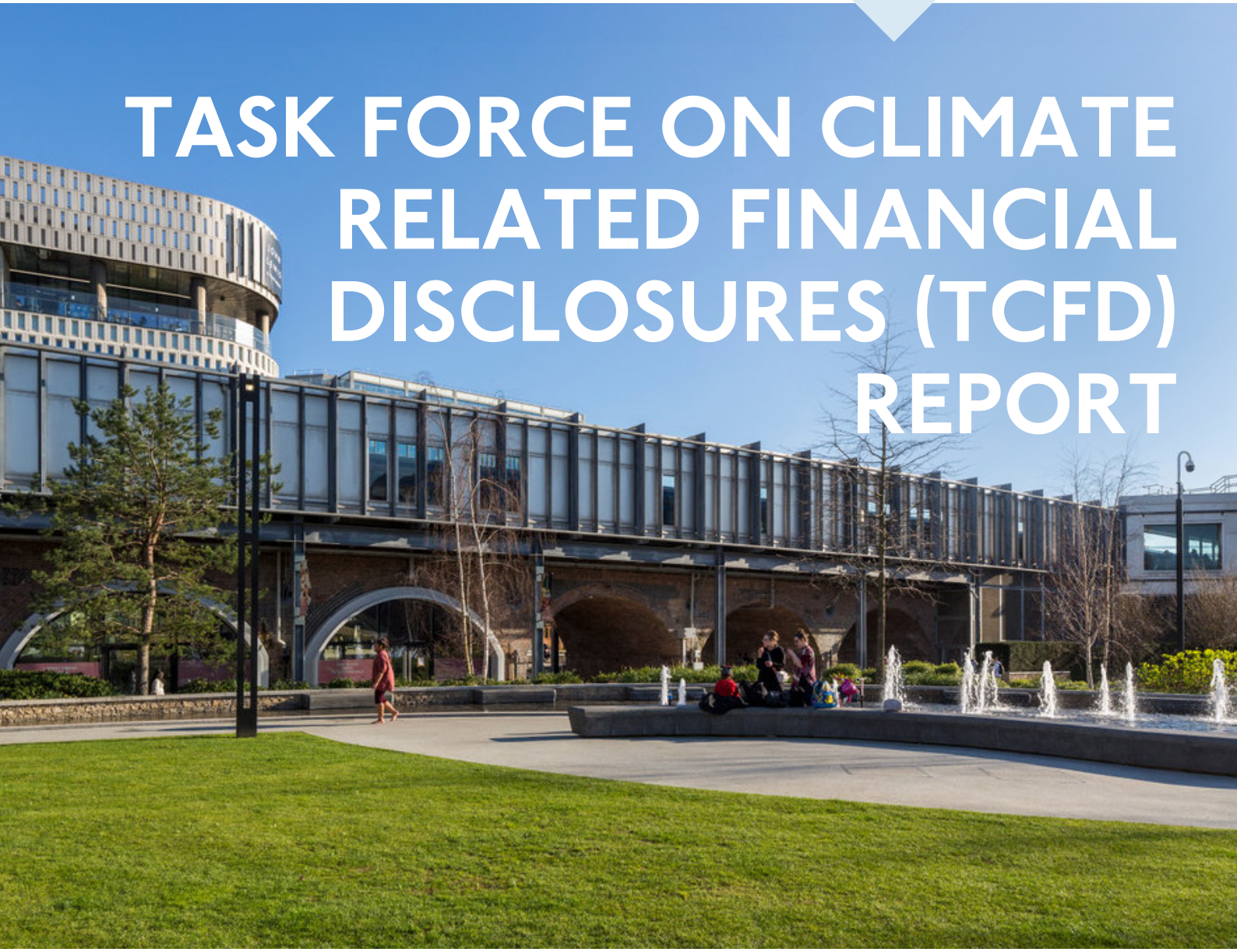
TfL PENSIONFUND

JUNE 2025

TASK FORCE ON CLIMATE RELATED FINANCIAL DISCLOSURES (TCFD) REPORT



Notice for the visually impaired

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MAYOR OF LONDON

Transport for London

Introduction

This report has been prepared to comply with the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 (the "Regulations") using the DWP's statutory guidance. It explains how the Trustee of the Fund (the "Trustee Board" or "Trustee") has established and maintained oversight and processes to satisfy themselves that the Fund's relevant climate-related risks and opportunities are considered appropriately by all stakeholders involved in the day-to-day management of the Fund.

The aim is to improve and increase reporting of climate-related financial risks and opportunities.

The TCFD framework requires disclosures in four broad categories:

- **Governance** around climate-related risks and opportunities
- **Strategy:** the actual and potential impact of climate-related risks and opportunities on the strategy and financial plans of the Fund, including under different climate scenarios
- **Risk management:** how the Fund identifies, assesses, and manages climate-related risks
- **Metrics and targets:** the metrics and targets used to assess and manage climate-related risks and opportunities

This report sets out the Fund's approach to compliance in each of these four categories. The report is extensive due to the comprehensive requirements of the Regulations. Therefore, the section below highlights the key results from the year 1 April 2024 to 31 March 2025 for the Fund's members. A glossary is included at the back of this report.

Member Highlights

In this Highlights section, we summarise the climate risk assessment results from the latest analysis carried out by the Trustee on the Fund's assets, liabilities and covenant. Readers can refer to Section II of the report: Strategy for more details. In addition, we summarise the metrics used to assess and manage climate-related risks and opportunities under the Regulations, and the actions (asset allocation, mandate design, engagement and divestment/ exclusions) that the Fund took this year which are expected to have had a positive impact on the metrics. Please refer to Section IV of the report: Metrics and Targets for full details.

Context of the Fund

Before considering the climate risk assessments and the actions that the Fund took over the year, it is helpful to consider the context – the Fund is a large Defined-Benefits (DB) pension scheme with assets at nearly £15bn that remains open to accruals and new entrants. Compared to most UK pension schemes, this means the Fund has longer maturities in its liabilities and significant salary increase and inflation linkage, which translates into a higher growth investment strategy with a larger allocation to growth assets (equities, alternative credit, private markets and liquid alternatives). This means the Fund provides significant capital to the private sector, unlike many closed DB schemes which would have a much higher allocation to government bonds and credit as an asset class. The Fund views itself as a "universal owner" of financial assets as it has a highly-diversified, global portfolio that is inevitably exposed to system-wide risks such as the growing and widespread economic and societal costs from environmental damage. The Trustee believes that as a long-term provider of responsible capital and universal owner, the Fund should exercise its stewardship responsibilities effectively and be an agent of positive change. This involves engagement and collaboration to help businesses and markets adopt and transition to best practices and sustainable business models – with net zero carbon transition being one of the priorities. As a result, the Fund has set a target for investing in ESG tilted assets, of which a substantial proportion will be for net zero

transition, and the Fund adopts an active ownership approach that aims to effect 'real world' changes, such as carbon emissions reductions in the real world rather than in the portfolio only. ESG tilted assets (or assets with an ESG tilt) are investments in sectors that have material real-world environmental and/or socio-economic impacts, including but not limited to renewable energy, sustainable agriculture/ biodiversity, circular economy, healthcare, education, social infrastructure, and green buildings. This sometimes means holding carbon intensive investments but engaging with the investee companies to demand change. It is useful to bear these points in mind when reading the report.

Climate risk assessments

Over the year covered by this report, the Trustee has undertaken an assessment of the impact of climate change risk on the funding of the Fund. This assessment includes an annually updated analysis of the assets.

The liability climate risk assessment was carried out for the first time in 2022/23 and recognised the key risks being through changes in the Fund's longevity assumptions. Also, in line with the regulatory guidelines, the impact assessment of physical risks on the strength of the Employer covenant was also undertaken for the first time.

The liability scenario analysis is not required to be updated annually as the liability profile is not expected to change materially from year to year. It was agreed that the liability scenario analysis is updated every three years alongside/following each actuarial valuation. The Fund finalised its Triennial Actuarial Valuation prior to the end of the reporting period, hence the liability scenario analysis has been updated ahead of the 2025 Climate Change report and ahead of the required three years mandated by the Regulations. From this report, the liability climate scenario analysis will be linked with the triennial cycle of the actuarial valuation, and therefore is expected to next be carried out following the 2027 actuarial valuation (expected to be ahead of the 2028 report).

The covenant climate review is based on information provided by the Sponsor and tries to understand how TfL covenant itself might fare in specific climate scenarios and how its adaptation and net zero plans could help mitigate some of the risks. However, unlike the more quantified nature of asset and liability stress testing, the covenant climate review is more qualitative in nature, and modelled scenarios and quantified impacts are only starting to be considered. As more data becomes available, TfL's aspiration is to continue extending it to include further scenarios and quantified impacts[1-4].

For context, quantitative and qualitative assessments have their advantages and disadvantages, but undertaken together, they should provide a better understanding of the risks. A quantitative framework helps to synthesise some very complex issues into an easy to compare numeric terms; qualitative analysis, on the other hand, helps to look at the issues through multiple lenses that aids better of contextualisation of the results. Precise modelled figures are based on several assumptions that would undoubtedly change over time, giving a sense of imprecise certainty. This is a helpful disclaimer to bear in mind when reading the scenario analysis.

Assets

The Fund has significant allocations to private market assets with a strong climate sustainability theme which publicly available scenario analysis, like the Paris Agreement Capital Transition Assessment (PACTA) tool used in previous reports, is not able to capture. In the last 3 years we made use of an additional analysis based on Bridgewater's climate transition stress testing tool which was able to stress test most of the asset classes (including private markets) in the Fund's portfolio.

[1] TfL Adaptation Reporting Power Submission (December 2024)

[2] Mott Macdonald ARP4 Interdependencies project report (May 2024)

[3] TfL Climate Change Adaptation Plan 2023 (March 2023)

[4] Sustainability Reporting Annual Report for Pensions (draft received from Management on 20 May 2025)

Bridgewater is reassessing the tool internally to incorporate the latest body of knowledge and scientific evidence and so we pause this piece of analysis this year. A short summary of the PACTA analysis is included below. More details can be found in the main body of this report.

PACTA covers seven sectors that are amongst the most carbon-intensive sectors of the economy, and, therefore, are likely to be more exposed to climate transition risks. Those key sectors are Oil and Gas, Coal, Power, Automotive, Steel, Cement and Aviation. PACTA covers sectors producing 75% of emissions, overall. The analysis highlights the portfolio's *current exposure* to economic activities that are likely to be impacted by the transition to a low-carbon economy. It also provides an indication of the *anticipated future exposure* to both high- and low-carbon activities, based on the disclosed production capacities and investment plans of companies held within the portfolio. For the anticipated future exposure analysis, the Fund considered the following scenarios from the World Energy Outlook (WEO) 2023:

- **Net Zero Emissions by 2050 Scenario (NZE Scenario)**: A normative scenario that outlines a pathway for the global energy sector to achieve net zero CO_2 emissions by 2050, with advanced economies reaching net zero ahead of others. This limits global warming to below 2°C above pre-industrial levels, with an anticipated rise of 1.5°C.
- **Stated Policies Scenario (STEPS)**: This scenario reflects current and announced policies, analysed on a sector-by-sector basis. While it is not explicitly designed to meet a specific temperature target, prevailing industry expectations suggest that these policies are **unlikely** to restrict global temperature increases to below 2°C above pre-industrial levels, with an anticipated rise of 2.4°C.

The 2025 review encompassed the Fund's equity holdings (approx. £2.44 billion) and corporate bond holdings (approx. £310 million). The PACTA analysis for the equity portfolio is summarised below with more details provided in the appendix, including for the corporate bond portfolio.

Listed equity - current exposure to climate transition risk

In 2025, within the listed equity portfolio, the automative sector accounted for 3.1% of emissions exposure, making it the largest contributor, following by steel and power sectors which accounted for 2% respectively. Notably, emissions from coal in the equity portfolio no longer featured in the breakdown (meaning it is insignificant or zero), reflecting shifts in portfolio composition and/or company-level emission reductions.

Listed equity – current exposure to low-carbon technologies

Overall, the listed equity portfolio has exposure to the power, automotive, oil & gas, cement, steel, and aviation sectors, although it is lower compared to the MSCI All Country World Index (the benchmark). Many of these companies are engaged in the production of critical materials necessary for the global low-carbon transition, such as inputs for renewable energy infrastructure and energy-efficient construction, or R&D for low carbon technology. This positioning reflects the Fund's consideration in the long-term value of these industries, particularly in emerging markets.

Within the Power sector, the Fund's equity holdings continuously demonstrate a strong alignment with the low-carbon transition compared to the benchmark. Specifically, 53.5% of our holdings in this sector are classified as low-carbon technologies, outperforming the benchmark figure of 47.3%.

Listed equity – anticipated future exposure to low-carbon technologies

For sectors with low carbon alternatives such as the power and automative sectors, it can be useful to compare how the split between technologies looks in five years vs. what is expected under scenarios, and vs. what the benchmark is doing in this regard. The analysis shows the split of each sector by technology, both what is currently planned and what is expected under the specified scenarios. The result is similar to the current technology breakdown. The equity portfolio has higher exposure to low

carbon technologies in the Power sector, but lower exposure to low carbon technologies in the automotive sector, compared to the benchmark.

Liabilities

The Fund is exposed to climate risk through the impact of climate on future improvements in life expectancy and the impact of both transition risk (the economic impact of a transition to a low carbon economy) and physical risk (the impact of changes in weather and climate on UK mortality rates).

The WTW Climate Scenario analysis, conducted in 2025, considers the impact of five climate scenarios on future improvements in life expectancy only:

- **Nationally Determined Contributions**- 'business as usual' where current policies continue with no further attempt to incentivise further emission reductions. This scenario assumes that the implied temperature rise exceeds 2°C;
- **Delayed Transition below 2ºC-** rapid shift in policy in late 2020's after an initial delay in meaningful action, implemented in an uncoordinated manner;
- **Below 2ºC-** immediate, coordinated implementation of policies to reduce global emissions;
- **Net Zero 2050** - immediate, ambitions and coordinated response in which aggressive policy is pursued and extensive technology shifts are achieved; and
- **Hot House World** – world follows a net Zero 2050 pathway, however, resultant temperature exceeds 2ºC due to lower than expected carbon budget,

The table below shows the impact on the Fund's liability value, on a Technical Provisions ("TP") basis, across the five scenarios, assuming an immediate shock to the Plan's liabilities. **The results show that, in isolation, four of the five climate scenarios in WTW's modelling process imply reduced average longevity improvement rates relative to the Fund's central mortality assumptions and therefore a relative reduction in the Fund's liabilities.** Such scenarios do not demonstrate a positive outcome for members and reflect the adverse societal effect of climate change.

Under the 'Below 2ºC' scenario, the estimated improvement in life expectancies causes a reduction in the funding level & surplus. The impact on the liability value of 2.5% is similar to WTW's standard 1-in-20 year longevity shock of 3.5%, which the Trustee monitors quarterly. While a negative impact on the funding position, both the funding level and the surplus remain strong at 130% and £3.5bn respectively (compared to 134% and c.£3.8bn as at 31st March 2025) under this scenario.

The Trustee has also assessed the impact as an annual impact on liability values over a 15-year period within the main body of the report.

Scenario	**Impact on Fund's Technical Provisions (-ve: reduction in liabilities)**
Base Case	N/A
National Determined Contributions	-3.5%
Delayed transition below 2ºC	-1.5%
Below 2ºC	2.5%
Net Zero 2050	-0.5%
Hot House World	-6.0%

Covenant

The covenant climate review is based on information provided by the Sponsor and tries to explain how the TfL covenant itself might fare in specific climate scenarios and how its adaptation and net zero plans could help mitigate some of the risks, as well as benefit from opportunities.

As the integrated transport authority for London, TfL faces a number of risks related to the ongoing impact of climate change and has therefore developed goals and strategies for managing the risks and opportunities which reflect that impact. TfL's fourth round of the Adaptation Reporting Power (ARP4), submitted in December 2024, identified 477 climate-related risks, compared to 333 identified in the previous submission, reflecting a broader scope, including Elizabeth line and London Transport Museum, with an improved understanding of climate risk rather than a higher level of concern; 28 of which were categorised as major or severe in the current period (defined as the time of report), with the expectation for this number to increase to 164 by 2080, as the effects of climate change become more severe. In addition, TfL's first analysis of interdependency risks for London's land-based transport sector identified 114 climate interdependency risks specific to roads, rail and sponsored services, 9 - 24 of which categorised as major or severe in the current period, with the expectation for this number to increase to 52 - 70+ by 2080 (depending on the scenario). TfL seeks to mitigate the impact of these climate risks through achieving its environmental sustainability targets and implementing its Adaptation Plan as set out in 2023.

In line with the Mayor's target for London, TfL has a target to reach Net Zero by 2030 through the use of 100% renewable energy, electrifying its support fleet and the use of a zero-emission bus fleet. TfL's Adaptation Plan focused on preparing, planning and investing for future climate change by increasingly integrating climate change risk into planning and investment decisions which consider adaptation to be as important as safety and reliability. In 2024, TfL made progress with both its sustainability targets and Adaptation Plan including both a better-than-targeted reduction in carbon emissions and delivery of sustainable drainage systems to protect against surface flooding.

As part of TfL's Adaptation Plan, it also set out to develop a framework to provide detailed climate-related reporting to support TCFD, including scenario analysis and a quantified assessment of their respective impacts. In FY24/25, TfL made progress on this by developing three scenarios, 'Green London', 'London Declines' and 'London Booms', to assess climate-related risks over three time horizons, 'Short-term' (to 2030), 'Medium-term' (to 2050) and 'Long-term' (to 2080). The scenario analysis focused on two physical risks, two transition risks and two transition opportunities, which were assessed in a qualitative manner, including financial impacts rated 'Low' to 'High'. The only quantified risk assessment was for the risk of flooding due to precipitation, in which TfL calculated annualised risk values of £4.7m - £5.3m in the short-term (to 2030), increasing to £4.8m - £7.8m in the long-term (to 2080) (depending on the scenario); these amounts are relatively immaterial relative to TfL's estimated revenue of c.£9.3bn in 2024/25, although could present a significant impact when aggregated with the other risks that have not yet been quantified. Additional quantitative analysis on further risks is expected as the relevant data becomes available.

While TfL has made good progress on its plans so far, we note that the continued achievement of TfL's climate targets and Adaptation Plan appears dependent on future external funding from both the Government and private sources. Further costs may be incurred related to the impact of physical and transitional risks (most of which TfL have not yet quantified), depending on the climate change pathway that materialises. As a result, Penfida have advised that the impact of climate change and the need to fund delivery on climate targets and adaptation may reduce TfL's flexibility to fund deficit recovery contributions and pension contributions in the future, to the extent that the required external funding is either not provided or comes with conditions.

Given that the Fund is still open, resulting in a long period of covenant reliance, the severity of the physical climate risks identified by TfL (not yet fully quantified) and the need for further funding to deliver on climate mitigation plans, **Penfida have assessed climate change-related risks from a covenant perspective to be Medium in the short to medium term and Medium to High in the long-term.**

This risk assessment should, however, take account of the critical nature of TfL to the London economy, the provision of government financial support to date and TfL's position as a statutory corporation under the Greater London Authority Act 1999.

Putting it all together

So what does it mean for the Fund when all the factors are considered all together? The Fund (using PACTA) and WTW have conducted scenario analysis on impact of climate change on the assets and liabilities, respectively. The Regulations require that scenario analysis should consider at least two scenarios, including one with a global temperature increase of 1.5-2°C and another with a temperature increase well above 2°C.

On the asset side, the Fund used PACTA to consider two scenarios, including one with a global temperature increase of 1.5-2°C (NZE scenario) and another with a temperature increase well above 2°C (STEPS scenario). While PACTA does not estimate the financial impact, it illustrates the anticipated future exposure to low-carbon technologies, for sectors with low carbon alternatives such as the power and automative sectors. The result is similar under both scenarios. The equity portfolio has higher exposure to low carbon technologies in the power sector, but lower exposure to low carbon technologies in the automotive sector, compared to the benchmark. Relatively speaking, this paints a mixed picture in terms of the equity portfolio's future performance versus the benchmark. However, it is worth noting that 1) in absolute terms, the portfolio's financial exposure to carbon intensive sectors is lower than the benchmark; 2) the PACTA analysis is limited to publicly listed assets, while the Fund has 22% strategic allocation to private market assets with significant exposure to renewable energy and low carbon investments; 3) while the Bridgewater tool is not available this year, last year's results (which remain relevant as the Regulations require the scenario analysis to be updated every three years) show that, across the four modelled scenarios, two resulting in a negative financial impact and two positive, with a range of +5.1% to -5.9%, so the financial impact is broadly symmetrical. The Fund continues to hold a highly diversified portfolio which controls exposure to any single macro impact.

On the liability side, WTW has modelled five different scenarios, and four climate change scenarios show a reduction in future improvements in life expectancy, thereby reducing liabilities on a TPs basis, while in only one would liabilities increase. The range of the impact on liabilities is +2.5% to -6.0%. Scenarios which show a reduction in future improvements in life expectancy do not demonstrate a positive outcome for members and reflect the adverse societal effect of climate change.

The scenarios used by PACTA (and Bridgwater) and WTW are not exactly the same and therefore cannot be mapped onto each other to determine a net funding impact. However, they are not that different in that they are trying to capture a varying range of global transition trends and journeys (both complying with the Regulations). In total, in any scenario, the impact on the Fund's assets and liabilities should be manageable relative to the sponsor's covenant and less significant than the ongoing risks related to the covenant.

In terms of the climate covenant risk, TfL, as the integrated transport authority for London, faces a number of risks related to the ongoing climate change crisis and has developed goals and strategies for managing the risks and opportunities borne from climate change. TfL's own risk assessment of the physical impact of climate change has identified 28 current (2024) physical climate risks as severe or major, with this number expected to increase to 164 by 2080 as there is a risk of the impact of climate change intensifying over time. However, TfL seeks to mitigate the impact of these climate risks through achievement of its environmental sustainability targets and implementation of its Adaptation Plan, which it has made good progress on so far including reducing emissions and developing its own scenario analysis for TCFD. It is to be noted though that the continued achievement of TfL's climate targets and Adaptation Plan appears dependent on future external funding from both the Government and private sources. In addition, further costs may be incurred related to the impact of physical and

transitional risks (most of which TfL has not quantified), depending on the climate change pathway that materialises. Some of these observations would not come as surprise to anyone as the impact of heavy rains, rising temperatures and extreme weather in general is not lost on Londoners using public transport.

Given that the Fund is still open, resulting in a long period of covenant reliance, Penfida have assessed climate change-related risks from a covenant perspective to be Medium in the short to medium term and Medium to High in the long-term.

Whilst climate change is a serious risk to TfL, it is taking actions to mitigate the impact, subject of course to the availability of funding. However, climate change is a global problem requiring a coordinated global response. TfL could do everything and still the covenant could be at risk if the global response fails. In that context, it is important to continue to better understand the impact on TfL as disclosures become available. Equally, this risk assessment should, however, take account of the critical nature of TfL to the London economy, the provision government financial support to date and TfL's position as a statutory corporation under the Greater London Authority Act 1999.

Update on Metrics

Here we summarise the metrics used to assess and manage climate-related risks and opportunities under TCFD, and the actions (asset allocation, engagement and divestment/ exclusions) that the Fund took this year which are expected to have had a positive impact on the metrics. Please refer to Section IV of the report: Metrics and Targets for full details.

The Fund is aiming to achieve a 100% reduction in its carbon emissions no later than 2045; with an interim target reduction of 55% of carbon emissions for 2030 at the latest. These targets are set based on the comparison with the 2016 baseline, when the Paris Agreement came into effect. The targets will be measured using the weighted average carbon intensity ("WACI") metric, which is the same metric used to measure the Fund's carbon footprint below.

As of 31 March 2025, the Fund has calculated the metrics below (for the carbon metrics, the percentages in brackets after each asset class show the coverage as a percentage of the Fund's total assets):

Metric	**March 2025**	**March 2024**
Absolute Carbon Emissions	Equity (Active + Passive) (26.3%) : 316,720 tons of Scope 1 and 2 carbon emissions ; and 2.935m tons of Scope 3 estimated carbon emissions Equity (Active) (13.9%): 122,128 tons of Scope 1 and 2 carbon emissions and 1.743m tons of Scope 3 estimated carbon emissions Corporate bonds (3.0%): 15,184 tons of Scope 1 and 2 carbon emissions; 169,243 tons of Scope 3 estimated carbon emissions **New metrics added, to replace old metrics going forward:** **Equity and corporate bonds (29.2%):**	Equity (Active + Passive) (33.1%): 360,245 tons of Scope 1 and 2 carbon emissions ; and 2.571m tons of Scope 3 estimated carbon emissions Equity (Active) (17.4%): 234,504 tons of Scope 1 and 2 carbon emissions and 1.706m tons of Scope 3 estimated carbon emissions Corporate bonds (2.9%): 21,136 tons of Scope 1 and 2 carbon emissions; 353,276 tons of Scope 3 estimated carbon emissions

	Scope 1/2 (Active +Passive) : 331,903 Tons CO2e Scope 1/2 (Active): 137,312 Tons CO2e Scope 3 (Active+Passive): estimated 3.1 million Tons CO2e **Equity and corporate bonds including Alternative credit:** (33.4%) Scope 1/2 (Active +Passive) : 378,896 Tons CO2e **Sovereign bonds including LDI** (14.4%) Scope 1/2: **n/a** **Liquid alternatives** (12.7%): Scope 1/2: 95,688 Tons CO2e, on single name exposures.	
Weight Average Carbon Intensity[1]	**Equity and corporate bonds (**29.2%): Scope 1/2 (Active +Passive) : 89.5 Tons CO2e / $M revenue Scope 1/2 (Active): 68.0 Tons CO2e / $M revenue Scope 3 (Active+Passive): estimated 696.9 Tons CO2e / $M revenue **Equity and corporate bonds including Alternative credit:** (33.4%) Scope 1/2 (Active +Passive) : 102.8 Tons CO2e / $M revenue **Sovereign bonds including LDI** (14.4%) Scope 1/2: 150 Tons CO2e / $M GDP Nominal. **Liquid alternatives** (12.7%): Scope 1/2: 87.5 Tons CO2e / $M revenue, on single name exposures.	**Equity and corporate bonds** (36.0%): Scope 1/2 (Active +Passive): 99.2 Tons CO2e / $M revenue Scope 1/2 (Active) : 85.7 Tons CO2e / $M revenue Scope 3 (Active+Passive) : estimated 731.7 Tons CO2e / $M revenue **Equity and corporate bonds including Alternative credit** (39.9%): Scope 1/2 (Active +Passive): 107.3 Tons CO2e / $M revenue **Sovereign bonds including LDI** (9.2%)**:** Scope 1/2: 201 Tons CO2e / $M GDP Nominal. **Liquid alternatives** (17.5%): Scope 1/2: 52.9 Tons CO2e / $M revenue, on single name exposures.
Percentage of investments with an "ESG" tilt[2]	15.9% of total assets under management	13.5% of total assets under management
Portfolio Alignment	49% of portfolio companies assessed by TPI[3] are aligned with 1.5-degree to 2-degree targets in 2050 (see * note below)	77% of portfolio companies assessed by TPI are aligned with 1.5-degree to 2-degree targets in 2050

1. 2016 baseline: Scope 1/2, 182.09 Tons CO2e / $M revenue at 31 Dec 2016 (across the actively managed public equity and bond holdings). Source: Aladdin/ MSCI

2. ESG tilted assets (or assets with an ESG tilt) are investments in sectors that have real-world environmental and/or social impacts, including but not limited to renewable energy, sustainable agriculture/ biodiversity, circular economy, healthcare, education, social infrastructure, and green buildings.
3. The Transition Pathway Initiative (TPI) is an independent, authoritative source of research and data into the progress being made by the financial and corporate world in making the transition to a low-carbon economy

* The decline from 77% to 49% may seem significant, but its actual impact is marginal in the broader context. Firstly, TPI figures are based on assessments of 16 companies in 2025 and 21 companies in 2024, out of more than 330 companies in the Fund's active equity portfolio. Thus, the number of companies assessed is relatively small compared to our overall portfolio. Additionally, the number of companies "not aligned" with TPI has only increased from one in 2024 to two in 2025. Given that 330 companies have seen a material decline in carbon intensity this year, this change is negligible.

Secondly, the bulk of the change is due to a nearly 70% increase in the category assessed as "Lack of Suitable Data Disclosure," primarily in the "food producers" sector. Here, disclosures are driven mainly by local regulations rather than TPI reporting templates.

On a broader note, ESG compliance has seen some setbacks, with divergences in reporting emerging in different jurisdictions. However, this does not necessarily reflect the actual actions taken in terms of engagement and collaboration.

Climate-related activities taken by the Fund over the year

In terms of the actions that the Fund took this year which are expected to have had a positive impact on the metrics, these are extensive and the main communication on this subject to the Fund's members and the public is the annual Sustainability Report published in Q4 every year. We would first recommend reading the annual Sustainability Report for additional details on the Fund's actions and progress. It can be found at the link below:

https://www.tflpensionfund.co.uk/news-publications/sustainability-report/

Some of the actions that are expected to have had a positive impact on the metrics include:

- **Asset allocation** - The Fund has total investments & commitments of c. £2.4bn in assets with an ESG tilt as of March 2025, representing c. 15.9% of total assets. The Fund continues to deploy capital in ESG tilted assets, of which a high proportion is climate transition investments. In the year to 31 March 2025, the Fund added three new mandates, all of which have material ESG tilts, namely, Harrison Street Net Zero (North American renewable energy platform), Blackstone (Blackstone Energy Transition Partners IV private equity fund), and IFC Growth & Sustainability (private equity investment in Sustainable Development Goals aligned sectors in emerging markets with a particular focus on climate transition, women empowerment and digital transformation). The Fund's allocation to private assets such as private equity, infrastructure, private credit and real estate are being channelled into more climate friendly investments when compared to their public equivalents.

- **Engagement and voting** – the Fund continued its close partnership with Sustainalytics and sought to enhance its stewardship activities and outcomes. The Fund started participating in Sustainalytics's Engagement 360 programme from 1 April 2024, which covers six 'meta themes' providing comprehensive coverage to the most important E, S and G issues, with three of the themes focusing on net zero, circular economy and biodiversity, two focusing on social matters (human rights and human capital management), and one on corporate governance. To strengthen the collaboration, the Fund started co-leading a small number of engagements with Sustainalytics in the net zero transition theme. Another programme with Sustainalytics, Material Risk Engagements, cover over 300 companies across the Fund's

active and passive holdings, of which two-thirds have a focus on carbon emissions and decarbonisation/ net zero goals. Sustainalytics also provides an ESG voting overlay that complements Glass Lewis's traditional corporate governance policies with specialist voting guidance on specific ESG topics.

- **Mandate design** – in the past year the Trustee put in net zero guidelines with its "value biased" active equity mandates to align with the Fund's targets. This mandate was prioritised as it can invest heavily in companies that are currently carbon intensive (and their share price depressed) but are implementing transition plans for low carbon business models. The guidelines set forward-looking alignment targets while allowing investment in 'transitional' companies that demonstrate a credible path to net zero, with engagement being a key component. This follows the corporate bond mandate which adopted net zero guidelines in 2023/24. Helpfully, in the private market mandates the Fund directly allocates capital to renewable energy, low carbon, circular economy and green building sectors. For example, in the infrastructure debt mandate, almost 100% of new investments are made in green and sustainable sectors.

Each quarter the Trustee monitored the active holdings with the highest emission intensities, and fossil fuel extractives holdings, and reviewed the investment rationale at regular meetings with the fund managers. An example on the company PRIO SA (formerly known as Petro Rio) is included in this report. The fund managers were asked to explain their engagement strategy for any fossil fuel company that is assessed as not aligned to the Paris Agreement goals by TPI, with divestment being an option if there is lack of progress over time.

Carbon reporting – the Fund materially increased the carbon reporting coverage on its portfolio last year to cover all assets where there is reliable data available. This report continues with the same level of coverage. The Fund also continued to participate in CDP's non-disclosure campaign to promote corporate carbon reporting, and had regular conversations with fund managers on improving data coverage and quality.

In addition, the Fund adopts an exclusion policy of any companies that derive over 30% of total revenue from thermal coal mining or power generation. This resulted in the exclusion of 122 companies at the end of March 2025.

I. Governance

The Fund's governance around climate-related risks and opportunities.

In relation to the DWP statutory guidance (2022) on governance disclosure requirements, this section will describe:

Part (a)

- how the Trustee maintains oversight of climate-related risks and opportunities which are relevant to the scheme

- the roles of those undertaking scheme governance activities, in identifying, assessing and managing climate-related risks and opportunities relevant to those activities

- the processes the Trustee has established to satisfy themselves that those undertaking scheme governance activities take adequate steps to identify, assess and manage those risks and opportunities

Part (b)

- the role of those advising or assisting the Trustee with scheme governance activities; and

• the processes the Trustee has established to satisfy themselves that the person advising or assisting takes adequate steps to identify and assess any climate-related risks and opportunities which are relevant to the matters on which they are advising or assisting

Governance Disclosure Part (a): how the Trustee maintains oversight of climate-related risks and opportunities, the roles of those undertaking scheme governance activities and the processes

The Trustee Board maintains overall responsibility for investment matters; however, its implementation, including that of climate related risks and opportunities, is delegated to the Investment Committee ("IC") and Alternatives & Liability Hedging Committee ("ALHC"). The IC and the ALHC are subgroups of the Trustee Board.

The Trustee Board is ultimately accountable for climate-related risks and opportunities and sets the broad strategy and direction, with input from the Fund's investment and legal advisers, within which the IC and ALHC undertake further actions. The Trustee Board receives quarterly updates from the IC and ALHC to undertake that oversight function. It covers the selection of new managers and the oversight of the existing managers and mandates, including reporting. The reports shared with the Trustee Board explicitly cover ESG, including climate, risks and opportunities both on an absolute basis and relative to their respective benchmarks. This is better evidenced in public markets where benchmarks are more well established and data quality is better, making comparisons more relevant. In private markets, where ALHC uses public benchmarks plus a spread to reflect the illiquid nature of these investments (i.e. illiquidity premium) as performance targets, it is reasonable to use public benchmarks for ESG purposes. At a strategic level, the IC and ALHC get reports directly from the managers, Sustainalytics as the Fund's Engagement and Voting partner and finally the Fund Office that brings it all together at the overall Fund level.

The IC is responsible for the Fund's investments in equities, bonds and real estate holdings and the ALHC is responsible for the Fund's alternatives investments and hedging activities. The four members of the ALHC are currently drawn from the 8-member IC to ensure there is an alignment on broader investment and sustainability issues.

The IC and ALHC have responsibility for managing climate-related issues in their respective asset classes as part of its remit for the implementation of the Fund's investment strategy. In accordance with the Committee Remits (dated December 2020), the Trustee Board has delegated to the IC the following ESG matters:

- ensure the Fund is complying with regulatory requirements including the submission of required disclosures around the Trustee's approach to sustainable investing.
- carry out the selection process for, and monitor, the Fund's third-party stewardship provider.
- monitor the Fund's ESG activities against industry best practice, adopting new practices where required, and publishing voluntary disclosures on the Fund's ESG policies and activities.

In addition, the IC / ALHC has been delegated the responsibility for meeting and discussing with the investment managers under its respective remit, investment and management strategies, approach to ESG considerations, and guidelines from time to time as necessary and for open-ended strategies, at least every 48 months but more frequently as required. This responsibility is partly delegated to the Fund Office who meets and discusses ESG/ climate related issues at least annually with each manager.

The IC and ALHC formally meet with majority of the Fund's investment managers on a four-year cycle (with additional meetings outside of this cycle as required). As part of these meetings, the investment manager is expected to present on its ESG integration and corporate governance policies and processes, including case studies, and the IC/ALHC will challenge the investment managers where they feel there are gaps or weaknesses in either the policies or processes.

The IC and ALHC Risk Registers have been updated to cover the recognition, management and mitigation of climate risks in the Fund's investments. The risk registers are reviewed on an annual basis by the IC/ ALHC and approved by the Trustee Board.

Member comments and feedback are requested through the Pension Consultative Council ("PCC"), which the Trustee Board considers when reviewing its ESG policy and climate change strategy. A Sustainable Investing report is published every year, which covers sustainability and ESG issues, including climate change.

In addition, the Trustee Board has a robust governance framework. Trustee Directors are nominated by the employer, TfL, as well as by PCC and the unions, representing a plurality of views (including those from members) on the Trustee Board.

Statement of Investment Principles and Investment Beliefs

The Trustee Board has developed beliefs with regards to the financial impact to the Fund arising from climate change. The resulting belief is that climate change is a significant long-term financial risk, which has the potential to impact all holdings in the portfolio over time, if not properly managed. This belief is integral to the Fund's Statement of Investment Principles ("SIP"), which also sets out how the Fund's Environmental, Social and Governance ("ESG") policy, which includes climate change issues, is taken into account in relation to exercising its ownership rights. The SIP is reviewed on an annual basis by the IC and approved by the Trustee Board. The SIP can be found on the Fund's website:

https://www.tflpensionfund.co.uk/about-tfl-pension-fund/investment-management-principles/

The Trustee Board went through a thorough process of reviewing all its beliefs, including those around ESG and climate change over the 2022-23 Fund Year. The Trustee decided to undertake this process following turnover within the Trustee Board, changing market conditions & Fund circumstances, and an evolution of understanding, ambition, and best practice around ESG integration, The Trustee went through a multi-stage process, covering education on the importance and use of investment beliefs, responding to a beliefs questionnaire, discussion of the results of the questionnaire, and specific training on ESG beliefs, before documenting the new investment beliefs in a Statement of Investment Beliefs. The Statement of Investment Beliefs can be found on the Fund's website:

https://www.tflpensionfund.co.uk/about-tfl-pension-fund/investment-management-principles/

Trustee Training

The Trustee Board receives annual training on ESG issues, including climate change. On 24 October 2024 and 28 January 2025, the Fund held a two-day training seminar focusing on climate fundamentals, investment considerations and actions for pension schemes, delivered by the Investment Adviser, WTW. Fund Office investment staff attended all training sessions as well.

The Chair of the IC is a member of Accounting for Sustainability and attends industry seminars and conferences regularly. Fund Office investment staff have all completed TfL Carbon Literacy Training as part of their learning objectives. In addition, the Trustees and the Fund Office staff attend ESG and climate focussed conferences and workshops, such as those hosted by Pensions & Lifetime Savings Association ("PLSA"), Sustainalytics and fund managers, to broaden their exposure and stay abreast of new developments.

IC/ ALHC meetings and climate related discussions

The IC meets at least quarterly and ALHC meets 7 times in a year (and more can be arranged on a need basis). *In the year ending 31 March 2025, the IC met four times and the ALHC met six times. Climate change or climate risk was discussed at each of the meetings . The climate-related discussions took place in the form of discussing renewable energy/ low carbon investments, topical issues like changing political headwinds for climate transition, or manager presentations, of which a significant part was Q&As between the committee members and the managers. Two examples are given below.* The IC (which includes all members of the ALHC) also received an ESG report and a

Voting and Engagement update each quarter. The ESG report highlighted the holdings with the highest carbon emission intensities and provided the manager's commentary on the holdings, including their engagement activities with the companies. The Voting and Engagement report provided case studies of 'impact voting' (advised by Sustainalytics's engagement-based voting overlay); the report also provided Sustainalytics's engagement updates. Climate-related topics were covered every quarter in both the voting activities and the engagements.

At the June 2024 meeting the ALHC received a presentation from Blackstone regarding a proposed investment into their Blackstone Energy Transition Partners IV (BETP IV). The strategy would invest not just in renewables but the entire spectrum of Net Zero and the transition towards it. BETP IV will provide annual data on fund carbon footprint metrics, impact of certain investments on avoided/ removed emissions, ESG governance and additional relevant metrics and take part in initiatives to demonstrate their dedication to aligning with industry standards and best practices in ESG considerations. The ALHC approved $250m commitment including co-investment into this strategy.

At the November 2024 the ALHC received a presentation from Euler, the manager for its insurance-linked strategy. The fund manager was asked how it modelled and priced climate risk. It was noted that such data was provided by large third-party model providers like RMS and AIR every 3 months before Euler used their own overlay which included climate change risk. Climate change had been incorporated to Euler's underwriting and Euler tried to achieve a trade-off and balance between risk and return by choosing the level of risk to accept.

The IC/ ALHC considers climate risk management practices as part of the Fund's manager selection process (including both new mandates and any top-ups of existing mandates). Specifically, the managers will now be required to formally commit to managing climate related risks and having a strategy for moving toward net zero in the portfolio. The contract will also incorporate requirements to measure carbon emissions of assets (for mandate top-ups, the requirement will be retrospective and cover all existing assets that the manager manages for the Fund too). For the Fund's existing mandates, the same requirements on carbon reporting are being rolled out.

The Trustee Board believes the time and resources being spent on the governance of climate related risks and opportunities is sufficient, considering the extent of the Fund's climate related exposures (across assets, liabilities and covenant, as explained in the scenario analysis) as well as the time horizons over which such exposures arise (short to long term, with short term being the next 3 years).

Governance Disclosure Part (b): the role of those advising or assisting the Trustee with scheme governance activities and the processes

The Fund Office has been given the mandate by the Trustee to assess and manage climate-related risks and opportunities on a day-to-day basis. The mandate mainly involves:

- engaging with and monitoring the fund managers and stewardship partner (Sustainalytics),
- data management and analysis,
- research, industry collaboration and advocacy,
- collaborating with the investment and legal advisers to provide advice and training to the Trustee,
- making proposals on managing climate-related risks and opportunities and implementing decisions made by the Trustee,
- reporting important findings to the Trustee on a regularly basis,
- other stakeholder and regulatory reporting,
- drafting and maintaining Fund ESG documents.

The mandate is further explained in the paragraphs below. The performance of the Fund Office is reviewed by the Trustee through 1) feedback from mainly the Trustee Directors and the PCC; 2) external reviews such as the PRI's annual assessment; 3) progress toward the metrics and targets set out in this report.

The Fund Office's investment staff attend training regularly and pursue continuous professional development through research and study. *In the year ending March 2025, Fund Office investment staff attended the two Trustee ESG training sessions.* In addition, the investment staff attend ESG and climate focussed conferences and workshops, such as those hosted by CFA Institute, PLSA, Sustainalytics and fund managers, to broaden their exposure and stay abreast of new developments. The Fund's Chief Investment Officer sits on the CFA Asset Owner Council that plays an important role in setting the organisation's climate agenda.

The Fund Office is responsible for the preparation of reports for the Trustee Board and its subgroups, including with regards to climate-related risks and opportunities. The Chief Investment Officer Pensions is responsible and the Fund Secretary accountable for producing the reports. The Trustee Board and its subgroups, as outlined in the previous section, assess these reports, and hold the decision-making power.

The Fund Office is responsible for proposing climate change policy and processes for the IC and ALHC to consider and the Trustee Board to review and approve, as well as implementing the agreed risk management measures, with support from the Fund Office's investment team – for detail, see the Strategy and Risk Management sections below.

The Fund Office is responsible for engaging with the Fund's investment managers and advisers to collect information and carry out climate risk assessment. The Fund Office is also responsible for monitoring the investment managers' fulfilment of fiduciary duty in managing climate risk on behalf of the Fund. *In the year to March 2025, over 70 meetings or calls were conducted with the Fund's managers during which climate change or climate risk was discussed (the topics included but were not limited to improving carbon reporting, engagement with portfolio companies, discussion on carbon intensive holdings, investing in renewable energy/ low carbon/ climate adaptation assets, and net zero guidelines in IMAs).* The Fund Office receives quarterly reporting from the Fund's investment managers including on ESG integration, voting and engagement, and feeds back this reporting on an exceptions basis to the Trustee Board if there are areas of concern.

The Fund Office is responsible for monitoring the Fund's partnership with stewardship specialists Sustainalytics, who exercise the Fund's ownership rights on climate-related matters. *In the year to March 2025, the Fund Office had two in-person meetings and more calls with Sustainalytics, to monitor the engagements, discuss the service and what could be improved. The Fund started participating in Sustainalytics's most comprehensive stewardship programme, Engagement 360* from 1 April 2024. This expands the Fund's engagement footprint to six 'meta themes' providing comprehensive coverage to the most important E, S and G issues, ranging from net zero, biodiversity, circular economy to corporate governance, human rights and human capital management.

Sustainalytics now also provides an ESG voting overlay that will complement the proxy voting agent Glass Lewis's traditional corporate governance policies with specialist voting guidance on specific ESG topics. The ESG voting overlay is closely joint up with the engagement programmes and will cover the six meta themes with ample focus on climate related issues. An example of this is a vote regarding CVS Health Corp in May 2024 where the Fund voted *for* a shareholder proposal regarding severance approval policy. This vote was cast against management recommendations and followed Sustainalytics's advice which supports greater shareholder oversight of executive severance arrangements. While CVS already limits cash severance payments exceeding 2.99 times salary and target bonus without shareholder approval, this proposal seeks to expand that oversight to include equity-based and other non-cash compensation awarded upon termination. Sustainalytics supports this broader approach, emphasizing that it helps mitigate the risk of excessive payouts and better aligns executive exit packages with shareholder interests.

The Fund Office gathers relevant information through the Fund's membership of the PRI, CDP, Climate Action 100+, A4S, other investment industry contacts and the use of various risk tools such

as that provided by MSCI and specialist providers in the investment sustainability sector such as Sustainalytics, who assist in the identification and management of risk.

Finally, the Fund Secretary is responsible for ensuring there are adequate resources available for managing climate risk in the Fund Office. These resources include software (BlackRock Aladdin risk analytics including ESG risks, Bloomberg terminal and publicly available tools including PACTA), personnel/resourcing support (a 7-member in-house investment team and external support including Sustainalytics and the fund managers), and access to data (the Fund subscribes to both MSCI and Sustainalytics ESG and carbon data and research) – how these resources are being deployed is further explained in the sections below.

Working with external advisers and service providers

The Trustee Board receives input and support from several professional advisers (WTW as investment advisers and Scheme Actuary, Sackers as legal advisers, and Sustainalytics as stewardship partner) in monitoring climate related risks and opportunities. The Trustee Board assesses the competence of the professional advisers, including specifically in relation to advice on climate change, by considering the quality of advice/service they receive and providing feedback to the Fund Secretary on an ongoing basis. In particular, the Trustee assesses the Fund's Investment Adviser with reference to the agreed Statement of Strategic Objectives, including the expectation that WTW reflects any Trustee-specific investment beliefs and Fund-specific circumstances (including in relation to climate change) in the advice provided. The Fund Secretary holds an annual meeting with each provider to review the contract. The intention is to review the appointments every three years.

The Fund's investment adviser, WTW, provides the IC with a biennial "Sustainable Investment Review" report. This includes an assessment of the Fund's public equity investment managers in meeting the Fund's requirements on ESG integration and corporate governance. This review has been expanded to also cover several credit and alternatives managers. Sustainable Investment Reviews for individual managers and strategies are also provided on a periodic basis as required. The Trustee Board also takes advice from its actuaries and covenant advisers regarding the extent to which climate change may affect the funding position of the Fund and the ability of the sponsor to support the Fund.

The Trustee Board has delegated responsibility for stewardship to Sustainalytics (for the segregated equity and bond portfolio) and its investment managers, within approved guidelines. Sustainalytics, a Morningstar Company, is a leading independent ESG and corporate governance research, ratings and analytics firm. Appointed in December 2019, it engages with portfolio holding companies on behalf of the Fund on focused programmes (Global Standards and Material Risk). Another specialist provider Glass Lewis carries out proxy voting on all of the Fund's segregated equity mandates. Since 1 April 2024, Sustainalytics has been appointed to expand the Fund's engagement footprint to six 'meta themes' providing comprehensive coverage to the most important E, S and G issues, ranging from human rights, human capital management, net zero and biodiversity, circular economy to corporate governance. Sustainalytics also provides an ESG voting overlay that will complement Glass Lewis's traditional corporate governance policies with specialist voting guidance on specific ESG topics. Unless agreed otherwise, the Fund adopts all of Sustainalytics's industry-leading ESG guidelines and policies in its voting, engagement and collaboration initiatives.

II. Strategy

The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.

Strategy Disclosure Part (a): the time periods which the Trustee has determined should comprise the short term, medium term and long term; the climate-related risks and opportunities relevant to the Fund over the time periods that the Trustee has identified and the impact of these on the Fund's investment strategy and the funding strategy

The Fund is an open scheme, and its Investment Beliefs highlight the importance of a long-term focus in thinking about its investment strategy and implementation.

The Trustee Board believes that climate change is a significant long-term financial risk which has the potential to impact all holdings in the portfolio over time if not properly managed. Climate change brings about both physical and transition risks, which can be both short term (acute) and medium/ long term in nature. As such, the Fund considers the following different timeframes, so that they cover both acute and chronic impacts of climate change:

- Short term – represented by the next 3 years. Regulatory and reputational risks, and some transition risk may occur.

- Medium term – represented by 3-10 years. Transition risk, and some regulatory and reputational risks likely to occur.

- Long term – represented by 10 + years. Physical risk tends to occur over this timeframe, and some transition risk. As time moves on, long term risks will become more pressing.

Physical risks:

Physical risks relate to the direct effects of climate change on the Fund and its members. These risks are expected to impact the Fund *in the long term* and limited to the effects of climate change-related weather and other natural events on the businesses of invested companies, and the effect of changing temperatures on the mortality of Fund members. These could have varying effects on the funding and investment strategy of the Fund, but the direction and size of the effects is unlikely to be clear for a considerable period. We have identified our real estate, infrastructure, catastrophic reinsurance, and private debt mandates as primary exposure to physical climate risk, although recognise that the entire portfolio of risky assets may be exposed to direct or indirect physical risk. The Fund reviews each manager's due diligence process for assessing physical risks (including acute risk such as flooding or hurricane, and chronic risk such as drought or rising sea levels) as well as how the risks are managed.

Transition risks:

Transition risks relate to the risks and opportunities arising from efforts made to transition towards a net-zero economy (both domestically and globally) in order to limit climate change. These risks and opportunities are generally expected to occur *in the medium term*, with some perhaps occurring *in the short term*. As such, the Fund considers risks

1) affecting its asset portfolio (see below) and

2) affecting the Fund's operations itself, including changing regulatory requirements and membership/ public expectations, which require ample response from the Fund to manage the 'regulatory' and 'reputational' risks arising from such changes that will likely impact the Fund *in the short and medium term*.

Asset-related transition risks and opportunities:

As the Fund's investments are externally managed, engagement with its investment managers is a key step in understanding these risks and opportunities for the individual portfolios that comprise the Fund. This includes understanding their investment process and the reasoning for the individual asset

selection in the context of those sectors which are most impacted by climate change, e.g. through the potential for stranded assets, as well as more generally the transition risk which many companies in the portfolios may face over short, medium and long-term time frames as the economy transitions to a low-carbon economy. The Fund also believe that there are climate-related opportunities arising from the transition to a zero-carbon economy and is engaging with its existing and potential new managers where there are investment opportunities in responding to climate change. The Trustee has set a target to invest at least 15% of the Fund's portfolio in investments that have a strong "ESG tilt" by 2025, and it is expected that a substantial proportion of that will be in investments which access climate-related opportunities.

Identification of risks and opportunities is also informed through the Fund's organisational contacts, which include, but are not limited to, Climate Action 100+, PRI, CDP and A4S and the use of portfolio climate risk analysis tools provided by TPI, PACTA, and Bridgewater.

Alongside the asset risks outlines above, the Trustee has recognised the key climate risks associated with changes to longevity assumptions (with lower liabilities due to a reduction in longevity expectations) and the impact of transition and physical risk on the strength of the Employer covenant.

Covenant risks:

The covenant climate review is provided through the Sponsor and tries to understand how TfL covenant itself might fare and how its adaptation and net zero plans could help mitigate some of the risks.

In its last Adaptation Reporting Power submission (ARP4), TfL has categorised physical risks according to materiality (from Minor to Severe) based on their likelihood and impact. This categorisation has then been mapped onto three separate time horizons: Current (2024), 2050s and 2080s. This risk assessment identified 28 physical climate risks as severe or major currently, with this number expected to increase to 164 by 2080 as the risk of increased climate change intensifies. In the near-term, these risks primarily relate to precipitation and extreme high temperatures. TfL's scenario analysis assessed these physical risks, as well as transitional ones, over three scenarios and three time horizons. It qualitatively assessed the risk of extreme high temperatures as moderate in the short-term (to 2030) and moderate to extreme (depending on the scenario) in the long-term (to 2080), and also noted the financial impacts from increased well-being related incidents and loss of revenue from service disruptions. In addition, the scenario analysis quantitatively assessed the risk from flooding due to precipitation, which was calculated to have a £4.7m - £5.3m annualised risk value in the short-term (to 2030), increasing to £4.8m - £7.8m in the long-term (to 2080). TfL plans to continue expanding its quantitative assessment of climate-related risks as the relevant data becomes available.

Liability risks

We have included the full results of the liability side climate scenario analysis later in the Strategy section of the report. An extract is shown below.

The analysis considered five climate scenarios. In one climate scenario, the 'Below 2ºC' scenario, the analysis showed an increase to the value of the liabilities and a reduction in the funding level & surplus as a result of improvements in the assumed average longevity improvement rate. The impact on the liability value of 2.5% is similar to WTW's standard 1-in-20 year longevity shock of 3.5%. While a negative impact on the funding position, both the funding level and the surplus remain strong at 130% and £3.5bn respectively (compared to 134% and c.£3.8bn as at 31st March 2025) under this scenario. While a negative impact, the impact is manageable. The Trustee has identified longevity hedging as a potential approach to mitigating liability risk associated with climate change, although recognises that there are other considerations which may impact the attractiveness of doing so.

In the other four climate scenarios considered, the climate scenario analysis implies reduced life expectancies improvements (relative to the Fund's central mortality assumptions) and therefore a relative reduction in the Fund's liabilities. This is a plausible potential outcome arising from the

negative impacts of increasing climate change. In isolation, this can suggest a relative improvement in the expected funding position for the Fund.

However, it is important to recognise that an assessment of what is in the best interests of the Fund and its members is a much broader question than the impact on funding level alone. Key considerations may be a reduction in the quality (and length) of members' lives, and the quality of the environment that they will retire into. Consequently, the results of any such modelling should not be assumed to reflect any complacency or acceptance (either implicit or explicit) that the Trustee considers global inaction or business-as-usual with respect to climate change to be in the best interests of the Fund or its members. The Trustee recognises that climate change is a systematic risk of material scale and severity. Actions to address it are a collective priority, given the risks it presents to individual pension schemes, the ongoing resilience of the savings universe, and the planet as a whole.

Impact on the Fund's investment strategy and funding strategy

The Fund's primary purpose is the delivery of pension benefits and ensuring there are enough funds to achieve that. The strategy in response to climate change is to use a research-driven and evidence-based framework to shift the portfolio assets over time to companies that are better prepared to handle physical and transition risks, reduce and, over time, completely eliminate investments in companies that are not. It should be noted that engagement with portfolio companies to promote real world decarbonisation will be a key part of the strategy. Also importantly, the Trustee aims to tilt the portfolio towards climate opportunities by investing in companies and sectors that would benefit from the transition to a low carbon economy. From a financial planning perspective, the dual goals are the delivery and sustainability of long-term funding ratio of the Fund.

Net zero carbon transition:

As part of its response to climate-related risks, the Fund has agreed its carbon neutral journey plan, which was developed with input from the Fund's investment adviser and asset managers. The Fund aims to achieve net zero carbon emissions by 2045 at the latest, with a 55% reduction in carbon emissions by 2030 also at the latest, relative to a baseline level of carbon emissions as at 2016.

Further details of the Fund's Carbon Neutral Journey Plan can be found in the link below and in the Metrics and Targets section of this report.

https://content.tfl.gov.uk/our-carbon-journey-net-zero-plan.pdf

Asset allocation and manager selection:

Through its diversification of investments, the Fund's strategy seeks to mitigate the impact of climate-related risks and identify opportunities. The Fund has a well-diversified portfolio of assets including specific allocations to those in the renewables sector, which provides resilience to adverse consequences of climate change. In 2021, the SIP was updated to include a target to invest at least 15% of the Fund's portfolio by 2025 (up from the previous 5% target which has been met) by value in investments that have a strong "ESG tilt", of which a significant portion will be aligned with decarbonisation. This represents a material increase in the Fund's ambition to benefit from the opportunities presented by decarbonisation and "investment with purpose" objectives.

In addition, the Fund's approach to the selection, appointment and monitoring of its investment managers is framed to ensure that such risks form part of their investment processes together with the ability of those managers to find opportunities where there is alignment between environmental outcomes and achieving good financial performance.

Stewardship:

Climate risk has a significant impact on the Fund's stewardship strategy and is of high priority. The Fund engages with investee companies that exhibit high climate-related risk (such as non-alignment with Paris Agreement transition pathway) and encourage more effective management of such risk, in

order to 'safeguard' the assets. The Fund works with its investment managers, stewardship partner Sustainalytics and Climate Action 100+ to do so. Voting is used as an important tool to exercise its ownership right on climate related matters.

Managers are also required to engage with companies where climate change is considered likely to impact the asset's value over the investment horizon. Feedback from engagements inform the managers' decision to continue holding the assets or not, and the Fund challenges such decisions as necessary.

Divestment:

Although the Fund has a preferred approach for engagement, it carefully considers where divestment may be necessary due to the nature of certain sectors. Since 2019, it has implemented an exclusion for stocks and assets where thermal coal contributes more than 30% of company revenues. The Fund currently has a process to assess companies that are not aligned with the Paris Agreement (based on TPI[2] analysis) and requires managers to engage with these companies, with divestment remaining an option for the fossil fuel companies if engagement does not lead to improvements. This process is expected to be refined and evolve as technology for decarbonisation and investment research on stewardship best practice develops and TPI itself finetunes its approach.

In terms of funding strategy, the Fund is an open DB scheme, so covenant risk is a bigger factor than an equivalent, closed scheme. That said, the Fund's investment strategy (and sponsor contributions) are set in the context of covenant risk, in order to adequately fund the liabilities over the long term. Regarding the climate covenant risk, TfL, as the integrated transport authority for London, faces a number of risks related to the ongoing climate change crisis and has developed goals and strategies for managing the risks and opportunities borne from climate change. TfL's own risk assessment of the physical impact of climate change has identified 28 current physical climate risks as severe or major, with this number expected to increase to 164 by 2080 as the effects of climate change become more severe. However, TfL seeks to mitigate the impact of these climate risks through achievement of its environmental sustainability targets and implementation of its Adaptation Plan as set out in 2023. This is further explained in part (b) below.

Strategy Disclosure Part (b): the most recent scenarios the Trustee has used in their scenario analysis, the potential impacts on the Fund's assets and liabilities, and the resilience of the Fund's investment strategy and funding strategy in the most recent scenarios analysed

Asset risk

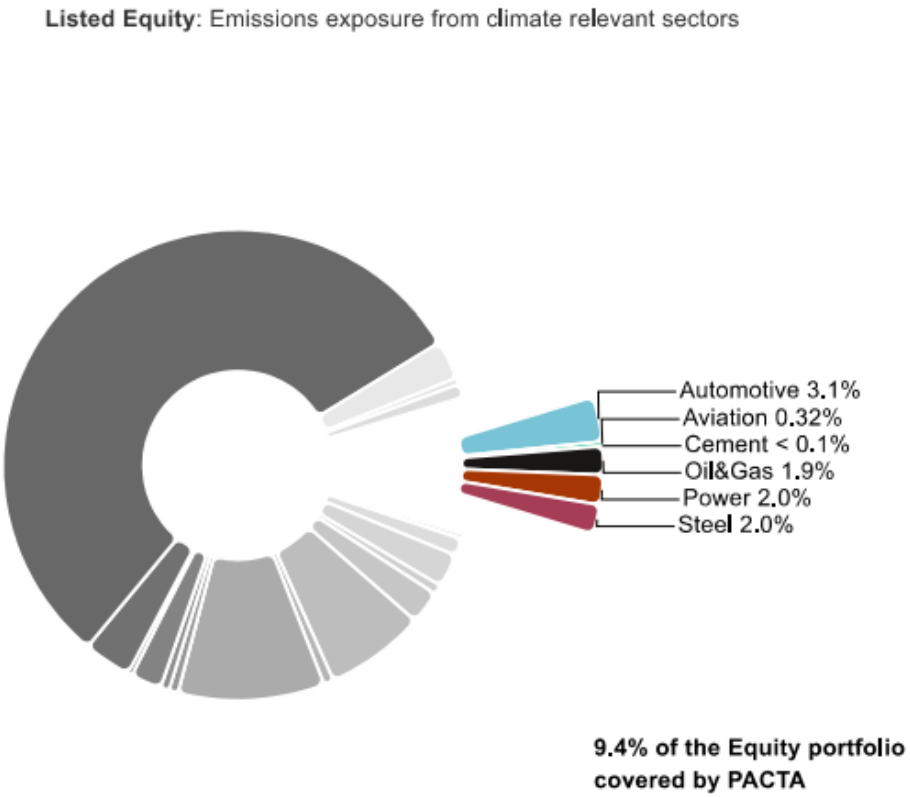
Since 2019, the Fund has undertaken annual scenario analysis using the Paris Agreement Capital Transition Assessment (PACTA) tool which is an open-source software application that enables users to measure the alignment of financial portfolios with climate scenarios. However, the Fund has significant allocations to private market assets with a strong climate sustainability theme which the PACTA tool is not able to capture. In the last 3 years we made use of an additional analysis based on Bridgewater's climate transition stress testing tool which was able to stress test most of the asset classes (including private markets) in the Fund's portfolio. Bridgewater is reassessing the tool internally and so we pause this piece of analysis this year.

PACTA covers seven sectors that are amongst the most carbon-intensive sectors of the economy, and, therefore, are likely to be more exposed to climate transition risks. Those key sectors are Oil and Gas, Coal, Power, Automotive, Steel, Cement and Aviation. PACTA covers sectors producing 75% of emissions, overall. The analysis highlights the portfolio's current exposure to economic activities that are likely to be impacted by the transition to a low-carbon economy. It also provides an indication of the anticipated future exposure to both high- and low-carbon activities, based on the disclosed production

[2] The Transition Pathway Initiative Global Climate Transition Centre (TPI Centre) is an independent, authoritative source of research and data on the progress of the financial and corporate world in transitioning to a low-carbon economy.

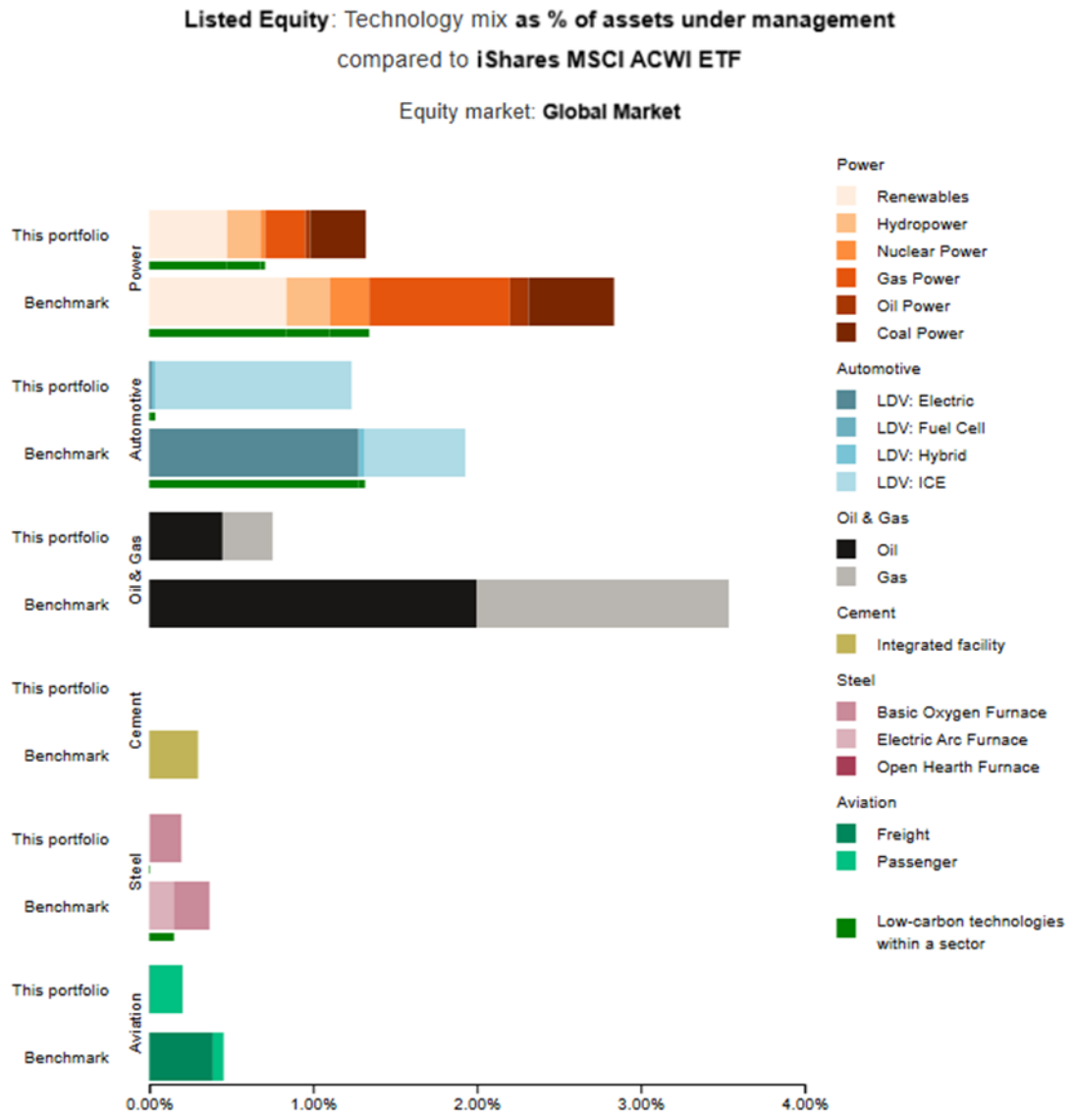
capacities and investment plans of companies held within the portfolio. The 2025 review encompassed the Fund's equity holdings (approx. £2.44 billion) and corporate bond holdings (approx. £310 million). The PACTA analysis for the equity portfolio is summarised below with more details provided in the appendix, including for the corporate bond portfolio.

Listed equity - current exposure to climate transition risk



In 2025, within the listed equity portfolio, the automative sector accounted for 3.1% of emissions exposure, making it the largest contributor, following by steel and power sectors which accounted for 2% respectively. Notably, emissions from coal in the equity portfolio no longer featured in the breakdown (meaning it is insignificant or zero), reflecting shifts in portfolio composition and/or company-level emission reductions.

Listed Equity – Current exposure to low-carbon technologies



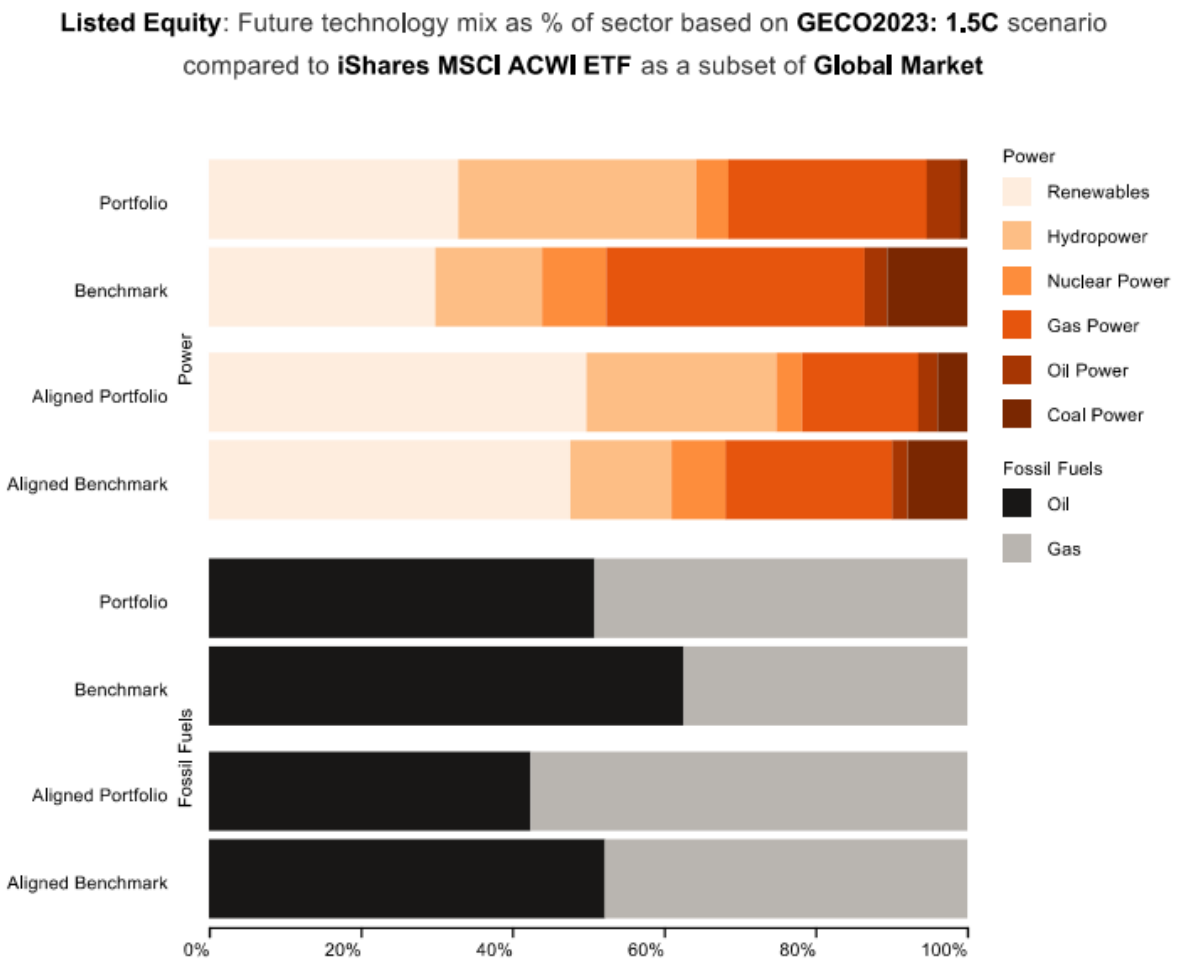
Overall, the listed equity portfolio has exposure to the power, automotive, oil & gas, cement, steel, and aviation sectors, although it is lower compared to the MSCI All Country World Index (the benchmark). Many of these companies are engaged in the production of critical materials necessary for the global low-carbon transition, such as inputs for renewable energy infrastructure and energy-efficient construction, or R&D for low carbon technology. This positioning reflects the Fund's consideration in the long-term value of these industries, particularly in emerging markets.

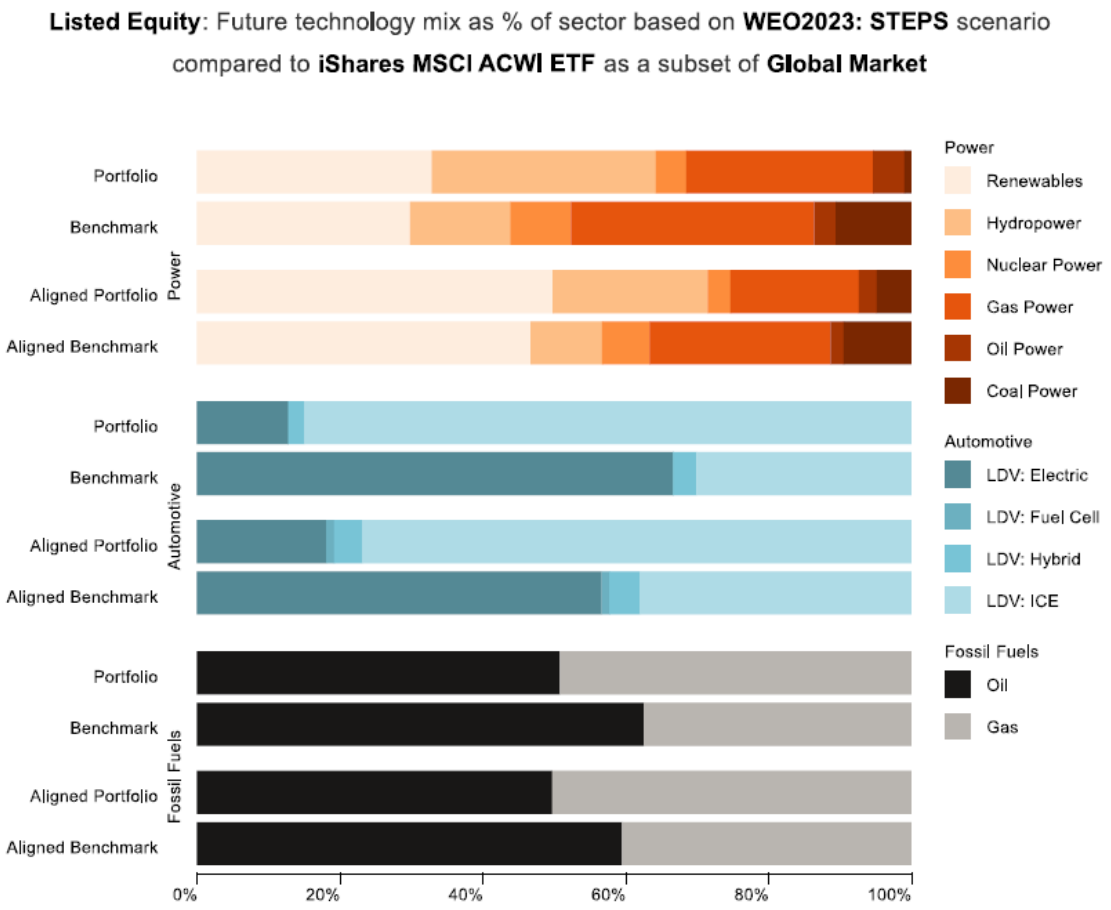
Within the Power sector, the Fund's equity holdings continuously demonstrate a strong alignment with the low-carbon transition compared to the benchmark. Specifically, 53.5% of our holdings in this sector are classified as low-carbon technologies, outperforming the benchmark figure of 47.3%. On the other hand, the percentages of low-carbon technologies in automotive (3%) and steel (2.6%) sectors are lower than the ones in the benchmarks (68.3% and 41.1%), respectively. A more detailed company-level analysis in the Automative sector will be provided in the appendix.

For the Steel sector, although our portfolio has a lower proportion of low-carbon steel technologies compared to the benchmark, our overall exposure to the sector is low, helping to reduce our carbon footprint. In the Cement sector, our exposure has decreased—from 0.7% last year to nearly 0% this year. For fossil fuels, there was no exposure to Coal in the portfolio this year, while the exposure to Oil &Gas has reduced relative to the benchmark compared to last year.

Listed Equity – Future technology breakdown

For sectors with low carbon alternatives such as the power and automative sectors, it can be useful to compare how the split between technologies looks in five years vs. what is expected under scenarios, and vs. what the benchmark is doing in this regard. The chart below shows the split of each sector by technology, both what is currently planned and what is expected under the specified scenarios (the 'aligned' bars). The result is similar to the current technology breakdown. The equity portfolio has higher exposure to low carbon technologies in the Power sector, but lower exposure to low carbon technologies in the automotive sector, compared to the benchmark.





Liability risks

Alongside assessing the impact of a range of climate scenarios on the investment strategy, in 2025 the Trustee conducted scenario stress testing on the Fund's liabilities in conjunction with the investment adviser and Scheme Actuary – specifically through the impact on longevity assumptions and future mortality rates. The key climate scenarios that the Trustee has considered are:

	Nationally Determined Contributions	Delayed Transition Below 2ºC	Below 2ºC	Net Zero 2050	Hot House World
Description	A "business as usual" outcome where current policies continue with no further attempt to incentivise further emissions reductions. Socioeconomic and technological trends do not shift markedly from historical patterns.	Delays in taking meaningful policy action result in a rapid policy shift around 2030. Policies are implemented in a somewhat but not completely co-ordinated manner resulting in a more disorderly transition to a low carbon economy. Emissions exceed the carbon budget temporarily, but then decline.	Globally co-ordinated climate policies are introduced immediately, becoming gradually more stringent over time. Companies and consumers take the majority of actions available to capture opportunities to reduce emissions.	A more ambitious version of the 'Below 2ºC' scenario where more aggressive policy is pursued immediately. More extensive technology shifts are achieved with Carbon Dioxide Removal ('CDR') used to accelerate the transition, broadly in line with sustainable levels of bioenergy production.	The world follows a Net Zero 2050 pathway, however the resultant temperature outcome exceeds 2ºC due to a lower than expected remaining carbon budget and/or the impact of climate tipping points. Use of Carbon Dioxide Reduction (CDR) technologies is relatively low.
Temperature Rise	~2.5ºC	~2.0ºC	~2.0ºC	~1.5ºC	~3.0ºC
Physical risk level (longer term)	High	Medium	Medium	Low-Medium	High
Transition risk level (shorter term)	Low	High	Medium	High	High

The scenarios were created to reflect different paths that could be taken to meet, or fail to meet, the temperature rise target agreed as part of the Paris Agreement. The Paris Agreement's target is to limit global temperature rises to well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. The scenarios differ in both the size of the physical risks, based on the resulting temperature impacts, and size of the

transition risks. In the view of the Trustee, the five scenarios selected reflect an appropriate range of plausible decarbonisation pathways and are relevant in the context of the Fund's funding plan.

Below the Trustee has illustrated the impact of the climate change scenarios on the Fund's liability value. For the purpose of this analysis the Trustee has used a value for the PSS Technical Provisions as at 31 March 2025 determined on the Agreed Basis as defined in the Pensions Funding Agreement (PFA) dated 13 December 2024. The key results from the climate scenario analysis are outlined below. The Trustee recognises that there is uncertainty over how such climate scenarios are expected to impact liabilities values over different time periods and have therefore reviewed both a one-off shock to the liability value (which seeks to illustrate the impact of climate change was to be reflected instantaneously in longevity assumptions) and an annual impact on the liability value (which seeks to illustrate the impact of climate change being reflected through a combination of gradually changing longevity assumptions and member experience). The annual impact is assessed over a 15 year period, which is consistent with the Fund's long term investment time horizon (10+ years), and broadly in line with the liability duration of the Fund (15.1 years).

For the avoidance of doubt, the scenario analysis allows for changes in the average longevity improvement rate only, and does not consider the potential impact of climate risk on future return expectations or the impact on the technical provisions discount rate.

The Trustee also recognises the uncertainty in the underlying assumptions and that, in reality, the shocks experienced could be larger.

Impact of Climate Shocks on the Fund's liability value

Scenario	Impact on Fund's Liabilities*	Funding Level after shock*	Impact on Fund's Surplus* (£m)	Surplus after shock* (£m)	Average longevity improvement rate assumed p.a.
Base Case	N/A	133.5%	N/A	3,789.0	1.5%
National Determined Contributions	-3.5%	138.3%	+395.9	4,184.9	0.1%
Delayed Transition Below 2ºC	-1.5%	135.5%	+169.7	3,958.7	0.8%
Below 2ºC	2.5%	130.3%	-282.8	3,506.3	2.4%
Net Zero 2050	-0.5%	134.2%	+56.6	3,845.6	1.3%
Hot House World	-6.0%	142.0%	+678.6	4,467.6	-1.0%

*Recent historical improvement rates have ranged between 0% and 3% p.a.

Impact of Climate Drags on the Fund's liability value

Scenario	Implied annual impact on Liabilities (%)	Implied annual impact on Liabilities (£m)
National Determined Contributions	-0.24%	-27.1
Delayed Transition Below 2ºC	-0.10%	-11.3
Below 2ºC	0.16%	18.1
Net Zero 2050	-0.03%	-3.4
Hot House World	-0.41%	-46.4

Under the Below 2°C scenario, improvements in life expectancies result in an increase to the value of the TP liabilities and a reduction in the funding level & surplus (under a one-off shock scenario), or acts as an annual drag on the funding level (under a climate drag scenario). While a negative impact, under both assessment methods the impact is manageable. Under a one-off shock scenario, the impact on the liability value is similar to longevity risk as measured by the Trustee's 1-in-20 year VaR95 impact (a 3.5% increase in the liability value), and would result in the funding position remaining strong at 130%. Under an annual drag scenario, the impact is relatively small and well within the prudence between the best estimate investment returns and the TP discount rate. The Trustee has identified longevity hedging as a potential approach to mitigating liability risk associated with climate change, although recognises that there are other considerations which may impact the attractiveness of doing so.

In four of the five climate scenarios, WTW's modelling process implies reduced life expectancies improvements (relative to the Fund's central mortality assumptions) and therefore a relative reduction in the Fund's liabilities. This is a plausible potential outcome arising from the negative impacts of increasing climate change. In isolation, this can suggest a relative improvement in the expected funding position for the Fund.

However, it is important to recognise that an assessment of what is in the best interests of the Fund and its members is a much broader question than the impact on funding level alone. Key considerations may be a reduction in the quality (and length) of members' lives, and the quality of the environment that they will retire into. Consequently, the results of any such modelling should not be assumed to reflect any complacency or acceptance (either implicit or explicit) that the Trustee considers global inaction or business-as-usual with respect to climate change to be in the best interests of the Fund or its members. The Trustee recognises that climate change is a systematic risk of material scale and severity. Actions to address it are a collective priority, given the risks it presents to individual pension schemes, the ongoing resilience of the savings universe, and the planet as a whole.

Covenant risk

The covenant climate review is based on information provided by the Sponsor and tries to explain how the TfL covenant itself might fare in specific climate scenarios and how its adaptation and net zero plans could help mitigate some of the risks.

As the integrated transport authority for London, TfL faces a number of risks related to the ongoing impact of climate change and has therefore developed goals and strategies for managing the risks and opportunities which reflect that impact. TfL's fourth round of the Adaptation Reporting Power (ARP4), submitted in December 2024, identified 477 climate-related risks, compared to 333 identified in the previous submission, reflecting an improved understanding of climate risk rather than a higher level of concern; 28 of which were categorised as major or severe in the current period (defined as the time of report), with the expectation for this number to increase to 164 by 2080, as the effects of climate change become more severe. In addition, TfL's first analysis of interdependency risks for London's land-based transport sector identified 114 climate interdependency risks specific to roads, rail and sponsored services, 9 - 24 of which categorised as major or severe in the current period, with the expectation for this number to increase to 52 - 70+ by 2080 (depending on the scenario). TfL seeks to mitigate the impact of these climate risks through achieving its environmental sustainability targets and implementing its Adaptation Plan as set out in 2023.

In line with the Mayor's target for London, TfL has an ambition to reach Net Zero carbon from its operations by 2030 through the use of 100% renewable energy, electrifying its support fleet and the use of a zero-emission bus fleet. TfL's Adaptation Plan focused on preparing, planning and investing for future climate change by increasingly integrating climate change risk into planning and investment decisions which consider adaptation to be as important as safety and reliability. In 2024, TfL made progress with both its sustainability targets and Adaptation Plan including both a better-than-targeted reduction in carbon emissions and delivery of sustainable drainage systems to protect against surface flooding.

As part of TfL's Adaptation Plan, it also set out to develop a framework to provide detailed climate-related reporting to support TCFD, including scenario analysis and a quantified assessment of their respective impacts. In FY24/25, TfL made progress on this by developing three scenarios, 'Green London', 'London Declines' and 'London Booms', to assess climate-related risks over three time horizons, 'Short-term' (to 2030), 'Medium-term' (to 2050) and 'Long-term' (to 2080). The scenario analysis focused on two physical risks, two transition risks and two transition opportunities, which were assessed in a qualitative manner, including financial impacts rated 'Low' to 'High'. The only quantified risk assessment was for the risk of flooding due to precipitation, in which TfL calculated annualised risk values of £4.7m - £5.3m in the short-term (to 2030), increasing to £4.8m - £7.8m in the long-term (to 2080) (depending on the scenario); these amounts are relatively immaterial relative to TfL's estimated revenue of c.£9.3bn in 2024/25, although could present a significant impact when aggregated with the other risks that have not yet been quantified. Additional quantitative analysis on further risks is expected as the relevant data becomes available.

While TfL has made good progress on its plans so far, we note that the continued achievement of TfL's climate targets and Adaptation Plan appears dependent on future external funding from both the Government and private sources. Further costs may be incurred related to the impact of physical and transitional risks (most of which TfL have not yet quantified), depending on the climate change pathway that materialises. As a result, Penfida have advised that the impact of climate change and the need to fund delivery on climate targets and adaptation may reduce TfL's flexibility to fund DRCs and pension contributions in the future, to the extent that the required external funding is either not provided or comes with conditions.

Given that the Fund is still open, resulting in a long period of covenant reliance, the severity of the physical climate risks identified by TfL (not yet fully quantified) and the need for further funding to deliver on climate mitigation plans, **Penfida have assessed climate change-related risks from a covenant perspective to be Medium in the short to medium term and Medium to High in the long-term.**

This risk assessment should, however, take account of the critical nature of TfL to the London economy, the provision of government financial support to date and TfL's position as a statutory corporation under the Greater London Authority Act 1999.

Putting it all together

So what does it mean for the Fund when all the factors are considered all together? The resilience of the scheme's investment and funding strategy is the paramount issue for the Trustee to consider in climate risk assessment covering assets, liabilities and covenant ability to withstand funding obligations. Diversification remains the bed rock of this strategy with an added climate lens to test the assets and liabilities for resilience and macro shocks.

It is in this context that the Fund (using PACTA) and WTW have conducted scenario analysis on impact of climate change on the assets and liabilities, respectively. The Regulations require that scenario analysis should consider at least two scenarios, including one with a global temperature increase of 1.5-2°C and another with a temperature increase well above 2°C.

On the asset side, the Fund used PACTA to consider two scenarios, including one with a global temperature increase of 1.5-2°C (NZE scenario) and another with a temperature increase well above 2°C (STEPS scenario). While PACTA does not estimate the financial impact, it illustrates the anticipated future exposure to low-carbon technologies, for sectors with low carbon alternatives such as the power and automative sectors. The result is similar under both scenarios. The equity portfolio has higher exposure to low carbon technologies in the power sector, but lower exposure to low carbon technologies in the automotive sector, compared to the benchmark. Relatively speaking, this paints a mixed picture in terms of the equity portfolio's future performance versus the benchmark. However, it is worth noting that 1) in absolute terms, the portfolio's financial exposure to carbon intensive sectors is lower than the benchmark; 2) the PACTA analysis is limited to publicly listed assets, while the Fund has 22% strategic allocation to private market assets with significant exposure to renewable energy and low carbon investments; 3) while the Bridgewater tool is not available this year, last year's results (which remain relevant as the Regulations require the scenario analysis to be updated every three years) show that, across the four modelled scenarios, two resulting in a negative financial impact and two positive, with a range of +5.1% to -5.9%, so the financial impact is broadly symmetrical. The Fund continues to hold a highly diversified portfolio which controls exposure to any single macro impact.

On the liability side, WTW has modelled five different scenarios, and four climate change scenarios show a reduction in future improvements in life expectancy, thereby reducing liabilities on a TPs basis, while in only one would liabilities increase. The range of the impact on liabilities is +2.5% to -6.0%. Such scenarios do not demonstrate a positive outcome for members and reflect the adverse societal effect of climate change.

The scenarios used by PACTA (and Bridgwater) and WTW are not exactly the same and therefore cannot be mapped onto each other to determine a net funding impact. However, they are not that different in that they are trying to capture a varying range of global transition trends and journeys (both complying with the Regulations). In total, in any scenario, the impact on the Fund's assets and liabilities should be manageable relative to the sponsor's covenant and less significant than the ongoing risks related to the covenant.

In terms of the climate covenant risk, TfL, as the integrated transport authority for London, faces a number of risks related to the ongoing climate change crisis and has developed goals and strategies for managing the risks and opportunities borne from climate change. TfL's own risk assessment of the physical impact of climate change has identified 28 current (2024) physical climate risks as severe or major, with this number expected to increase to 164 by 2080 as there is a risk of the impact of climate change intensifying over time. However, TfL seeks to mitigate the impact of these climate risks through achievement of its environmental sustainability targets and implementation of its Adaptation Plan, which it has made good progress on so far including reducing emissions and developing its own scenario analysis for TCFD. It is to be noted though that the continued achievement of TfL's climate targets and Adaptation Plan appears dependent on future external funding from both the Government

and private sources. In addition, further costs may be incurred related to the impact of physical and transitional risks (most of which TfL has not quantified), depending on the climate change pathway that materialises. Some of these observations would not come as surprise to anyone as the impact of heavy rains, rising temperatures and extreme weather in general is not lost on Londoners using public transport.

Whilst climate change is a serious risk to TfL, it is taking actions to mitigate the impact, subject of course to the availability of funding. However, climate change is a global problem requiring a coordinated global response. TfL could do everything and still the covenant could be at risk if the global response fails. In that context, it is important to continue to better understand the impact on TfL as disclosures become available, in particular should TfL provide further quantitative analysis of the potential impacts of various climate scenarios, the Trustees may consider updating the analysis.

III. Risk Management

The processes used by the organisation to identify, assess and manage climate-related risks.

Risk Management Disclosure Part (a): the Fund's processes for identifying and assessing climate-related risks.

As all assets are managed externally, at a mandate level, the Fund has explicitly stipulated clauses in the Investment Manager Agreements ("IMA") requiring its segregated equity and bond managers to account for climate related risks in the investment process, including asking for TCFD reporting from each manager. Work is ongoing to expand this to all segregated and bespoke mandates.

As mentioned previously, reports and analysis with regards to climate related risks and opportunities is carried out by the Fund Office. BlackRock's Aladdin tool (using MSCI ESG data) and the TPI analysis enables the Fund Office to identify the climate-related risks in the Fund's segregated equity and bond portfolios. The Fund identifies the holdings with highest reported carbon intensity and fossil fuel extractives and assesses the investment managers' rationale for holding such stocks (including the managers' engagement with these companies) – an example is PRIO SA, which is a company that engaged in the exploration and production of oil and gas in Brazil and abroad. Brazilian regulatory framework for oil is more lenient compared to developed markets. With the announcement that International Sustainability Standards Board's (ISSB) IFRS Sustainability Disclosure Standards will be incorporated into the Brazilian regulatory framework in 2024, this sets a roadmap from voluntary to mandatory disclosures beginning 1 January 2026. The manager sees PRIO as proactive in reducing emissions and outperforming most peers in upstream emissions intensity reduction, where it ranked second out of seven in the Campos Basin. PRIO disclosed a 35% emissions intensity reduction target (Scopes 1 & 2, 2021-2026) in its Carbon Disclosure Project report and the manager plans to continue engaging with PRIO to establish absolute and long-term targets.

The climate change scenario analysis shown in the previous Strategy section provides the Trustee with a holistic overview of the potential impacts of climate change and how they may affect the Fund's funding strategy (across assets, liabilities, and covenant). This is an important risk management tool for a top-down risk and opportunity assessment.

Engagements with investees through Climate Action 100+, Sustainalytics and the managers help the Fund attain information to assess the quality of company management of climate risk.

For passive equity investments, there is data available from the manager which measures the carbon intensity of these portfolios.

For private equity, infrastructure, real estate, private debt, hedge funds and other assets, the Fund uses manager-supplied information and engagement. The Fund has been collecting carbon intensity data from all the private market mandates in order to combine this data with public market assets.

However there remain material challenges on data availability and quality for private markets. Where carbon data is not readily available on the private market assets, the Fund may use a suitable proxy (MSCI GICS level 4 sector average carbon intensity) to enable this assessment but more time is needed to build a reliable dataset to support a robust assessment.

The Fund also requires its fund managers to explain how the managers identify and assess climate risk within their portfolios. Within real estate and infrastructure (in the form of both equity and debt investing), the Fund reviews the managers' due diligence process for assessing physical risks that the assets are exposed to (such as flooding and excessive heat) as well as how the risks are managed (such as the operator's quality of management).

As an example, with the main real estate mandate, the Fund had discussions at length with the manager to examine how they assess physical risks (understanding the tools and data they use, including 'mapping' physical risks), how such analysis is incorporated into investment decisions (we ask for specific examples), and the stewardship aspect (we challenge the manager to actively engage with tenants e.g. educate/encourage tenants to be energy efficient). Also, we ask for asset level GRESB reports (the current industry standard for ESG disclosures for real estate) and where they are not available, we push managers to start providing them and engage more with building occupants/operators to collect data.

The Fund has had similar discussions with its infrastructure mandates, on the integration of physical and transition risk analysis and engagement with investees. With the infrastructure debt manager, engagement focus remains on improving emissions data collection and quality.

Within private equity and corporate private debt, the Fund reviews how the managers assess climate risks for the businesses to which the Fund is providing capital (including both transition and physical risks) and their engagement with investees.

Risk Management Disclosure Part (b): the Fund's processes for managing climate-related risks.

Carbon Neutral Journey Plan: As part of its response to climate-related risks, the Fund has agreed its carbon neutral journey plan, which was developed with input from the Fund's investment adviser and asset managers. The Fund aims to achieve net zero carbon emissions by 2045 at the latest, with a 55% reduction in carbon emissions by 2030, relative to a baseline level of carbon emissions as at 2016.

Further details of the Fund's Carbon Neutral Journey Plan can be found in the link below and in the Metrics and Targets section of this report.

https://content.tfl.gov.uk/our-carbon-journey-net-zero-plan.pdf

The Fund intends to progress towards the targets above by including emissions-based guidelines in manager mandates, allocating to low carbon transition assets (such as renewable energy infrastructure, energy efficient buildings, controlled environment farming) and by engaging with investee companies to establish net zero business strategies, with divestment being an option on the table if companies are not sufficiently committed to change. The Fund also excludes any companies that derive over 30% of their revenues from thermal coal mining or power generation.

Manager monitoring:

Climate risk management is part of the regular conversation with all investment managers. Every two to three years the Fund formally evaluates the managers' effectiveness in doing this through a questionnaire, which began with the equity and bond mandates in 2021. This started as an annual exercise but as managers' ESG frameworks become more established, every 2-3 years is considered sufficient. This will be expanded to private markets over time.

This exercise is supplemented by the monitoring of the Fund's equity mandates through a biennial review provided by the Fund's investment adviser, WTW, focussing on WTW's assessment of the sustainability capabilities and activities of the managers. This review has been expanded to also cover several credit and alternatives managers. The Fund considers the WTW report alongside information gathered through the Fund's dialogue with the managers (including the ESG questionnaire). Managers who show inadequate management of climate risk are challenged to improve their practices. The Fund will consider removing a manager if they do not show improvements on climate risk management over time.

As noted previously, the Fund has specific clauses in its segregated equity and bond mandate IMAs asking managers to monitor and manage climate related risks in the investment process (e.g. through engaging investee companies).

In 2023 the Trustee examined the Fund's fossil fuel extractive holdings (c0.3% of Fund assets) and reviewed the holdings that are assessed by The Transition Pathway (TPI) as not aligned to the Paris Agreement. The Investment Committee received a presentation from the manager that held most of the extractives at the time and considered the pros and cons including the potential financial returns from holding undervalued extractive companies, whether engagement can be effective in changing their business strategy and thereby reducing carbon emissions in a 'real world' setting, and to what extent holding extractives will affect the Fund's progress over time toward the Net Zero Targets. The fund managers were requested to disclose their engagement strategy with the non-aligned companies. The Investment Committee decided it is prudent to take more time to consider this issue and will continue its dialogue with the fund managers before any decisions are made.

Mandate design:

The Fund has applied an exclusion across its segregated active mandates to exclude from its portfolio all companies that generate more than 30% of their revenue from thermal coal mining or electricity generation.

The Fund implemented net zero guidelines in its segregated corporate bond mandate in 2023/24. In 2024/25 this was expanded to the 'value biased' equity mandate which holds carbon intensive companies that have demonstrated credible transition plans in the manager's view. These guidelines set out long term (2045) emission reduction targets as well as interim goals to ensure progress. The guidelines make use of three metrics to measure progress over time – actual carbon intensity reductions (as measured by WACI); portfolio alignment to net zero (as a forward-looking metric); and engagement coverage with investees. The guidelines also cover the use of green bonds and exclusions (thermal coal and oil sands). This builds on an existing requirement of 20% lower carbon intensity versus benchmark at every calendar year end. A broader initiative is underway to expand net zero guidance to more mandates where suitable.

In private markets, the Fund actively seeks out climate-related investment opportunities. The Fund has made large allocations to climate related infrastructure (renewable energy, low carbon technology, waste management etc), real estate (energy efficient buildings) and private equity (controlled environment farming).

The Fund has total investments & commitments of c. £2.4bn in assets with an ESG tilt as of March 2025, representing c. 15.9% of total assets. The Fund continues to deploy capital in ESG tilted assets, of which a high proportion is climate transition investments. ESG tilted assets (or assets with an ESG tilt) are investments in sectors that have real-world environmental and/or social impacts, including but not limited to renewable energy, sustainable agriculture/ biodiversity, circular economy, healthcare, education, social infrastructure, and green buildings.

In the year to 31 March 2025, the Fund added three new mandates, all of which have material ESG tilts, namely, Harrison Street Net Zero (North American renewable energy platform), Blackstone (Blackstone Energy Transition Partners IV private equity fund), and IFC Growth & Sustainability (private equity investment in Sustainable Development Goals aligned sectors in emerging markets with a particular focus on climate transition, women empowerment and digital transformation). Case studies of these investments can be found in the annual Sustainable Investing reports.

The Fund's tactical opportunities private debt mandate has implemented carbon disclosure requirements explicitly, not just for the recent re-up but for all investments retrospectively. This is despite the fact that private debt is one of the harder areas to address from a carbon reporting perspective.

Stewardship:

Sustainalytics helps the Fund manage climate risk by aligning the Fund's underlying holding companies' actions with the Trustee's beliefs. This is achieved through the Global Standard and Material Risk engagements, as well as thematic programmes on Net Zero and Biodiversity.

Also, the Fund's involvements with CDP and Climate Action 100+ ("CA100") enables engagement with investee companies to encourage better disclosure and improve assessment and management of climate risks. The Fund also has specific clauses in its IMA with segregated equity and bond managers to promote better climate risk disclosure among investee companies.

As part of the CDP's non-disclosure campaign in 2024, the Fund agreed to co-sign letters addressed to targeted companies held in the Fund's portfolio. Results from the 2024 campaign were remarkable. 396 companies responded for the first time after being engaged through the campaign. A total of 191 companies disclosed for the first time in the climate change module, while 51 companies disclosed in the forests module for the first time. In water security, with the significant increase in the number of companies engaged, the total number of disclosures also rose from 66 in 2023 to 216 in 2024. Greggs and Walmart are among the companies that disclosed for the first time in the water security module. Most of the companies targeted in the campaign have been targeted over multiple years. Year-on-year engagement through the NDC has played a significant role in encouraging companies to start their disclosure journey with CDP. This year, the NDC recorded six companies who finally disclosed after being engaged with for the seventh year. This includes China Motor Corporation and Oil & Natural Gas Corporation in India The number of companies engaged in the NDC has continued to grow.

Through CA100 the Fund engages directly with three companies, Rio Tinto, Anglo American and Rolls Royce. All three companies have announced net zero by 2050 ambitions and have set short, medium to long term emission reduction *targets* with varying degrees of details. They are implementing a *strategy* of decarbonising their own operations and developing products and technologies that will help clients decarbonise as well as enable the companies to access opportunities presented by the energy transition. There is increased *partnership* with customers, local governments and the like in research and development. These are all areas that CA100 has been pushing the companies to continue to improve. Companies are also being asked to align their *capital spending* with their decarbonisation strategies. Phase 2 of CA100 was launched in 2023 and the Fund continues its active participation in the programme. CA100 conversations with the companies are confidential but annual highlights are published on the each company's website.

Risk Management Disclosure Part (c): how the processes for identifying, assessing, and managing climate-related risks are integrated into the Fund's overall risk management.

Climate risk is considered among other significant financial risks as listed in the SIP. Investment decisions at the asset class level consider climate risk and are tilted towards asset classes that provide greater access to opportunities that mitigate or control climate risk – examples being the private market investments listed in the section above.

The Fund's assets and liabilities are coded on the BlackRock Aladdin Explore platform, a leading industry platform with direct ESG and carbon data feed from MSCI and Sustainalytics, that allows us to have real time access to key ESG/ climate metrics, at mandate and portfolio levels.

The climate change scenario analysis shown in the previous Strategy section provides the Trustee with a holistic overview of the potential impacts of climate change and how they may affect the Fund's

funding strategy (across assets, liabilities, and covenant). This is an important risk management tool for a top-down risk and opportunity assessment.

From the sponsor's perspective, TfL has fully integrated climate risk and adaptation into its governance structure, with the Executive Committee Sustainability Group given management responsibility and the Board (chaired by the Mayor) with oversight and advisery responsibility. All risks in the organisation are managed through the ERM framework, which has been updated to include climate risk as a standalone Level 1 risk. TfL intends to use risk modelling to quantify the probability and severity of events, leveraging data from internal information systems as well as third-party data from the Met Office. The long-term aim of the organisation is to have an integrated approach to managing climate risks and to conduct in-depth quantitative risk modelling to improve performance.

Climate risk (the possibility of climate change leading to volatility or underperformance in the assets) has been added to the IC risk register. The likelihood and controls for the risk are considered.

At the manager level, the Fund continually engages with the investment managers and require the incorporation of climate risks and opportunities into their investment process (thereby integrating climate change into traditional financial analysis). The Fund's investment adviser, WTW, provides the IC with a biennial "Sustainable Investment Review" report. This includes an assessment of the Fund's public equity investment managers in meeting the Fund's requirements on ESG integration and corporate governance. This review has been expanded to also cover several credit and alternatives managers.

IV. Metrics and Targets

Metrics Disclosure Part (a): describe the metrics used by the Fund to assess climate-related risks and opportunities in line with its strategy and risk management process.

A key facet of the Trustee's ongoing monitoring and management of climate change is having good data on the Fund's exposure in this area. Although there are limitations with some of the metrics presented and the completeness of data, the Trustee still has a strong belief that these can helpfully inform the ongoing monitoring and management of the Fund. The Trustee considers metrics across the SI spectrum, but the focus within this statement is those in climate change.

The Fund runs a complex investment strategy covering public and private markets and also hedge funds. Climate disclosure is quite comprehensive for the public markets when compared to private and hedge funds and the Fund is nudging its managers in these alternative asset classes to improve data quality. The Fund has added Liquid Alternatives (covering the Fund's hedge fund portfolio) as a new disclosure this year and undertaken to refresh private markets data on a more regular as the data availability improves.

At a total Fund and asset class level, the Fund reports the following metrics, on an annual basis, which the Trustee Board takes into consideration in investment strategy setting, risk management and manager evaluation:

Absolute Carbon Emissions – This is an 'absolute emissions' metric which gives the total greenhouse gas ("GHG") emissions attributable to the Fund's assets. This is calculated in line with the GHG protocol methodology and currently includes only Scope 1 and 2 Emissions. This year, the Fund reports scope 3 Emissions separately on a best endeavours basis.

Weighted Average Carbon Intensity ("WACI") – This is an 'emissions intensity' metric which gives the total greenhouse gas emissions attributable to the Fund's assets per some form of unit (such as per $ invested or $ of company revenue).

Percentage of investments with an "ESG" tilt – This is a metric which demonstrates the Fund's ambition to benefit from the opportunities presented by decarbonisation.

Portfolio alignment - An additional metric this year to measure the compatibility of the Fund's investment portfolio with the aspiration to limit global temperature rises to 1.5 degrees Celsius.

It is also important to be clear which emissions are captured within the above metrics and therefore the Trustee have referred to the categories of emissions as follows:

- Scope 1 emissions: all direct emissions from the activities of an entity or the activities under its control

- Scope 2 emissions: indirect emissions from electricity purchased and used by an entity which are created during the production of energy which the entity uses

- Scope 3 emissions: all indirect emissions from the activities of the entity, other than scope 2 emissions, which occur from sources that the entity does not directly control.

Scope 3 emissions are significantly more difficult to calculate than scope 1 or scope 2 emissions for any given entity. It is also the case that, for some assets, even scope 1 and scope 2 emissions are difficult to calculate. The Fund uses best endeavours to make as full a disclosure as it can, subject to overriding constraints of reasonable time and cost for doing so. The Fund is working actively with its investment managers to improve the quality of the data supplied for these purposes over time.

The metrics are calculated through BlackRock Aladdin and MSCI on segregated, public assets (equity and bonds).

At a sector and issuer level, the Fund also uses the TPI tool which allows the assessment of carbon management quality and carbon performance for key companies within high-risk sectors.

Metrics Disclosure Part (b): Disclose absolute emissions metric, emissions intensity metric, portfolio alignment metric and an additional climate change metric.

As of 31 March 2025, the Fund has calculated the metrics below (for the carbon metrics, the percentages in brackets after each asset class show the coverage as a percentage of the Fund's total assets):

Metric	**March 2025**	**March 2024**
Absolute Carbon Emissions	Equity (Active + Passive) (26.3%) : 316,720 tons of Scope 1 and 2 carbon emissions ; and 2.935m tons of Scope 3 estimated carbon emissions Equity (Active) (13.9%): 122,128 tons of Scope 1 and 2 carbon emissions and 1.743m tons of Scope 3 estimated carbon emissions Corporate bonds (3.0%): 15,184 tons of Scope 1 and 2 carbon emissions; 169,243 tons of Scope 3 estimated carbon emissions **New metrics added, to replace old metrics going forward:** **Equity and corporate bonds (**29.2%): Scope 1/2 (Active +Passive) : 331,903 Tons CO2e Scope 1/2 (Active): 137,312 Tons CO2e Scope 3 (Active+Passive): estimated 3.1 million Tons CO2e	Equity (Active + Passive) (33.1%): 360,245 tons of Scope 1 and 2 carbon emissions ; and 2.571m tons of Scope 3 estimated carbon emissions Equity (Active) (17.4%): 234,504 tons of Scope 1 and 2 carbon emissions and 1.706m tons of Scope 3 estimated carbon emissions Corporate bonds (2.9%): 21,136 tons of Scope 1 and 2 carbon emissions; 353,276 tons of Scope 3 estimated carbon emissions

	Equity and corporate bonds including Alternative credit: (33.4%) Scope 1/2 (Active +Passive) : 378,896 Tons CO2e **Sovereign bonds including LDI** (14.4%) Scope 1/2: n/a **Liquid alternatives** (12.7%): Scope 1/2: 95,688 Tons CO2e, on single name exposures.	
Weight Average Carbon Intensity[1]	**Equity and corporate bonds (**29.2%): Scope 1/2 (Active +Passive) : 89.5 Tons CO2e / $M revenue Scope 1/2 (Active): 68.0 Tons CO2e / $M revenue Scope 3 (Active+Passive): estimated 696.9 Tons CO2e / $M revenue **Equity and corporate bonds including Alternative credit:** (33.4%) Scope 1/2 (Active +Passive) : 102.8 Tons CO2e / $M revenue **Sovereign bonds including LDI** (14.4%) Scope 1/2: 150 Tons CO2e / $M GDP Nominal. **Liquid alternatives** (13.7%): Scope 1/2: 87.5 Tons CO2e / $M revenue, on single name exposures.	**Equity and corporate bonds** (36.0%): Scope 1/2 (Active +Passive): 99.2 Tons CO2e / $M revenue Scope 1/2 (Active) : 85.7 Tons CO2e / $M revenue Scope 3 (Active+Passive) : estimated 731.7 Tons CO2e / $M revenue **Equity and corporate bonds including Alternative credit** (39.9%): Scope 1/2 (Active +Passive): 107.3 Tons CO2e / $M revenue **Sovereign bonds including LDI** (9.2%)**:** Scope 1/2: 201 Tons CO2e / $M GDP Nominal. **Liquid alternatives** (17.5%): Scope 1/2: 52.9 Tons CO2e / $M revenue, on single name exposures.
Percentage of investments with an “ESG” tilt	15.9% of total assets under management	13.5% of total assets under management
Portfolio Alignment	49% of portfolio companies assessed by TPI[2] are aligned with 1.5-degree to 2-degree targets in 2050 (see * note below)	77% of portfolio companies assessed by TPI are aligned with 1.5-degree to 2-degree targets in 2050

1. 2016 baseline: Scope 1/2, 182.09 Tons CO2e / $M revenue at 31 Dec 2016 (across the actively managed public equity and bond holdings). Source: Aladdin/ MSCI
2. The Transition Pathway Initiative (TPI) is an independent, authoritative source of research and data into the progress being made by the financial and corporate world in making the transition to a low-carbon economy

Comments on changes in the metrics over the year:

Carbon metrics:

Scope 1 and 2 WACI is the key metric and it fell over the year for the active equity and corporate bonds. The Fund's WACI was down from 85.7 to 68.0, by around 21% over the last twelve months against no change experienced by the benchmark. The reduction would be a combination of 'benchmark effect' and the stock selection of portfolio managers.

ESG tilted investment metric:

The Fund has total investments & commitments of c. £2.4bn in assets with an ESG tilt as of March 2025, representing c. 15.9% of total assets. The Fund continues to deploy capital in ESG tilted assets, of which a high proportion is climate transition investments.

Portfolio Alignment metric:

49% of companies assessed by TPI[3] are aligned with 1.5-degree to 2-degree targets in 2050 (50% if including international and national pledges). This compares with 77% (79%) last year. There is a larger number of 'no or unsuitable disclosure' this year. The total number of portfolio companies assessed by TPI is 16 (note this number may increase due to TPI coverage expansion). This compares with 21 holdings last year. Note that because this only includes a small number of holdings, a marginal change in the number of holdings in a category would result in a large change in the percentage. For example, there are 5 companies in the 'No or unsuitable disclosure' category this year compared to 3 companies last year, but the percentage represented (by market value) changed from 19% last year to 45% this year.

* The decline from 77% to 49% may seem significant, but its actual impact is marginal in the broader context. Firstly, TPI figures are based on assessments of 16 companies in 2025 and 21 companies in 2024, out of more than 330 companies in the Fund's active equity portfolio. Thus, the number of companies assessed is relatively small compared to our overall portfolio. Additionally, the number of companies "not aligned" with TPI has only increased from one in 2024 to two in 2025. Given that 330 companies have seen a material decline in carbon intensity this year, this change is negligible.

Secondly, the bulk of the change is due to a nearly 70% increase in the category assessed as "Lack of Suitable Data Disclosure," primarily in the "food producers" sector. Here, disclosures are driven mainly by local regulations rather than TPI reporting templates.

On a broader note, ESG compliance has seen some setbacks, with divergences in reporting emerging in different jurisdictions. However, this does not necessarily reflect the actual actions taken in terms of engagement and collaboration.

Table below shows the breakdown. This covers the actively managed, segregated public equity holdings, which was 13.9% of the Fund's assets or £2.4bn (out of which c. £42m was covered by TPI assessments). Corporate bonds were not included as no suitable identifier were available to match holdings. TPI does not provide coverage for private companies or sovereign bond issuers. The fund managers are asked to explain their engagement strategy for any fossil fuel company that is assessed as not aligned to the Paris Agreement goals by TPI or having no suitable disclosure, with divestment being an option if there is lack of progress over time[4].

TPI Assessed Alignment in 2050	**By Market Value**	**No. of Companies**
1.5 Degrees	46	7
2 Degrees or below	3	1

[3] The Transition Pathway Initiative (TPI) is an independent, authoritative source of research and data into the progress being made by the financial and corporate world in making the transition to a low-carbon economy.
[4] For engagements, we look at TPI scores on company management quality, and 2035 and 2050 carbon performance alignments.

International Pledges	1	1
National Pledges	0	0
No or unsuitable disclosure	45	5
Not aligned	6	2
Total	100.00%	16

Data coverage and quality

Table 1 below summarises the Fund's coverage of carbon emissions data in this report by asset class as at 31 March 2025 and considerations in relation to data coverage. Note all the %s shown are of the total Fund:

Table 1

Asset Class (% of total Fund at 31 March 2025)	**Data coverage-scope 1&2**	**Data coverage – scope 3**	**Steps being taken by the Fund to improve data coverage and quality**
Listed equity, 26.3%	26.3% included in this year's reporting Please see Table 2 below for MSCI source of data.	26.3% included in this year's reporting All data was estimated by MSCI	The Fund participates in CDP's Non Disclosure Campaign and also asks the managers to engage with companies, in order to increase emission disclosures.
Traditional fixed income (developed market sovereign bonds and investment grade credit), 5.1%	5.1% included in this year's reporting Please see Table 2 below for MSCI source of data.	3.0% included in this year's reporting (corporate bonds) All data was estimated by MSCI	See Note 1 below.
Liability hedging (mostly Gilts and derivatives, and a small portion of Network Rail bonds), 12.3%	12.3% included in this year's reporting	0% included in this year's reporting	See Note 1 below.
Alternative liquid credit, 6.8%	5.3% included in this year's reporting	5.3% included in this year's reporting	Asset-backed securities not included. See Note 2 below.

Private markets (including alternative illiquid credit), 27.7%	0% included in this year's reporting	0% included in this year's reporting	See Note 3 below.
Liquid alternatives (hedge funds and alternative beta), 20.0%	12.7% included in this year's reporting	8.5% included in this year's reporting	Included where the nature of underlying assets allows. Also see Note 4 below.
Cash and equivalent, 1.8%	Cash is assumed to have nil carbon emissions.	Cash is assumed to have nil carbon emissions.	-
Total, out of 100% of Fund assets	*61.7%*	*43.1%*	-

For public assets (equity and corporate bonds), the table below shows the MSCI source of data (weighted by market value) for scope 1 and 2, as at 31 March 2025. Based on Aladdin.

Table 2

	No data	**Estimated**	**Reported**	**Grand Total**
Grand Total	7%	11%	82%	100%

Note 1: Sovereign bond holdings are disclosed as a separate line due to the underlying methodology being materially different, as are the potential actions available to the Trustee. For UK Government Bonds, for example, the carbon emissions are calculated as the territorial emissions in the whole of the UK i.e. those that take place within a country's territorial boundaries and include exports but omits imports. The denomination used to attribute emissions is the total amount of UK Government Debt outstanding. The rationale for the current exclusion of Government Bonds from the Fund's main carbon metrics is as follows:

- The Trustee primarily holds Government Bonds as assets to hedge the Fund's liabilities and as such, even if reducing exposure to these assets would lead to an overall improvement in climate metrics, it would expose the Fund to excessive funding and investment risk

- The Trustee recognises that it has limited capacity and capability to engage with the Governments on climate related metrics

- The level of financial risk arising from these assets is perceived to be much smaller i.e. the influence of climate change on the price of Government Bonds in comparison to the other assets held is likely to be lower

Whilst the above provide the rationale as to why the Fund excludes government bonds and liability hedging assets from the Fund's main carbon metrics, the Trustee still believes it is useful to monitor these figures over time. Therefore, the Trustee has reported emissions from the sovereign bond and LDI portfolios separately in the section above.

Note 2: Alternative liquid credit covers 4 mandates within the Fund, with assets mostly invested in high yields, loans/ structured products, Emerging Market Sovereign Debt, short-term government debt and derivatives. The Fund has disclosed the data for a portion of the assets where data was available. The Fund continues to engage its managers to ask for more data coverage and has made it

mandatory for managers to report carbon data for any future mandate awards or re-ups to any existing mandates (subject to availability of carbon data in the asset class).

Note 3: Private markets data will be reported in the Net Zero Carbon Journey Update every 2 to 3 years. The Fund continues to engage its managers to ask for more data coverage and has made it mandatory for managers to report carbon data for any future mandate awards or re-ups to any existing mandates (subject to availability of carbon data in the asset class).

Note 4: Liquid alternative mandates often make use of derivative instruments in their investment process and they can incorporate climate considerations and conviction to go long or short on a range of asset classes. The net-long carbon emissions of these strategies tend to be insignificant. The Fund has reported data on the proportion of assets that is in single name equity/ corporate exposure, as this is where data is available.

Targets Disclosure: describe the targets used by the Fund to manage climate-related risks and opportunities and performance against targets.

The Trustee has reinforced their views of climate change being a financial risk to the return of the Fund's assets by committing to a Net Zero Carbon Emissions Plan, which would see the Fund achieve a 100% reduction in its carbon emissions no later than 2045. To assist in meeting this target, a target reduction of 55% of carbon emissions has been set for 2030 at the latest. These targets are set based on the comparison with the December 2016 baseline, when the Paris Agreement came into effect.

The Fund intends to progress towards the targets above by including emissions-based guidelines in manager mandates, allocating to low carbon transition assets (such as renewable energy infrastructure, energy efficient buildings, controlled environment farming) and by engaging with investee companies to establish net zero business strategies, with divestment being an option on the table if companies are not sufficiently committed to change. The Fund also excludes any companies that derive over 30% of their revenues from thermal coal mining or power generation.

1) The Trustees are actively looking to do more and are targeting to invest at least 15% of the Fund's portfolio by 2025, by value in investments that have a strong "ESG tilt". This represents a material increase in the Fund's ambition to benefit from the opportunities presented by decarbonisation and "investment with purpose" objectives. The Fund is currently in line with the 2025 target of a 15% allocation to "ESG" tilted investments, with c.15.9% of assets invested in/ committed to those having an "ESG" tilt.

2) The net zero targets will be measured using the weighted average carbon intensity ("WACI") metric, which is the same metric used to measure the Fund's carbon footprint. This will allow the Fund to effectively measure progress through making comparisons with the baseline.

The table below illustrates the progress of the Fund's WACI across the *actively managed public equity and bond holdings* since 31 December 2016:

Date	Fund WACI[5]	MSCI AC World Index WACI
31 December 2016	182.1	219.9
31 March 2020	123.4	180.5
31 March 2021	115.7	157.6
31 March 2022	114.6	162.8
31 March 2023	98.5 (103.7)	149.8
31 March 2024	80.9 (85.7)	118.2
31 March 2025	66.7 (68.0)	118.4

Figures in brackets include Russell emerging market equity which is a pooled fund. Prior to 2023, data shows segregated mandates only (as reported on Aladdin). Going forward the data will be updated to include passive equity and 2016 baseline will be updated to allow for comparison with new data.

Progress against the Net Zero Carbon Journey Plan

The Fund published its first Net Zero Carbon Journey Update in October 2023, available on the Fund's website:

https://www.tflpensionfund.co.uk/net-zero-carbon-journey-update/

It shows that the Fund is currently ahead of schedule to meet the target of a 55% reduction by 2030. The update will be published every three years and provide a detailed quantitative assessment of progress against the targets.

This report will provide a qualitative assessment of annual progress. Since 31 December 2016 the WACI of the Fund (as calculated on the segregated public equity and bond holdings) has reduced by 63%. By comparison, the WACI of the MSCI AC World Index has reduced by 46% over the same period. The Fund's WACI was down by around 18% over the last twelve months while the benchmark's figure remains similar.

The reduction since 2016 is a combination of 'benchmark effect' and the stock selection of portfolio managers. The Fund announced its Net Zeron Carbon Journey Plan in October 2021 and communicated this with all its managers. Since then the Fund has been in discussions with its managers, starting with the public equity and credit mandates, to incorporate net zero guidelines in the mandates while preserving the Fund's risk and return requirements. The investment grade credit mandate was the first to incorporate the new guidelines in Q1 2024 and the 'value biased' equity mandate followed in Q3 2024.

Note that, although the data above shows over 60% reduction in WACI since the 2016 baseline, this only covers the segregated public equity and bond holdings. Data for the other asset classes including private markets (which makes up a large proportion of the Fund's assets) remains incomplete. Further, the WACI can fluctuate from year to year as it is a result of stock selection and the benchmark effect.

With regard to the assets not yet covered by the table above:

- The Fund expects its private market assets to exhibit a strong trend of carbon reductions, as a significant portion has been invested in renewable energy and other low carbon sectors;
- The passive equity portfolio was earmarked for restructuring in the 2024/25 Fund Year to incorporate ESG guidelines. Although this exercise was postponed as the Fund went through de-risking and reducing its equity allocation, it remains on the agenda;

[5] Tons CO_2e / $M revenue across the actively managed public equity and bond holdings.

- For the other assets including sovereign bonds, structured credit and hedge funds, the nature of the asset class and/ or structure of the market presents more significant obstacles for influencing the level of financed emissions. In this space the Fund has encouraged its managers to conduct policy engagement and advocacy to promote systemic change.

Glossary

Climate Action 100+
An investor initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.

Carbon Intensity (Weighted Average Carbon Intensity)
Carbon intensity (or emission intensity) measures the carbon emissions per unit of output (expressed as CO_2e tonnes /$m Sales). Weighted average means each company's carbon intensity is adjusted by its weight in the Fund's total portfolio (as a percentage of the total market value.

CDP
formerly the Carbon Disclosure Project. The CDP is an international non-profit organisation that helps companies and cities disclose their environmental impact.

CO_2e
"Carbon dioxide equivalent" or "CO_2e" is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO_2e signifies the amount of CO2 which would have the equivalent global warming impact.

COP
The United Nations Climate Change Conference. COP stands for Conference of the Parties, and is attended by countries that signed the United Nations Framework Convention on Climate Change (UNFCCC)– a treaty agreed in 1994.

ESG tilted assets/ investments
Investments in sectors that have real-world environmental and/or social impacts, including but not limited to renewable energy, sustainable agriculture/ biodiversity, circular economy, healthcare, education, social infrastructure, and green buildings.

GHG
Greenhouse Gases

Paris Agreement
The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at the UN Climate Change Conference (COP21) in Paris, France, on 12 December 2015. It entered into force on 4 November 2016. 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."

Scope 1 Emissions
Direct emissions from owned or controlled sources

Scope 2 Emissions
Indirect emissions from the generation of purchased energy

Scope 3 Emissions
Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organisation (in
this case, the Fund's investee companies), but that the organisation indirectly impacts in its value chain. Scope 3 emission sources include emissions both upstream and downstream of the organisation's activities, such as business travel, procurement, waste and water.

SDGs
Sustainable Development Goals

SIP
Statement of Investment Principles

Stewardship
A purposeful dialogue between shareholders and boards with the aim of ensuring a company's long-term strategy and day-to-day management is effective and aligned with shareholders' interest. Good stewardship should help protect and increase the value of investments.

TPI
Transition Pathway Initiative

UN PRI
United Nations Principles of Responsible Investments

Voting rights
Equity investors typically enjoy rights to vote at annual and extraordinary general meetings (AGMs and EGMs). The resolutions on which shareholders vote will vary according to individual countries' legal frameworks. They may include voting on an individual director's appointment, remuneration or mergers and acquisition.

Appendix 1 Paris Agreement Capital Transition Assessment (PACTA)

The Paris Agreement Capital Transition Assessment (PACTA) is an open-source, independent tool that allows users to get a granular view of the exposure and climate goal alignment of their portfolios by sector and for related technologies.

Coverage of PACTA

- PACTA covers **seven sectors** that are amongst the **most carbon-intensive** sectors of the economy, and, therefore, are likely to be more exposed to climate transition risks. Those key sectors are **Oil and Gas, Coal, Power, Automotive, Steel, Cement and Aviation**. PACTA covers sectors producing 75% of emissions, overall.
- In each sector, PACTA **focuses on** the part of the **value chain** which makes the largest contribution in terms of CO_2 emissions and where the potential influence and impact on emissions can therefore be greatest.
- PACTA alignment metrics are then selected to **measure the technology transitions** that will be needed in each of those value chains, with a focus on the phaseout of high carbon technologies and the ramp up of low carbon technologies ("climate solutions").
- PACTA **measures alignment** with scenarios using a combination of **production capacity** and **CO_2 emissions intensity** metrics.
    - The analysis covers scope 1 for aviation and power, scopes 1 and 2 for steel and cement, scope 3 for automotive and coal, and scope 1, 2 and 3 for oil and gas.
    - PACTA **recommends the use of the production capacity metrics** to inform decision-making, rather than GHG emissions for the **power, automotive, coal, and oil and gas sectors**, since they provide technology-level insights on what needs to happen according to the scenario pathways.

PACTA and the Fund's portfolio

- The **Climate scenario analysis** for **listed equities and corporate bonds**, based on the PACTA methodology, **provides answers** to the following questions:
    - What **proportion** of the portfolio is invested in **carbon-intensive sectors**?
    - How relevant is the analysed portion of the portfolio in terms of overall portfolio emissions?
    - Which climate change scenarios do the production plans of the companies in the **portfolio align** with?
    - Which **companies** in the portfolio **significantly influence** the results?
    - How does the portfolio perform compared to market **benchmarks**?

For its portfolio alignment analysis, the Fund used the following scenarios from the World Energy Outlook (WEO) 2023:

- **Net Zero Emissions by 2050 Scenario (NZE Scenario)**: A normative scenario that outlines a pathway for the global energy sector to achieve net zero CO_2 emissions by 2050, with advanced economies reaching net zero ahead of others. This limits global warming to below 2°C above pre-industrial levels, with an anticipated rise of 1.5°C.

- **Stated Policies Scenario (STEPS)**: This scenario reflects current and announced policies, analysed on a sector-by-sector basis. While it is not explicitly designed to meet a specific temperature target, prevailing industry expectations suggest that these policies are **unlikely** to restrict global temperature increases to below 2°C above pre-industrial levels, with an anticipated rise of 2.4°C.

The analysis highlights the portfolio's current exposure to economic activities that are likely to be impacted by the transition to a low-carbon economy. It also provides an indication of the anticipated

future exposure to both high- and low-carbon activities, based on the disclosed production capacities and investment plans of companies held within the portfolio. The 2025 review encompassed the Fund's equity holdings (approx. £2.44 billion) and corporate bond holdings (approx. £310 million). A summary of the key findings is presented below.

Charts 1–4 illustrate the sectoral contributions to total emissions within both the equity and bond portfolios, comparing data from 2024 to 2025. These charts highlight the climate significance of specific sectors, offering insight into where the highest emissions are concentrated across the portfolio.

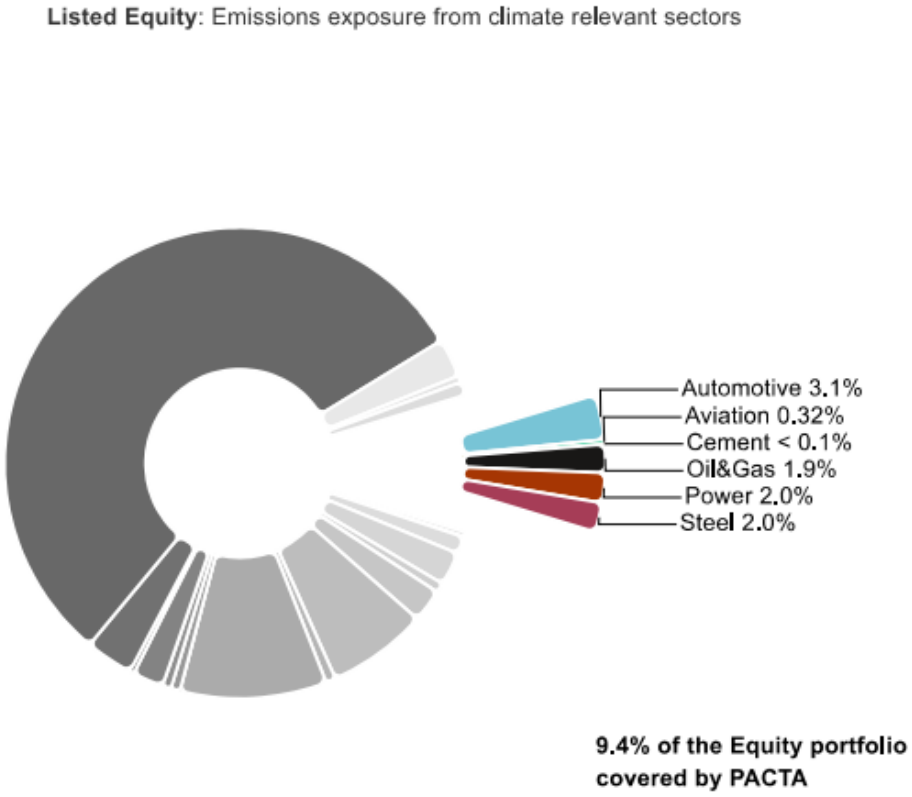
It is important to note that this analysis differs from a breakdown by market value (which is illustrated in Charts 1a-2a for comparison). While some sectors may represent a smaller share of the portfolio by value, they can still contribute disproportionately to emissions due to their inherently carbon-intensive nature. This underscores the need to focus on high-impact sectors when assessing climate-related risks and opportunities.

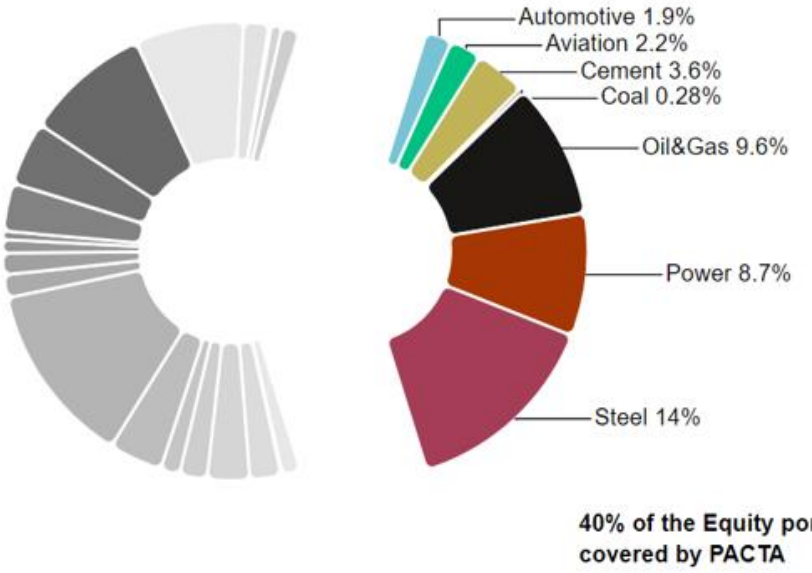
In 2025, within our listed equity portfolio, the automative sector accounted for 3.1% of emissions exposure, making it the largest contributor, following by steel and power sectors which accounted for 2% respectively. Notably, emissions from coal in the equity portfolio no longer featured in the breakdown (meaning it is insignificant or zero), reflecting shifts in portfolio composition and/or company-level emission reductions.

Note that, the percentage of emissions exposure covered by PACTA fell significantly this year; by contrast, the financial exposure covered by PACTA also fell but much less remarkably. The Fund has sought clarification from PACTA on this point. This could be related to the rise of energy use by the AI sector but it is not confirmed.

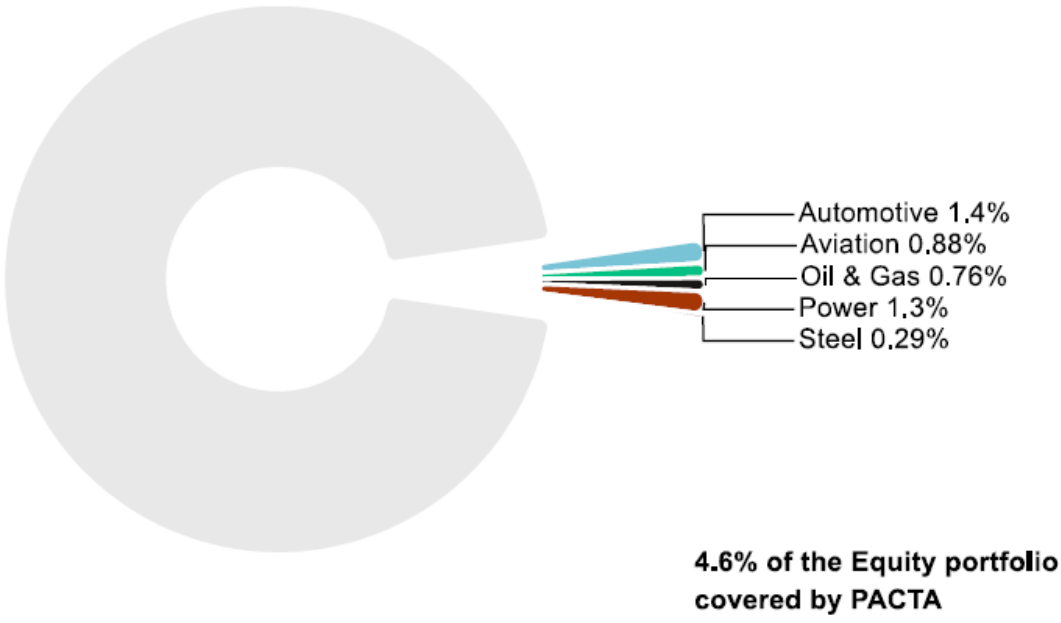
Within our corporate bond holdings, nearly 27% of emissions exposure originated from the oil & gas sector in 2025 - a marked decrease from the previous year, while the other sectors have remained in a similar range to 2024.

Charts 1 & 2: Listed equity - current exposure to climate transition risk, 2025 (top) vs. 2024 (bottom)





Charts 1a &2a Listed Equity: Financial exposure to climate relevant sectors: 2025 (top) vs. 2024 (bottom)



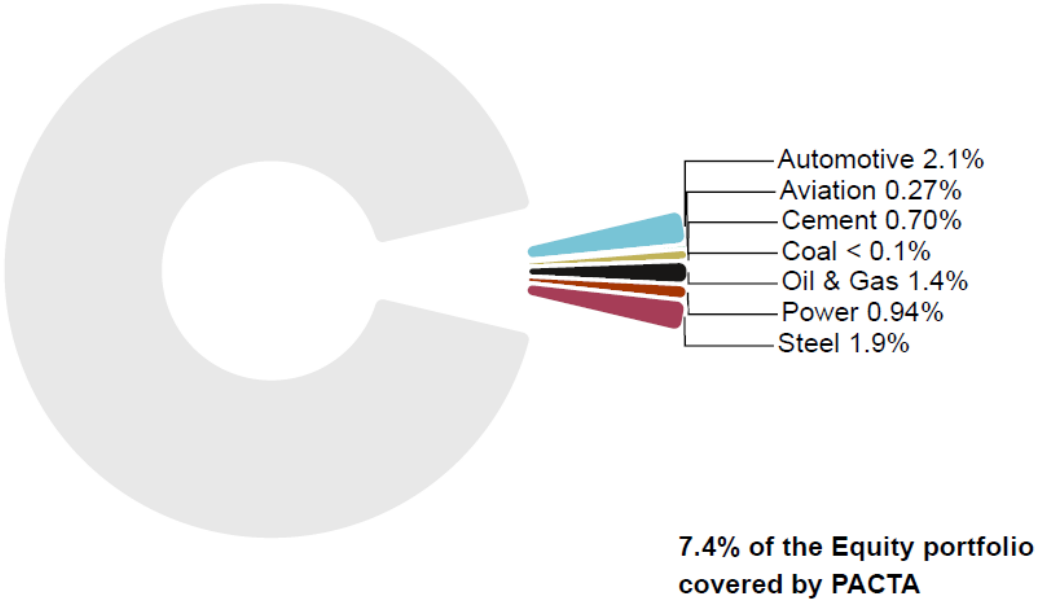
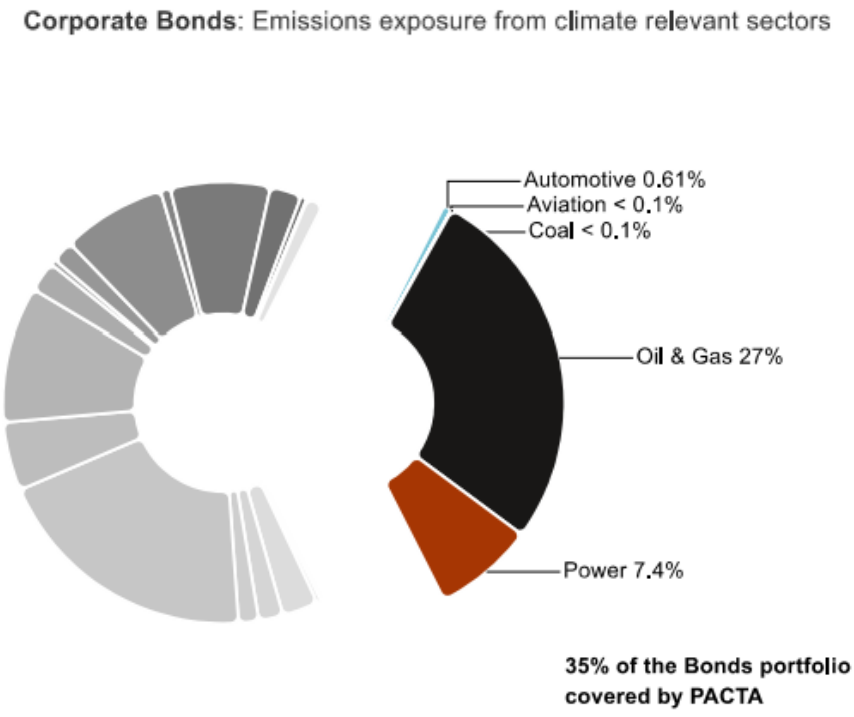
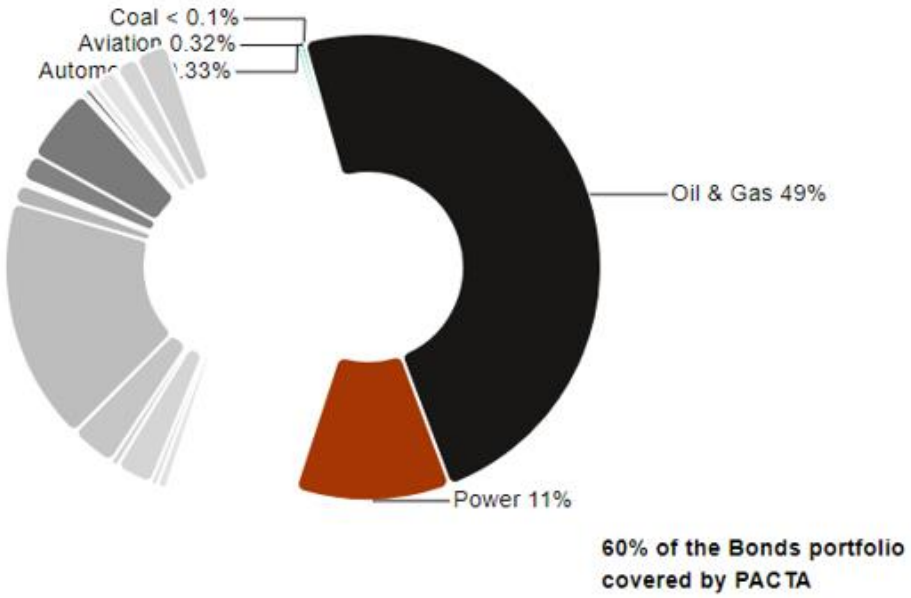


Chart 3 & 4: Corporate bonds - current exposure to climate transition risk, 2025 (top) vs. 2024 (bottom)





Exposure to climate transition risks vs. low-carbon technologies:

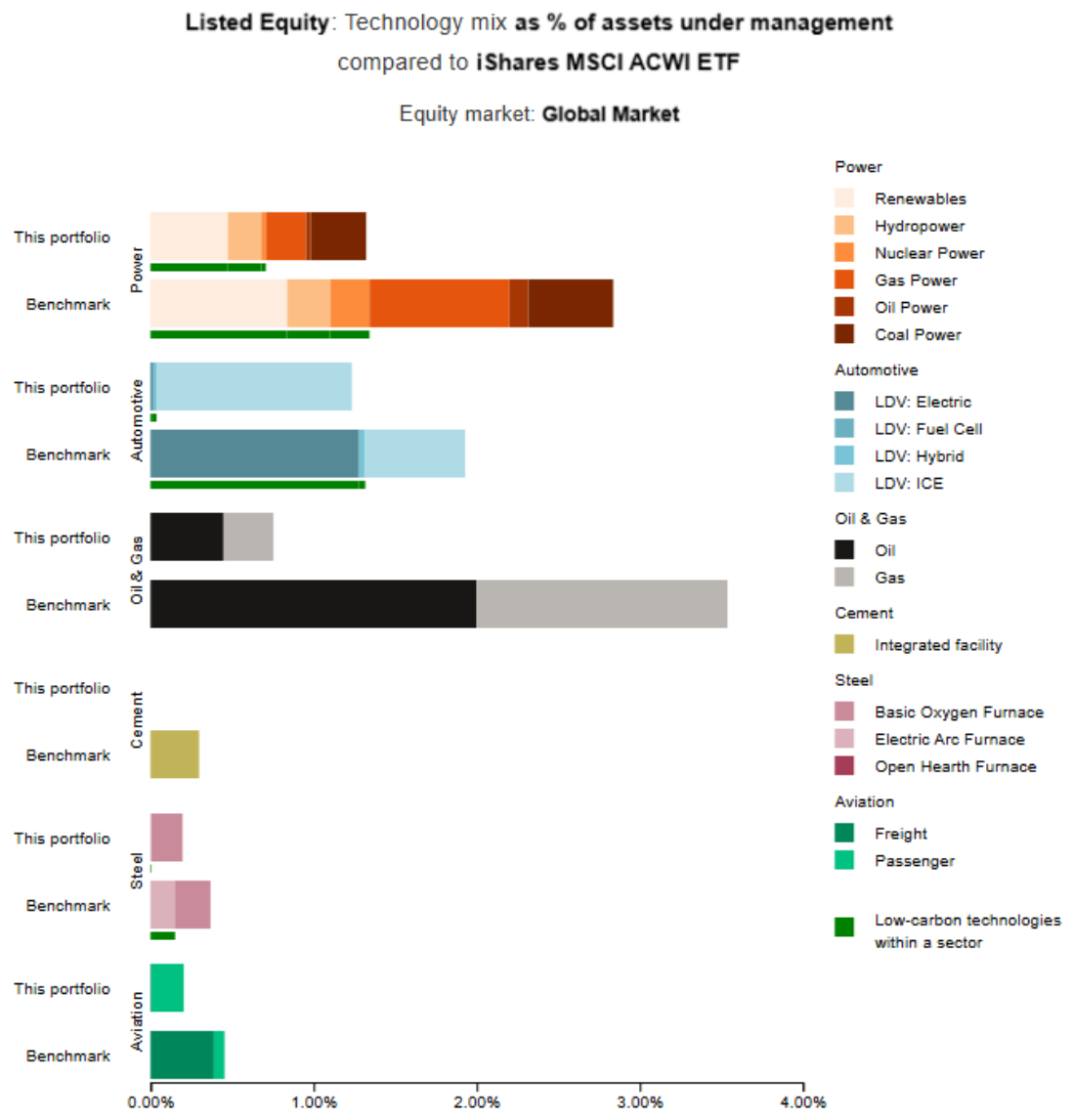
The portfolio's exposure across various sectors and technologies is illustrated in the accompanying analysis. Within climate-relevant sectors, technologies play distinct roles in facilitating the transition to a low-carbon economy. Therefore, assessing portfolio exposure at the technology level is essential for understanding the portfolio's alignment with climate transition pathways.

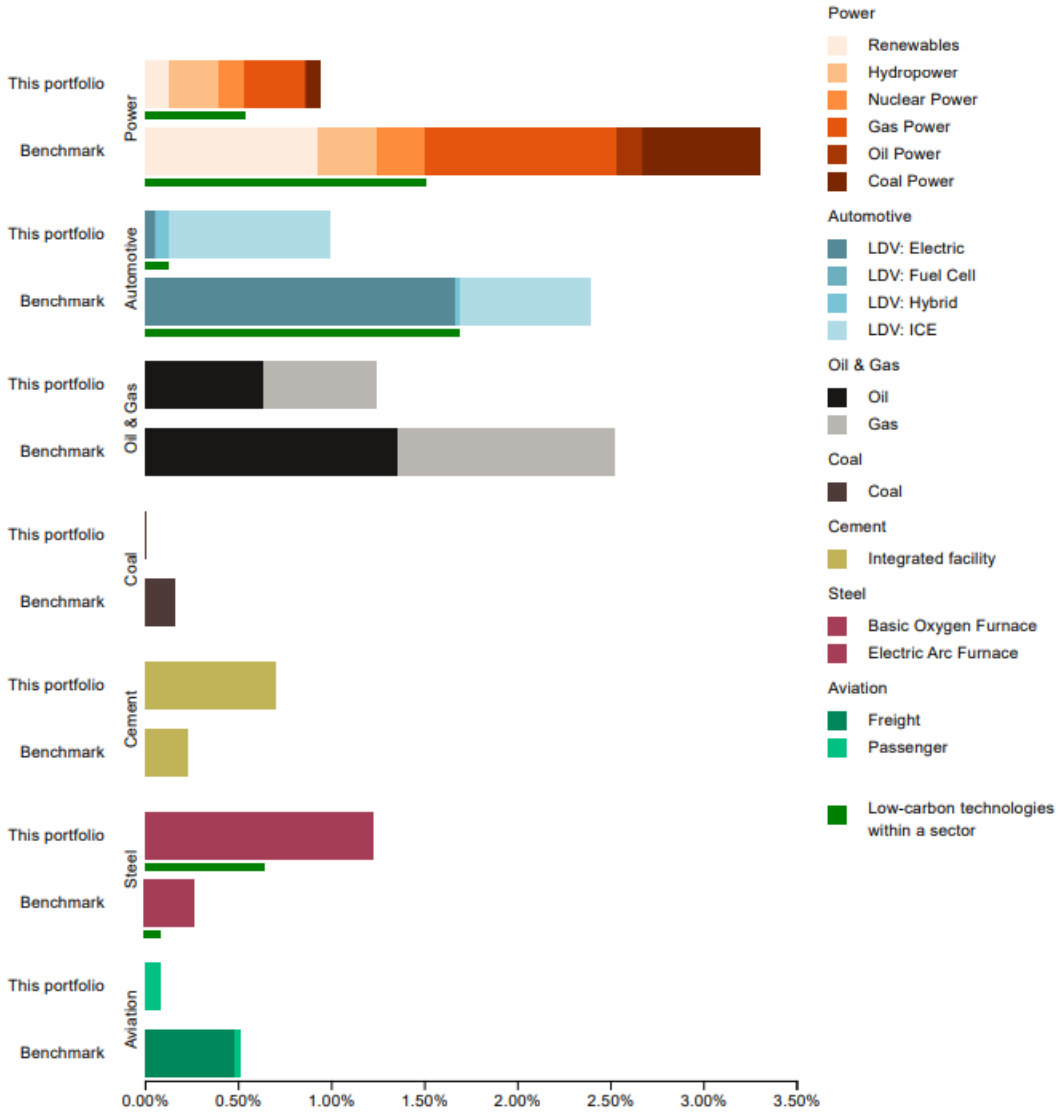
Overall, our listed equity portfolio has exposure to the power, automotive, oil & gas, cement, steel, and aviation sectors, although it is lower compared to the MSCI All Country World Index, which serves as our benchmark.

The managers that the Fund has selected have also maintained exposure to the materials and utilities sectors, contributing to broader portfolio diversification, particularly in the context of ongoing inflationary pressures. Many of these companies are engaged in the production of critical materials necessary for the global low-carbon transition, such as inputs for renewable energy infrastructure and energy-efficient construction. This positioning reflects the Fund's consideration in the long-term value of these industries, particularly in emerging markets.

This sectoral and technological allocation strategy reflects the Fund's commitment to a balanced approach—supporting the transition to a sustainable economy while ensuring resilience and diversification in changing market conditions.

Charts 5&6: Listed Equity – Current exposure to low-carbon technologies, 2025 (top) vs. 2024 (bottom)





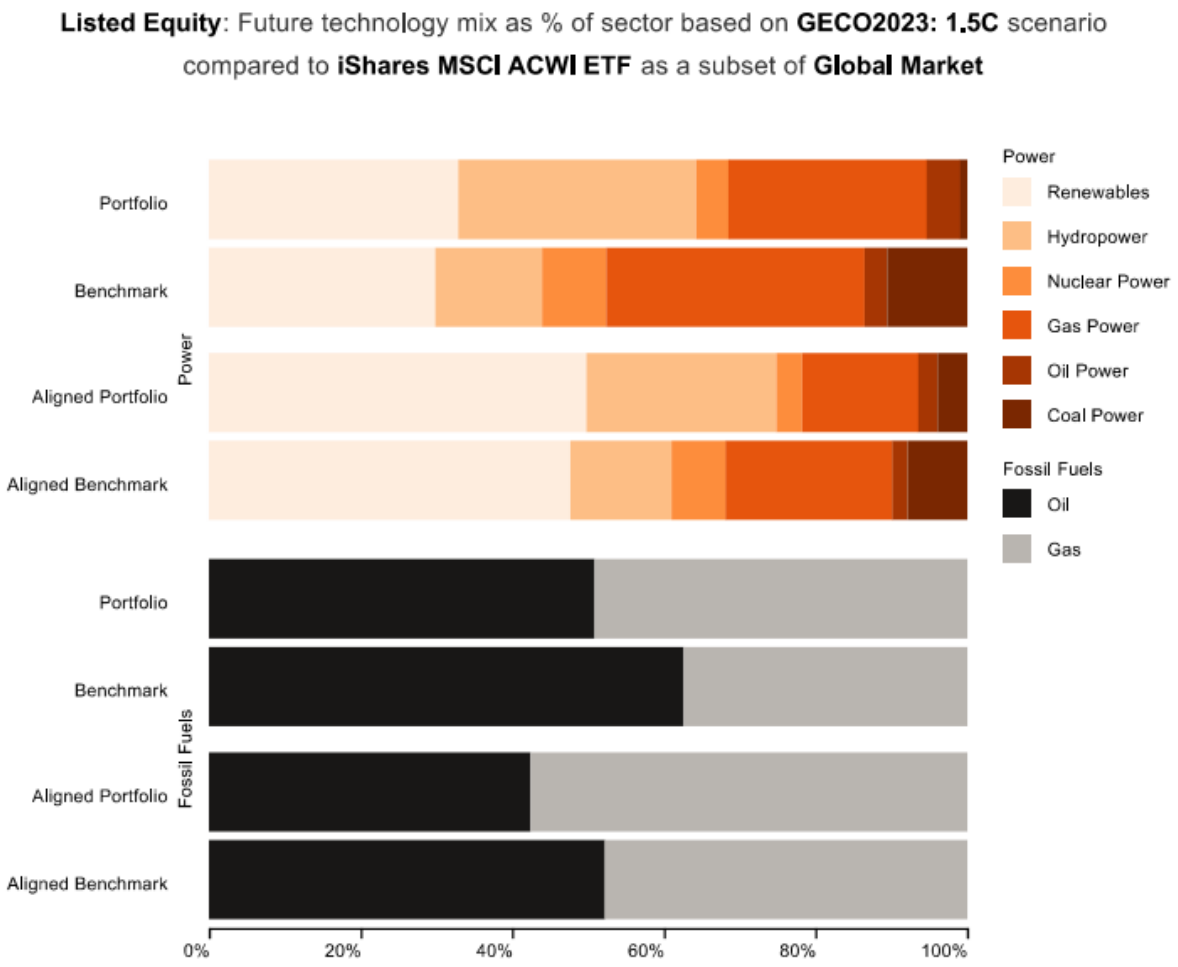
Within the Power sector, the Fund's equity holdings continuously demonstrate a strong alignment with the low-carbon transition compared to the benchmark. Specifically, 53.5% of our holdings in this sector are classified as low-carbon technologies, outperforming the benchmark figure of 47.3%. On the other hand, the percentages of low-carbon technologies in automotive (3%) and steel (2.6%) sector are lower than the ones in the benchmarks (68.3% and 41.1%), respectively. A more detailed company-level analysis in the Automative sector will be provided in the next section. For the Steel sector, although our portfolio has a lower proportion of low-carbon steel technologies compared to the benchmark, our overall exposure to the sector is low, helping to reduce our carbon footprint. In the Cement sector, our exposure has decreased—from 0.7% last year to nearly 0% this year. For fossil fuels, there was no exposure to Coal in the portfolio this year, while the exposure to Oil &Gas has reduced relative to the benchmark compared to last year.

Similar to last year, currently, the PACTA model does not identify any commercially viable green technologies within the cement and aviation sectors. However, innovation in these areas is ongoing, and we are actively engaging with companies involved in these industries, such as Rolls-Royce, to support and monitor their transition efforts.

In terms of anticipated future exposure, for sectors with low carbon alternatives, PACTA can project how the technology mix looks like in five years under a specific scenario, and compare this for the portfolio versus the benchmark. Charts 7 and 8 below show this comparison under the NZE/1.5C and

STEPS scenario (through the Aligned portfolio and benchmark). The results are similar to the current exospore analysis.

Charts 7&8 – Future technology exposure – Portfolio vs. Benchmark



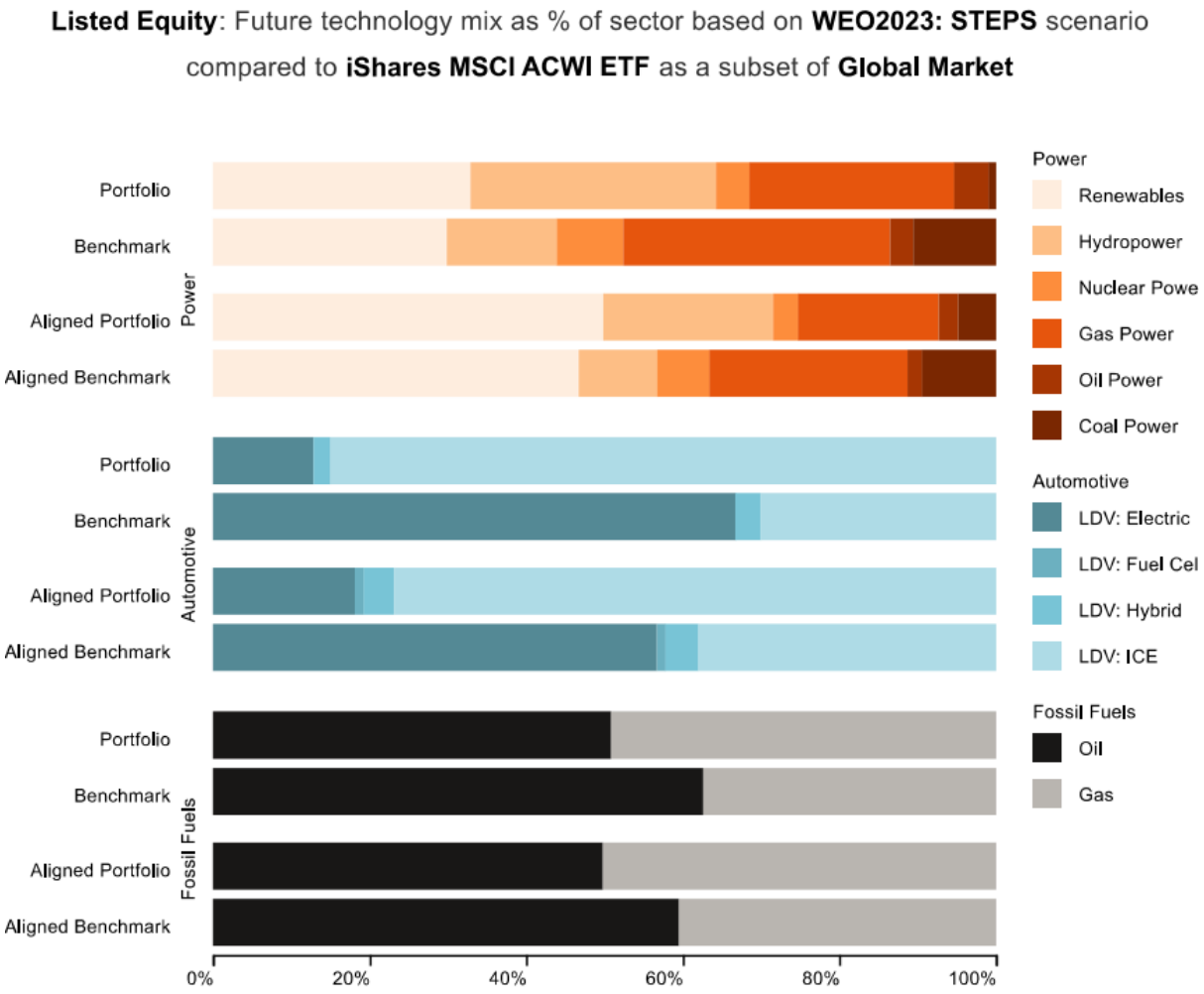


Chart 9 below illustrates the breakdown of production capacity by technology for each company within the automotive sector. The data highlights that several of the Fund's largest equity holdings currently have a relatively limited share of their production in electric and fuel cell vehicles. This reflects the transitional stage of many incumbent automakers as they gradually shift away from internal combustion engine technologies. In response to these findings, the Fund's investment managers have provided commentary to contextualize these positions and outline how these holdings align with the broader climate and transition strategy.

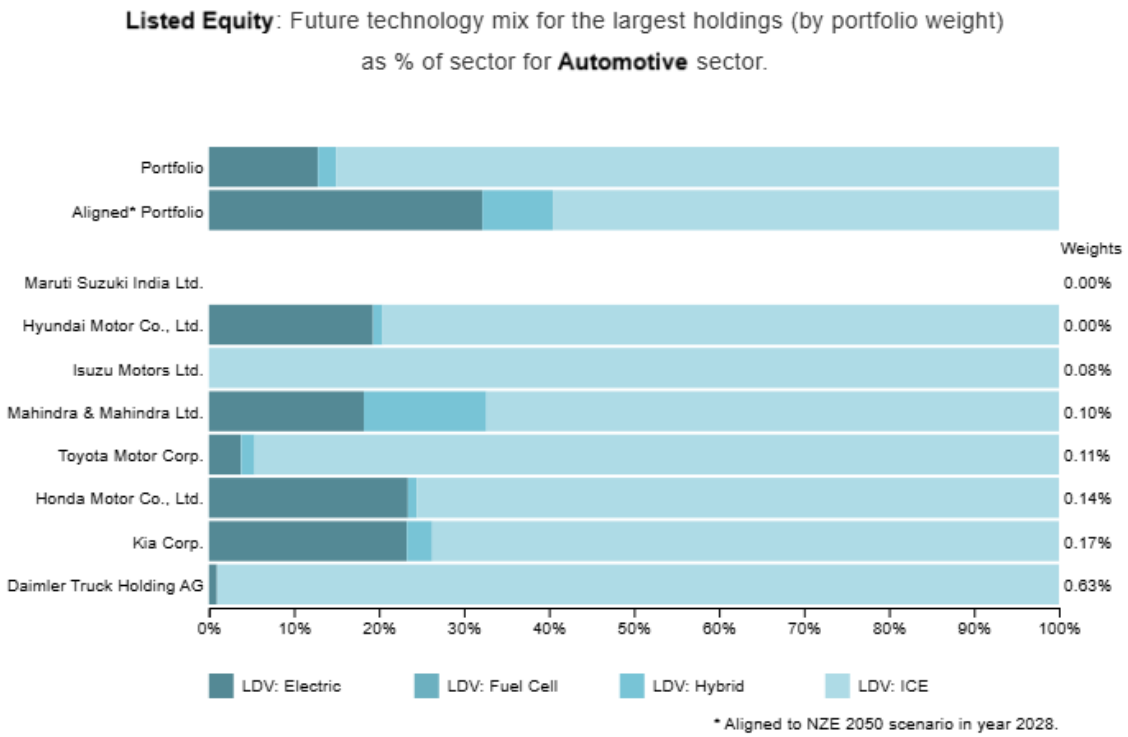
Last year, the managers shared vehicle electrification targets for several automakers, including Honda and Kia. Over the course of the year, we observed a notable increase in the share of electric vehicles within their production capacities. Both Honda and Kia now have over 20% of their production capacity dedicated to electric vehicles. This progress is encouraging, as it reflects a shift by automakers away from internal combustion engine technologies toward newer, greener alternatives. This year, we will be looking into Daimler Truck and Isuzu Motor.

Similar to the market for cars, decarbonization represents a major challenge facing manufacturers of trucks. Whereas the end state for cars seems more certain to be based on electric battery technology (BEV), the end state for trucks is less clear cut. Specifically, the heavy-duty truck market, used for heavier loads and long-distance transportation, appears to favour Hydrogen Fuel Cells (HFC), while BEVs suit lighter trucks and shorter distances. Considering this, Daimlers dual-track strategy of investing in both HFCs and BEVs seems sensible. The manager believes that the dual-track strategy has merit and positions it well for the changes ahead given the wide range of models it produces. In BEVs, specifically, Daimler has certain advantages owing to its continued relationship with Mercedes leveraging the company's R&D into car electrification. Daimler recently began rolling out its first all-

electric heavy-duty truck, the Mercedes Benz eActros 600, with Lidl Italia among its first high profile customers, and in terms of absolute sales its BEV trucks is outselling Volvo. Daimler is not behind peers vis-à-vis the energy transition, as they have successfully produced and commercialized a fully electric truck. Daimler is appropriately positioned for an anticipated rise in demand for electric trucks; the company currently has a vocational model with a range of 200km, and an OTR model with a range of 600km – more or less sufficient from customers' point of view. Daimler also possesses an EV charging business that its management plans to leverage to help augment their electric truck business. The fund manager commented that Daimler's management is being responsible when it comes to transition R&D/capex spending, given the heterogeneous nature of the market and the potential end state solution for different segments of the market.

Isuzu, a leading commercial vehicle manufacturer, faces similar challenges as Daimler in expanding battery electric vehicle (BEV) sales. Commercial vehicles require capabilities such as heavy load carrying capacity, long distance travel range, and extended durability. So far, EVs have been unable to offer satisfactory solutions to these challenges. In addition, commercial vehicle owners tend to be more price-sensitive and are more focused on economic returns than passenger vehicle drivers, who typically drive shorter distances for commuting or leisure. Therefore, the adoption of EVs in commercial vehicles remains limited. That said, Isuzu aims to halve its Scope 1 and Scope 2 greenhouse gas (GHG) emissions from operations by FY2030 and achieve net zero emissions across its product lifecycle by FY2050. Isuzu has embraced a multi-pathway strategy, developing a broad suite of carbon-neutral products and solutions tailored to diverse economic and regulatory environments worldwide. The company is accelerating the development of a comprehensive lineup of carbon-neutral vehicles by 2030, including constructing a new EV research and development and testing facility in Japan, which is scheduled to begin operations in June 2026. Isuzu also plans to invest ¥2.6 trillion between FY2024 and FY2031 to support these technology and infrastructure enhancements.

Chart 9 – Future technology exposure for Automotive sector

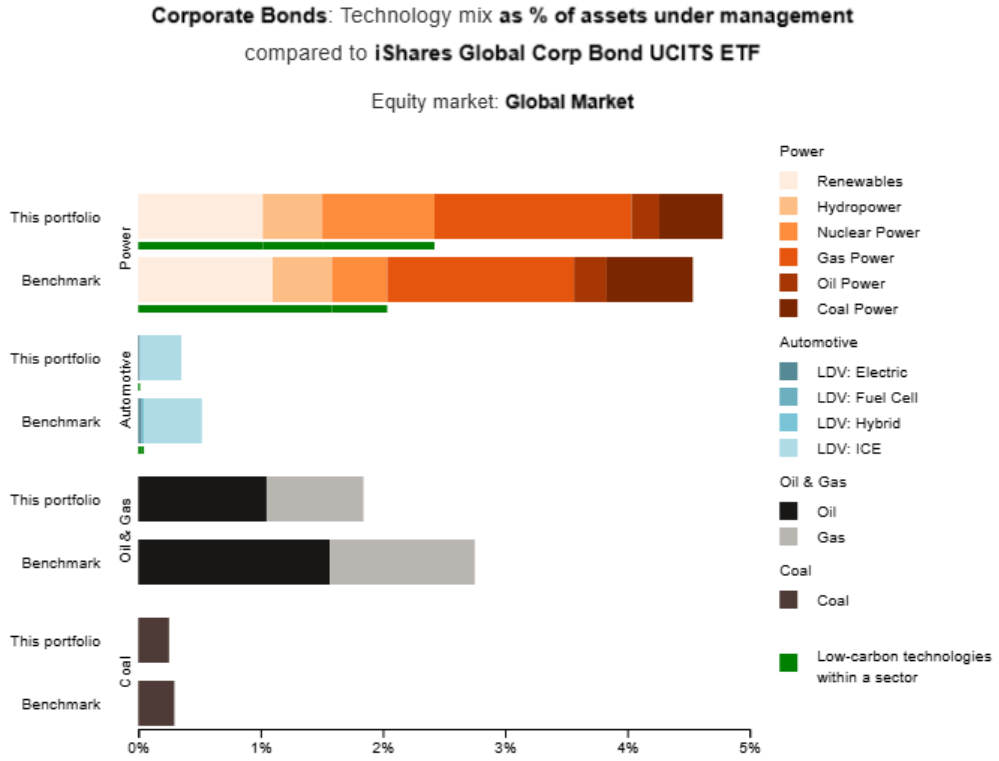


Charts 10&11 below show the analysis for the corporate bond portfolio (which is a much smaller allocation within the Fund's total portfolio compared to equity, but the analysis is included for completeness). The most notable changes compared to last year are that 1) in the Power sector, the

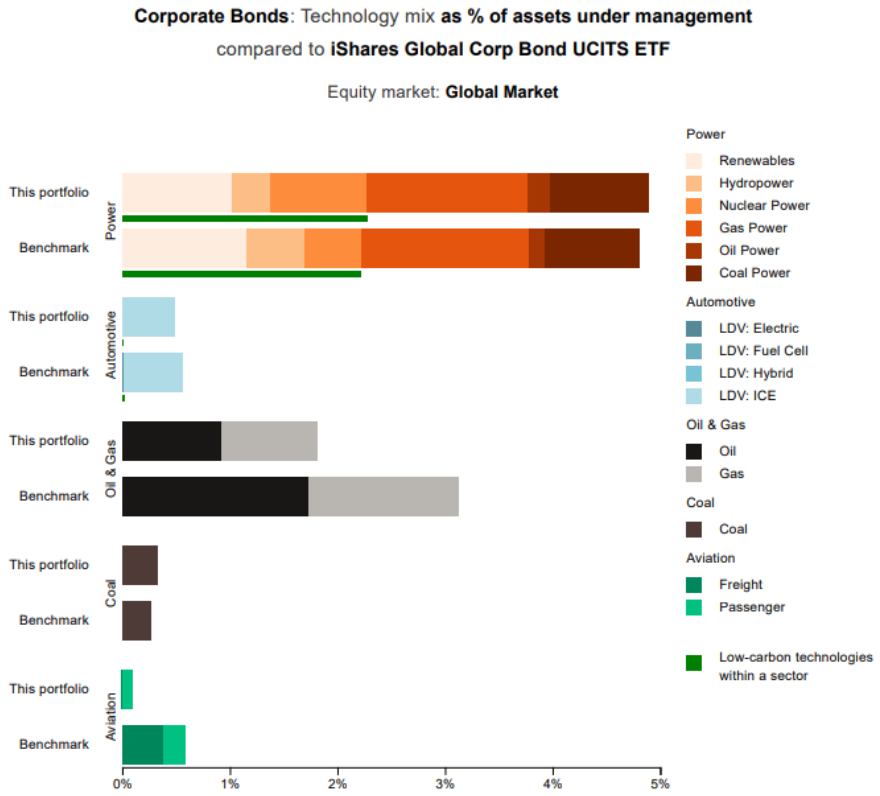
portfolio's exposure to low-carbon technologies was higher than the benchmark this year; 2) the portfolio had no exposure to Aviation this year.

Charts 10&11: Corporate bonds - Current exposure to low-carbon technologies, 2025 (top) vs. 2024 (bottom)

2025



2024



Qualitative assessment to complement PACTA

As the preceding analysis focuses exclusively on publicly listed assets, the Fund also conducts a qualitative assessment—summarised below—to evaluate climate-related risks and opportunities across the remainder of its portfolio. This broader view ensures a comprehensive understanding of the exposure within asset classes not captured by the PACTA framework.

Under climate scenarios where global temperature increases are limited to 2.0°C or less, the Fund acknowledges potential exposure to both transition and physical climate risks across its wider portfolio. In these scenarios, Private Equity and High Yield Credit holdings are anticipated to face higher transition risk relative to public equity and investment grade corporate bonds, due to the nature of the underlying companies and the limited transparency in some of these markets. Conversely, the real assets portfolio—comprising infrastructure and property with climate-aligned strategies—is generally more resilient to transition risk. In fact, these assets may present opportunities, particularly where the underlying investments contribute to or benefit from the shift to a low-carbon economy. These risks and opportunities are most relevant over the short to medium term.

In scenarios where global temperature increases exceed 2.0°C, physical climate risks become more prominent. The Fund recognises that its property and infrastructure portfolios may face greater long-term exposure to weather-related damage and climate-related disruptions. In contrast, alternative credit holdings are expected to exhibit lower sensitivity to both transition and physical risks compared to public equities, largely due to their senior position in the capital structure, which provides a degree of downside protection.

Across all climate scenarios, the Fund's liquid alternatives portfolio is assessed to have comparatively lower climate-related risk exposure. These strategies are typically more agile and diversified, and many of the Fund's managers in this space actively integrate climate considerations into their investment process. The use of derivatives allows them to express views on climate-related risks and opportunities—such as going long or short across sectors—without necessarily holding carbon-intensive assets. As a result, the actual climate footprint of these strategies is relatively limited.

By integrating this broader qualitative assessment, the Fund maintains a well-rounded understanding of its total portfolio's climate exposure, helping to inform both risk management and the pursuit of long-term investment opportunities aligned with a more sustainable future.

THE TFL PENSION FUND OFFICE

The staff in the Fund Office will be pleased to answer any queries you may have. They cannot give financial advice or deal with tax matters but will be able to point you to who to contact for the assistance you need.

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If you are telephoning the team, you can reach the call centre on **01737 235 298**. Please have your Member number and National Insurance number to hand when you call.

Fund Office appointments

The Fund Office team are working on a hybrid basis so we are now able to see visitors in the office, but with fewer people in the office each day we require that you contact us to book an appointment by email or telephone to ensure that a member of the team is available to help you.

If you have access to the internet, you can access our Pension Web Portal and find lots of information, including forms and Fund documents, on the Fund's website at **www.tflpensionfund.co.uk**