high physical climate risk. Importantly, the modelling does not consider transition and second-order impacts which could affect asset values. Further details on limitations can be found in M&G plc's ARA pages 358-359.



Under each scenario assets were rated low, medium or high risk (high risk meaning at least 1% of an asset's value being at risk of damage per year). The physical risk exposure has increased slightly from last year's levels, although it is still a relatively small share of assets that are at high risk from climate-related hazards, and draws the following conclusions:

- Under an orderly scenario between 8.2% and 13.3% of assets will be rated high risk by 2050 and 2100, respectively; and
- Under a hot house scenario, these percentages increase to 9.7% and 14.3%.

The physical risk is driven by exposure to hydro-meteorological hazards such as floods (eg, as a result of their proximity to the coast). The outputs presented here are limited to the aggregate risk level per scenario, but in our analysis we also look at reinstatement value, which refers to the estimated cost of rebuilding an asset after complete destruction.

Glossary

Term	Definition
Aladdin Climate	Aladdin Climate is a BlackRock software application which enables investors to measure the physical risk of climate change and the transition risk to a low-carbon economy on portfolios with climate-adjusted security valuations and risk metrics.
Carbon footprint	Carbon footprint refers to financed emissions normalised by the market value of a portfolio (GHG emissions per million pounds of investment). This indicator is particularly useful for comparative purposes, but similar to financed carbon emissions is sensitive to financial factors that do not relate to decarbonisation.
Disorderly scenario	The disorderly scenario used in this report broadly aligns with Representative Concentration Pathway (RCP) 2.6 and predicts a temperature rise lower than 2°C by the end of century. However, climate action to achieve this is not taken until 2030, which delays transition impacts and makes them more drastic. This scenario is limited in that it assumes coordinated policy action at a global level by 2030. This scenario is useful to explore disruptive transition risk dynamics, and is only applicable to the equities and bonds model.
Financed carbon emissions	Financed carbon emissions represent the absolute greenhouse gas emissions associated with a portfolio of investments, where there is available reported data or estimates. Financed emissions are influenced by change in financial factors such as market movements and portfolio values, which are unconnected to real-world emissions.
Financed Scope 1 emissions	Financed Scope 1 emissions include direct emissions from an issuer's owned or controlled sources, eg, emissions associated with fuel combustion in boilers, fleet vehicles.
Financed Scope 2 emissions	Financed Scope 2 emissions include indirect emissions from purchased or acquired energy, eg, electricity, steam, heat, or cooling, that is generated off-site and consumed by an issuer.
Financed Scope 3 emissions	Financed Scope 3 emissions are all other indirect emissions (not included in Scope 2) that occur in the value chain of an issuer, including both upstream and downstream emissions.
Greenhouse gases	Greenhouse gases are gases that trap heat from the sun in our planet's atmosphere, keeping it warm. The main greenhouse gases released by human activities are carbon dioxide, methane, nitrous oxide, and fluorinated gases used for cooling and refrigeration.
Hot house scenario	The hot house scenario used in this report broadly aligns with Representative Concentration Pathway (RCP) 8.5 and predicts an average temperature change above 3°C by the end of the century, assuming no global response to climate change beyond what has already been committed to. This scenario is widely used in industry to represent a 'worst-case' outcome and provides a valuable comparison with the RCP 2.6 scenario as a high-risk future.

Term	Definition
Intergovernmental Panel on Climate Change (IPCC)	The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change. It provides policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as puts forward adaptation and mitigation options.
Network for Greening the Financial System (NGFS)	The Network for Greening the Financial System (NGFS) is a group of central banks and supervisors committed to sharing best practices, contributing to the development of climate and environment-related risk management in the financial sector and mobilising mainstream finance to support the position toward a sustainable economy.
Net-Zero Asset Owner Alliance (NZAOA)	The UN-convened Net Zero Asset Owner Alliance (NZAOA) is a member-led initiative of institutional investors committed to transitioning their investment portfolios to net-zero GHG emissions by 2050.
Orderly scenario	The orderly scenario used in this report broadly aligns with Representative Concentration Pathway (RCP) 2.6 and predicts a temperature rise below 2°C by the end of the century, in line with the Paris Agreement. Important context for this scenario is that the world currently remains significantly off target in restricting the temperature rise to below 2°C, yet the industry often refers to this as a 'best case' and it provides a valuable reference point against other scenarios.
Own Risk and Solvency Assessment (ORSA)	The Own Risk and Solvency Assessment (ORSA) is a self-assessment of an organisation's risk management and capital adequacy and is mandatory for insurers under Solvency II regulation.
Paris Agreement	The Paris Agreement is an agreement within the United Nations Framework Convention on climate change, dealing with greenhouse gas emissions mitigation, adaptation, and finance. Its overarching goal is to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels.
Weighted average carbon intensity (WACI)	Weighted average carbon intensity provides a single metric summing the individual emissions intensities (by million pounds of issuer sales) of companies in a portfolio based on their weightings, indicating a portfolio's exposure to carbon-intensive issuers.

