



**THE UNITE PENSION SCHEME  
(THE “SCHEME”)**

**TASKFORCE FOR CLIMATE RELATED FINANCIAL  
DISCLOSURES**

**NOVEMBER 2022**



# Governance

Unite Pension Scheme (“the Scheme”)

Prepared by: Aon  
Date: January 2022

# Governance

**The TCFD recommendations state that the Scheme should a) describe the Board's oversight of climate-related risks and opportunities; b) describe management's role in assessing and managing climate related risks and opportunities.**

## Role of the Trustee Board

- The Trustee Board is ultimately collectively responsible for oversight of all strategic matters related to the Scheme. This includes approval of the governance and management framework relating to environmental, social and governance ("ESG") considerations and climate-related risks and opportunities. Given its importance, the Trustee has not identified one individual to specifically be responsible for the Trustee's response to climate risks and opportunities. Rather, the Trustee Board has collective responsibility for setting the Scheme's climate change risk framework.
- The Trustee has discussed and agreed its climate-related beliefs and overarching approach to managing climate change risk. Details are set out in the Statement of Investment Principles, Responsible Investment Policy and the TCFD governance documents including the Climate Mission Statements, which is reviewed annually by the ESG Working Group.
- In summary, the Trustee believes that:
  - the risks associated with climate change can have a materially detrimental impact on the Scheme's investment returns within the timeframe that the Trustee is concerned about and, as such, the Trustee seeks to integrate assessments of climate change risk into its investment decisions.
  - climate-related factors may create investment opportunities. Where possible, and appropriately aligned with the Trustee's strategic objectives and fiduciary duty, the Trustee will seek to capture such opportunities through its investment portfolio.
  - the most appropriate time horizons for the Scheme are as follows:
    - short term: 1 - 3 years
    - medium term: 4 - 9 years
    - long term: 10 - 20 years
- Climate-related risks and opportunities are assessed over the above time horizons. Where appropriate, the Trustee considers transition and physical risks separately.

- The Trustee Board receives training – at least on an annual basis but more frequently if required – on climate-related issues to ensure that it has the appropriate degree of knowledge and understanding on these issues to support good decision-making. The Trustee expects its advisers to bring important and relevant climate-related issues and developments to the Trustee’s attention in a timely manner and expects its advisers to have the appropriate level of knowledge on climate-related matters.
- The Trustee Board has delegated oversight of the Scheme’s climate change risk management framework to the Investment Sub Committee (“ISC”) where they relate to investment matters. The ISC is a sub-committee of the Trustee Board and keep the Trustee Board apprised of material climate-related developments on a regular basis (at least annually). The Trustee regularly monitors and reviews progress against the Scheme’s climate change risk management approach.

### **Role of the Investment Committee**

- The Trustee has delegated the ongoing monitoring, and day-to-day implementation, of the Scheme’s climate change risk management framework to the Investment Committee (“ISC”), which is a sub-committee of the Trustee.
- The ISC has established an ESG working Group. The members of the ESG working Group are Doug Patterson, Mary Callaghan, John Neal and Dave Williams.
- The ESG working group has a terms of reference and will carry out work and make recommendations to the ISC with respect to fulfilling the tasks set out below.
- The ISC seeks to ensure that any investment decisions appropriately consider climate-related risks and opportunities within the context of the Scheme’s wider risk and return requirements, and are consistent with the climate change policy as set out in the Statement of Investment Principles, Responsible Investment policy, Climate Mission Statement and TCFD documentation. The ISC will incorporate this into future manager selection exercises, and also as part of the ongoing monitoring of fund managers. Once the Scheme’s climate change risk management framework has been implemented, the ISC will also be responsible for the ongoing monitoring and implementation of the framework.
- Once the initial framework has been agreed with the Trustee, the expectation is that the ISC will monitor and review progress against the Scheme’s climate change risk management approach on an annual basis. The ISC will keep the Trustee apprised of any material climate-related developments through regular (typically quarterly) updates
- The key activities undertaken by the ISC, with the support of the Trustee’s advisers, are:
  - ensuring investment proposals consider the impact of climate risks and opportunities.
  - seeking investment opportunities which enhance the ESG and climate change focus of the Scheme’s portfolio.
  - engaging with the Scheme’s investment managers to understand how climate risks are considered in their investment approach.

- working with the investment managers to disclose relevant climate-related metrics as set out in the TCFD recommendations.
- ensuring that stewardship activities are being undertaken appropriately on the Scheme's behalf.
- ensuring that actuarial and covenant advice adequately incorporate climate-related risk factors where they are relevant and material

### **Trade Union Share Owners**

- The Union has joined together with a number of other trade union pension funds to form Trade Union Share Owners ("TUSO"). The aim of this group is to collaborate on voting and engagement with companies in order to put trade union values at the heart of our stewardship practices.
- TUSO has developed a set of Trade Union Voting and Engagement Guidelines to guide the group's voting and engagement activity. The Trade Union Voting and Engagement Guidelines reflect a trade union perspective on corporate governance.
- The Trustee contacts the Scheme's investment managers and requests that the investment manager votes in line with the TUSO views on certain companies.

### **Role of external advisors**

- **Investment consultant**  
The Trustee's investment consultant, Aon, provides investment-related strategic and practical support to the ISC and Trustee in respect of the management of climate-related risks and opportunities as set out by the recommendations within the TCFD. This includes provision of regular training and updates on climate-related issues, climate change scenario modelling, ESG ratings and advice with respect to mandates and manager selection.
- **Scheme Actuary**  
The Scheme Actuary, Hilary Salt from First Actuarial, will help the Trustee assess the potential impact of climate change risk on the Scheme's funding assumptions where appropriate.
- **Covenant advisor**  
The Trustee's covenant advisor, BTG advisory, helps the Trustee understand the potential impacts of climate change risk on the sponsor covenant.



# Strategy

Unite Pension Scheme (“the Scheme”)

Prepared by: Aon

Date: October 2022

# Assessing climate-related risks and opportunities

Assessing the climate-related risks and opportunities the Scheme is exposed to is key to understanding the impact climate change could have on the Scheme in the future.

The Trustee has carried out a qualitative risk assessment on each asset class the Scheme is invested in. From this the Trustee has identified which the climate-related risks and opportunities could have a material impact on the Scheme.

Given the number of asset classes used in the Scheme, the Trustee has completed a best endeavours exercise to analyse the climate-related risks of each asset class. The Trustee has completed this analysis having asked its investment managers, which invest the Scheme's assets on behalf of the Trustee, as to how climate risks and opportunities are incorporated into the current mandates.



## Risk categories

In the analysis, the climate-related risks have been categorised into physical and transitional risks.

**Transitional risks** are associated with the transition towards a low-carbon economy. For example, shifts in policy, technology or supply and demand in certain sectors.

**Physical risks** are associated with the physical impacts of climate change on companies' operations. For example, extreme temperatures, floods, storms or wildfires.



## Ratings

The analysis uses a RAG rating system where:

**Red** denotes a high level of financial exposure to a risk.

**Amber** denotes a medium level of financial exposure to a risk.

**Green** denotes a low level of financial exposure to a risk.



## Time horizons

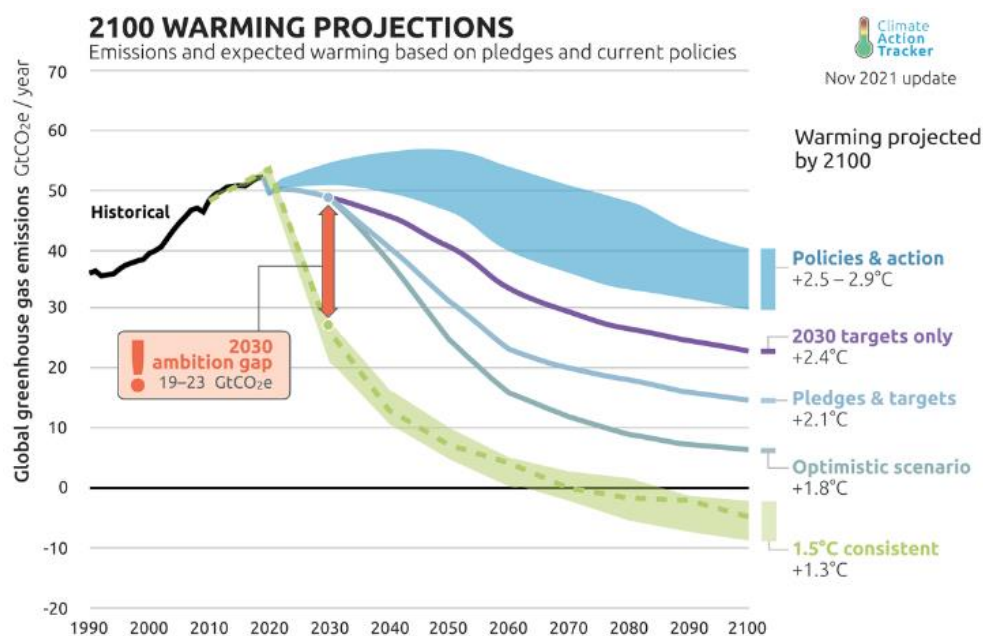
The Trustee assessed the climate-related risks and opportunities over multiple time horizons. The Trustee has decided the most appropriate time horizons for the Scheme are:

- short term: 1-3 years.
- medium term: 4-9 years
- long term: 10-20 years

When deciding the relevant time horizons, the Trustee has taken into account the liabilities of the Scheme and its obligations to pay benefits.

## Climate Change background

The world's climate is already, on average, 1.2°C warmer than in preindustrial times (broadly the period up to 1850). The vast majority of climate scientists anticipate that with current action on climate change, by 2100, the world will be between 2°C and 3°C warmer (current commitments made as part of the Paris Agreement, if implemented, put the trajectory at 2.3 to 2.6°C), noting that averages mask the differences that will be felt regionally.



Source: <https://climateactiontracker.org/global/temperatures/>

The consensus view is that limiting global warming is crucial to mitigating the catastrophic effects of climate change on ecosystems and humanity.

As an example, for a 2°C scenario by 2100, the expected physical damages include:

- Increase in average sea level of 50cm;
- Increase in annual maximum daily temperature of 2.6°C;
- 25% increase in number of hot days; and
- 36% increase in frequency of rainfall extremes over land.

There is scientific consensus that greenhouse gas (**GHG**) emissions from human activity are being trapped in the atmosphere and creating a “greenhouse effect,” which is causing the increase in global mean surface temperature and the consequent effects on underlying weather patterns. Fossil-fuel use is the principal source of GHG emissions, primarily carbon dioxide (CO<sub>2</sub>). The second largest contributor to GHG emissions is methane, primarily related to agricultural activities, fossil fuel production and waste/landfills. Agriculture and the built environment are the principal drivers behind deforestation, which not only reduces CO<sub>2</sub> absorption capacity but also is a major source of emissions as the carbon stored in vegetation and soils is released into the atmosphere.

## Climate – related risk assessment

The notion that there are “climate risks” in financial portfolios is now a well-established one. So, what are climate risks? In short, the idea is that climate change impacts the financial performance of companies and therefore also the risk-return profile of the securities they issue. Climate risks are typically categorised along two dimensions described above.



## Transition risks

Transition risks relate to the need to transition to a low-carbon economy, including development of, and investment in, new technologies and services that support this transition as well as government policy to aid in the transition. Specific market-based activities comprise the mitigation of carbon emissions, and/or adaptation to be resilient against climate change:

- **Mitigation:** technologies and services that increase energy efficiency, relate to increased renewable energy uptake and decreased demand for fossil fuels, and/or capture or sequester carbon dioxide.
- **Adaptation:** infrastructure resiliency efforts, business model shifts (e.g. changing geographic location of production and/or sales, introduction of new products and services and aligning business models with new environmental conditions).

Potential financial impacts from this transition include:

- **Revenue loss (demand contraction):** reduced demand for fossil fuels, related services, and energy consuming products.
- **Stranded assets:** devaluation/impairment or “asset stranding” of fossil fuel reserves.
- **Revenue growth:** growth in renewable energy, emergence of new industries, including carbon capture and sequestration, smart grid technologies, energy-efficient products, infrastructure adaptations, and green chemistry solutions.
- **Long-term cost reductions:** operational cost reduction from investments in updated infrastructure and technologies that facilitate the transition to a low-carbon, resilient economy.

Furthermore, the transition comes with policy and legal risks, including:

- **Carbon pricing mechanisms** (e.g. carbon taxes), already implemented in over 25 countries.
- **Litigation risk:** driven by the failure of companies to mitigate impacts of climate change, failure to adapt to climate change, and the insufficiency of disclosure around material financial risks.

## Physical risks

A changing climate can lead to changes in the frequency and severity of extreme or incremental hazards. The TCFD recommendations refer to these hazards as acute and chronic, respectively. Acute hazards represent severe and extreme events and are location specific (e.g. droughts, heatwaves, storms, wildfire, etc). Chronic climate change represents the background incremental changes in, for example: temperature, precipitation and sea-level rise over several decades.

### Acute and chronic climate-related hazards

#### Acute

#### Chronic

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▪ Extreme heat	▪ Water stress
▪ Extreme rainfall	▪ Sea level rises
▪ Floods	▪ Land degradation
▪ Droughts	▪ Variability in temperature
▪ Storms (e.g., hurricanes)	▪ Variability in precipitation

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## Climate-related risk assessment (on asset class level)

Given the number of asset classes in which the Scheme invests, the Trustee has completed a best endeavours exercise to analyse the climate-related risks of each asset class. The Scheme invests across a range of different asset classes and investment managers via pooled and segregated funds. In pooled funds, the Trustee's ability to influence how each manager incorporates climate related issues is limited. However, the Trustee asked its investment managers for details how they were incorporating climate risks and opportunities into the funds and asset classes in which the Scheme invests over the short, medium and long-term; the responses from its investment managers are summarised below.

Please note that BlackRock, JP Morgan and Henderson were not able to provide climate-related risk assessments on an asset class level at the time of writing.

The Scheme's assessment has been undertaken based on the current mix of assets which are currently invested in. The asset classes assessed are:

- Emerging Market Equities
- Diversified Growth
- Illiquids
- Bonds

### Emerging Market Equities

Time horizon	Physical risks		Transition risks			
	Acute	Chronic	Policy and Legal	Technology	Market	Reputation
Short (1-3 years)						
Medium (4-9 years)						
Long (10-20 years)						

#### **Physical Risks**

Emerging markets equity manager recognises that there are significant risks associated with climate change. The manager appreciates positive GHG commitments in short term, especially from the global economies as a result of COP 26, however, it is more concerned about longer term impact of climate change – notably – Climate Refugee Crisis. An estimated one billion people live on land that is less than 10m above current high tide levels (for 230 million individuals, it's less than 1m) making them especially vulnerable to sea-level rise, extreme weather and other potential consequences of global climate change.

#### **Transition Risks**

The manager recognises the opportunities available currently within emerging markets to transition to greener economy. However, geopolitical environments can affect the speed of transition based on the landscapes across regions. For example, the energy required to provide decent living standards to all – including to build the infrastructure to reach those that still lack them would require roughly a quarter of projected world energy demand by mid-century, though the share would be larger in regions with the highest poverty levels.

## Diversified Growth

Time horizon	Physical risks		Transition risks			
	Acute	Chronic	Policy and Legal	Technology	Market	Reputation
Short (1-3 years)	Yellow	Green	Green	Green	Green	Yellow
Medium (4-9 years)	Yellow	Yellow	Yellow	Green	Yellow	Yellow
Long (10-20 years)	Red	Red	Yellow	Yellow	Red	Red

### Physical Risks

While emissions may have begun to decrease by this point, given the time lag on temperature changes related to emissions, the risk of acute events continues to increase. Issues of extreme heat and flooding may begin to permeate into companies operating in hot climates or coastal regions. Consumer goods companies may see lower crop yields of water availability that impacts revenues. Holdings, such as supermarkets, may see product prices change or supply issues emerge.

### Transition Risks

By 2025, the manager expects emerging markets will have caught up with Europe in relation to climate change in decision making. Reputationally, barriers will remain in adopting cleaner products and services, which may impact companies operating in less developed jurisdictions. Over the long term, it believes consumer preferences will be more favourable towards clean technologies as adoption levels are significantly higher and costs have come down. In addition, high emitting products using fossil fuels are likely to be significantly impacted.

## Illiquids

Time horizon	Physical risks		Transition risks			
	Acute	Chronic	Policy and Legal	Technology	Market	Reputation
Short (1-3 years)	Green	Green	Green	Green	Green	Green
Medium (4-9 years)	Green	Yellow	Yellow	Yellow	Yellow	Green
Long (10-20 years)	Green	Green	Red	Yellow	Red	Green

### Physical Risks

The manager's analysis suggests that there is a low risk of financial exposure to chronic and acute risks such as heat stress and drought in the locations in which this strategy invests. If there is localised risk then this is addressed in underwriting and through due diligence.

**Transition Risks**

By 2030, the market demand for sustainable buildings will have increased significantly and carbon intensive buildings will be at risk of obsolescence. Beyond 2030 it is expected that there will be policy in place to ensure that all buildings become Net Zero Carbon. The manager anticipates that carbon taxation will have come into effect. This presents some risk to real estate debt providers as there will be some loans to buildings that do not currently meet these standard. These risks can be mitigated by engagement with borrowers on their strategy for sustainability improvements and achieving Net Zero Carbon.

The manager assessed that the reputation risk to Real Estate Debt investors is low, as this asset class is considerably less carbon intensive than others such as fossil fuels and transport. Debt providers also have less direct control than building owners, so have less reputational risk.

**Bonds**

Global Bonds Fund

Time horizon	Physical risks		Transition risks			
	Acute	Chronic	Policy and Legal	Technology	Market	Reputation
Short (1-3 years)	Green					Yellow
Medium (4-9 years)	Yellow					Red
Long (10-20 years)	Red		Yellow			Red

Diversified Income Fund

Time horizon	Physical risks		Transition risks			
	Acute	Chronic	Policy and Legal	Technology	Market	Reputation
Short (1-3 years)	Green		Yellow	Green	Yellow	
Medium (4-9 years)	Yellow					Red
Long (10-20 years)	Red					

**Physical and Transition Risks**

In the short-run, the lack of substitution technologies could actually serve to mitigate some transition risks across certain key sectors, notably ‘hard to abate’ sectors e.g. cement, steel, shipping, aviation, trucking. While reputational risks, associated with the energy transition, have become more prominent for the fossil fuel industry in particular. Changing customer behaviour on the back of the awareness of climate risks is likely to grow and increasingly impact “end user” sectors as it relates to energy demand. The rise in carbon prices more aligned with a net zero scenario, could impact the pricing of products and raw materials depending on certain variables such as cost pass through.

## Absolute Return Bonds Fund

The manager did not provide a heat map for the climate-related risks for this mandate, however, it demonstrated understanding of physical and transition risks.

### ***Physical risks***

The manager tracks physical risks in its investment strategies, including acute risks arising from extreme weather events such as storms, floods, droughts, fires or heatwaves, and chronic risks arising from gradual changes in the climate, such as changing rain-fall patterns, rising sea levels, ocean acidification, and biodiversity loss.

### ***Transition risks***

The manager recognises that transition risks may negatively affect the value of investments by impairing assets or revenues, or by increasing liabilities, capital expenditures, operating and financing costs.

## Climate-related opportunities (on asset class level)

The Trustee has also identified some climate-related opportunities across broad themes as follows:



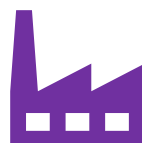
### Cleaner energy

Green power generation, clean technology innovation, sustainable biofuels



### Environmental resources

Water, agriculture, waste management



### Energy and materials efficiency

Advanced materials, building efficiency, power grid efficiency



### Environmental services

Environmental protection, business services

The Trustee also relies on its investment managers to take into account climate related risks and opportunities applicable for their mandates. Based on the qualitative assessment, the Trustee's managers identified the following opportunities.

### Emerging Market Equities

The manager identifies two emerging markets where it sees the most climate related opportunities.

#### **Chinese market**

The manager's long-term investment in China facilitates the financing of the country's decarbonisation goals including the development of green technologies. The manager identified examples of China's A-share listed equities that could be part of a global climate solutions fund:

- (\$230bn market cap company): leading electric vehicle battery provider with 50% market share in China;
- (\$27bn market cap company): industrial automation company with its main growth engine being powertrain components to the EV industry;
- (\$35bn market cap company): manufacturer of solar inverters and wind power converters.

#### **Indian market**

Indian renewable energy sector is the fourth most attractive renewable energy market in the world. India was ranked fourth in wind power, fifth in solar power and fourth in renewable power installed capacity, as of 2020.

### Diversified Growth

The manager has identified opportunities in relation to the transition to low carbon economy into four themes.

#### **Clean energy**

- Potential opportunities range from manufacturers of renewable-energy components to developers of renewable energy, to asset owners. Notable examples exist in the renewable-energy sector, such as wind-energy assets.

#### **Efficient infrastructure**

- The manager already holds companies engaged in increasing efficiency within its core portfolios.

#### **Electric vehicles**

- The strategy is exposed to the electrification trend through battery manufacturers, and companies involved in the design and manufacture of connectors and sensors.

### **Resource management & recycling**

- Some of the portfolio holdings are engaged in some form of by-product management. The manager believes it is well-positioned to benefit from resource management as economies transform and strive to meet stringent emissions and environmental targets.

### **Illiquids**

There is opportunity presented by the potential to invest in green buildings that are likely to deliver stronger returns than buildings without sustainability certification or a viable path to net zero carbon.

The manager has developed a Green Loan Framework to enable them to take advantage of this opportunity.

### **Bonds**

As part of the **Global Bonds Strategy**, the manager invests in impact bonds that have attractive valuations that are in line to comparable (by coupon, maturity, seniority etc.) non-green/social/sustainability bonds issued by the same company, given the strong focus on sustainability objectives. The manager has confirmed that the fund has c.29% allocation to green bonds and this is where it sees the opportunity in the ESG space within fixed income space.

Whilst not the principal driver or main objective of the **Diversified Income Fund**, climate risks are a consideration in all investments. This fund has c.1.7% allocation to green bonds. The manager's investment approach combines top-down macroeconomic analysis with bottom-up research to arrive at recommendations based on 3 screens: Fundamentals, Valuations and Technicals.

As part of the **Absolute Return Bonds** mandate, the manager believes that facilitating the green economic transition represents a significant investment opportunity. Where possible, the manager can direct capital towards companies providing solutions to environmental problems.

The Scheme's manager for a **Government Bonds** mandate has engaged with the UK Debt Management office and Treasury with regard to the issuance of Green Gilts.

# Portfolio resilience and scenario analysis

The Trustee has undertaken climate change scenario analysis to better understand the impact climate change could have on the Scheme’s assets and liabilities.

The analysis looks at five climate change scenarios. Each scenario considers what might happen when transitioning to a low carbon economy under different conditions. The Trustee has chosen these scenarios because it believes that they provide a reasonable range of possible climate change outcomes. These scenarios were developed by the Scheme’s investment consultant, Aon, and are based on detailed assumptions. They are only illustrative and are subject to considerable uncertainty.

The Trustee established a “base case” scenario against which the five climate change scenarios are compared.

	1	2	3	4	5
<b>Base scenario</b>	<b>Smooth transition</b>	<b>Orderly transition</b>	<b>Abrupt transition</b>	<b>Disorderly transition</b>	<b>No transition</b>
<b>2°C – 2.4°C</b>	<b>&lt;1.5 °C</b>	<b>1.3°C - 2°C</b>	<b>1.5°C – 2°C</b>	<b>3°C – 4°C</b>	<b>&gt;4°C</b>
Emission reductions start now and continue in a measured way in line with the objectives of the Paris Agreement and the UK government’s legally binding commitment to reduce emissions in the UK to net zero by 2050.	Shows how rapid advancement of green technology, private innovation and tiered environmental regulation and greenhouse gas taxes could achieve a smooth transition to a low carbon world.	Considers the impact of immediate and coordinated action to tackle climate change using carbon taxes and environmental regulation.	Explores the impact of delayed action on climate change for five years with governments eventually forced to address greenhouse gas emissions due to increasing extreme weather events.	Explores the impact if limited action is taken and insufficient consideration is given to sustainable long-term policies to manage global warming effectively.	Considers the impact of climate change if no further action is taken to reduce greenhouse gas (“GHG”) emissions leading to significant global warming.



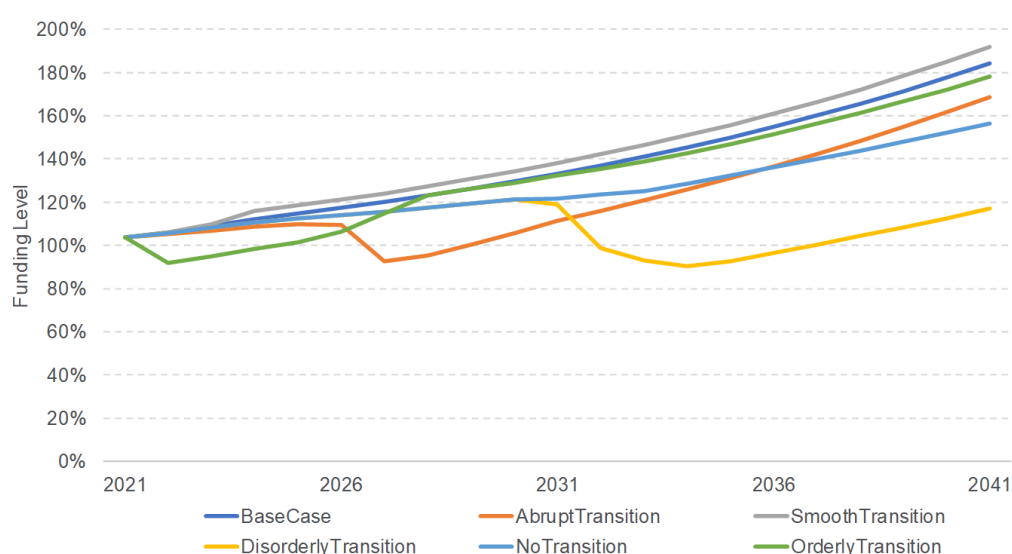
## Impact Assessment

The analysis undertaken was based on the following strategic allocations.

Asset Class	Strategic weighting (%)
Equities	29
DGF	13
Illiquids	6
Bonds	37
LDI	15

## Long term funding level projections

Funding level projection



Source: Aon. Scenario projections as at 30 June 2021.

Under all scenarios considered, the Scheme is expected to be fully funded in the medium term, however under the Disorderly Transition there is a large loss of surplus relative to the Base Case by the end of the 20 year period.

The Scheme is exposed to climate change risk due to its relatively high allocation to equities. This is compounded by inflation risks, which result in poor outcomes under high inflation scenarios.

The two factors above are particularly pronounced under the Disorderly Transition scenario, with a large loss of surplus relative to the Base Case by the end of the 20 year period.

Recovery after the initial shock is also muted under the Orderly Transition scenario, which is due to high inflation and poor equity performance in early years. This prevents recovery above the Base Case after 20 years, even though growth asset returns have largely recovered by then.

### Next steps

As a result of the impact assessment undertaken, the Trustee has considered the following:

- When it will be appropriate to re-do the analysis, such as any planned changes to the Strategy review
- Ways in which to mitigate some of climate related risks, such as considering ESG tilted equities.

## **Business, strategy, and financial planning**

The Trustee recognises the importance of climate change and the risk it poses to the Scheme. The Trustee takes climate-related risks into account in determining its investment strategy, and any forthcoming strategy reviews.

Another key risk identified from the analysis is the volatility of the funding level. Under the Disorderly scenario, there was little impact on the funding level in the short to medium term, followed by a sudden fall in funding when significant coordinated action is taken to limit the impacts of climate change. Any deterioration of the funding level will place a strain on the sponsor covenant, if they must make up a bigger shortfall through deficit contributions.

The Trustee therefore recognises that climate change may have an impact on the sponsor covenant. The Trustee monitors the covenant on a regular basis, with the support of its covenant adviser, and maintains a regular dialogue with the participating employers.

# Appendices

## Appendix A - Climate Risk Assessment – transition risks

Transition risks relate to the need to transition to a low-carbon economy, including development of, and investment in, new technologies and services that support this transition as well as government policy to aid in the transition. Examples of climate-related risks and potential financial impacts include:

	Climate-related risks	Potential financial impacts
Policy and legal	<ul style="list-style-type: none"> <li>▪ Increased pricing of GHG emissions</li> <li>▪ Enhanced emissions-reporting obligations</li> <li>▪ Mandates on and regulation of existing products and services</li> <li>▪ Exposure to litigation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased operating costs (e.g. higher compliance costs, increase insurance premiums)</li> <li>▪ Write-offs, asset impairment and early retirement of existing assets due to policy changes</li> <li>▪ Increased costs and/or reduced demand for products and services resulting from fines and judgments</li> </ul>
Technology	<ul style="list-style-type: none"> <li>▪ Substitution of existing products and services with lower emissions options</li> <li>▪ Unsuccessful investment in new technologies</li> <li>▪ Costs to transition to lower emissions technology</li> </ul>	<ul style="list-style-type: none"> <li>▪ Write-offs and early retirement of existing assets</li> <li>▪ Reduced demand for products and services</li> <li>▪ Research and development (R&amp;D) expenditures in new and alternative technologies</li> <li>▪ Capital investments in technology development</li> <li>▪ Costs to adopt/deploy new practices and processes</li> </ul>
Market	<ul style="list-style-type: none"> <li>▪ Changing customer behaviour</li> <li>▪ Uncertainty in market signals</li> <li>▪ Increase cost of raw materials</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced demand for goods and services due to shift in consumer preferences</li> <li>▪ Increased production costs due to changing input prices (e.g. energy, water) and output requirements (e.g. waste treatment)</li> <li>▪ Abrupt and unexpected shifts in energy costs</li> <li>▪ Change in revenue mix and sources, resulting in decreased revenues</li> <li>▪ Re-pricing of assets (e.g. fossil fuel reserves, land valuations, securities valuations)</li> </ul>
Reputation	<ul style="list-style-type: none"> <li>▪ Shifts in consumer preferences</li> <li>▪ Stigmatisation of sector</li> <li>▪ Increased stakeholder concern or negative stakeholder feedback</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced revenue from decreased demand for goods / services</li> <li>▪ Reduced revenue from decreased production capacity (e.g. delayed planning approvals, supply chain interruptions)</li> <li>▪ Reduced revenue from negative impacts on workforce management and planning (e.g. employee attraction and retention)</li> <li>▪ Reduction in capital availability</li> </ul>

## Appendix – B - Glossary

<b>Governance</b>	refers to the system by which an organisation is directed and controlled in the interests of shareholders and other stakeholders. <sup>1</sup> Governance involves a set of relationships between an organisation’s management, its board, its shareholders, and other stakeholders. Governance provides the structure and processes through which the objectives of the organisation are set, progress against performance is monitored, and results are evaluated. <sup>2</sup>
<b>Strategy</b>	refers to an organisation’s desired future state. An organisation’s strategy establishes a foundation against which it can monitor and measure its progress in reaching that desired state. Strategy formulation generally involves establishing the purpose and scope of the organisation’s activities and the nature of its businesses, taking into account the risks and opportunities it faces and the environment in which it operates. <sup>3</sup>
<b>Risk management</b>	refers to a set of processes that are carried out by an organisation’s board and management to support the achievement of the organisation’s objectives by addressing its risks and managing the combined potential impact of those risks. <sup>4</sup>
<b>Climate-related risk</b>	refers to the potential negative impacts of climate change on an organisation. Physical risks emanating from climate change can be event-driven (acute) such as increased severity of extreme weather events (e.g., cyclones, droughts, floods, and fires). They can also relate to longer-term shifts (chronic) in precipitation and temperature and increased variability in weather patterns (e.g., sea level rise). Climate-related risks can also be associated with the transition to a lower-carbon global economy, the most common of which relate to policy and legal actions, technology changes, market responses, and reputational considerations. <sup>5</sup>
<b>Climate-related opportunity</b>	refers to the potential positive impacts related to climate change on an organisation. Efforts to mitigate and adapt to climate change can produce opportunities for organisations, such as through resource efficiency and cost savings, the adoption and utilization of low-emission energy sources, the development of new products and services, and building resilience along the supply chain. Climate-related opportunities will vary depending on the region, market, and industry in which an organisation operates. <sup>6</sup>
<b>Greenhouse gas emissions (“GHG”) scope levels<sup>7</sup></b>	Greenhouse gases are categorised into three types or ‘scopes’ by the Greenhouse Gas Protocol, the world’s most used greenhouse gas accounting standard. Scope 1 refers to all direct GHG emissions. Scope 2 refers to indirect GHG emissions from consumption of purchased electricity, heat, or steam. Scope 3 refers to other indirect emissions not covered in Scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. Scope 3 emissions could include: the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g., transmission and distribution losses), outsourced activities, and waste disposal. <sup>8</sup>

<sup>1</sup> A. Cadbury, [Report of the Committee on the Financial Aspects of Corporate Governance](#), London, 1992.

<sup>2</sup> OECD, [G20/OECD Principles of Corporate Governance](#), OECD Publishing, Paris, 2015.

<sup>3</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>4</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>5</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>6</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>7</sup> World Resources Institute and World Business Council for Sustainable Development, [The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard \(Revised Edition\)](#), March 2004.

<sup>8</sup> PCC, [Climate Change 2014 Mitigation of Climate Change](#), Cambridge University Press, 2014.

- Value chain** refers to the upstream and downstream life cycle of a product, process, or service, including material sourcing, production, consumption, and disposal/recycling. Upstream activities include operations that relate to the initial stages of producing a good or service (e.g., material sourcing, material processing, supplier activities). Downstream activities include operations that relate to processing the materials into a finished product and delivering it to the end user (e.g., transportation, distribution, and consumption).<sup>9</sup>
- Climate scenario analysis** is a process for identifying and assessing a potential range of outcomes of future events under conditions of uncertainty. In the case of climate change, for example, scenarios allow an organisation to explore and develop an understanding of how the physical and transition risks of climate change may impact its businesses, strategies, and financial performance over time.<sup>10</sup>
- Net zero** means achieving a balance between the greenhouse gases emitted into the atmosphere, and those removed from it. This balance – or net zero – will happen when the amount of greenhouse gases add to the atmosphere is no more than the amount removed.<sup>11</sup>

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<sup>9</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>10</sup> TCFD, [Recommendations of the Task Force on Climate-related Financial Disclosures](#), 2017

<sup>11</sup> Energy Saving Trust, [What is net zero and how can we get there?](#) - Energy Saving Trust, October 2021



# Risk management

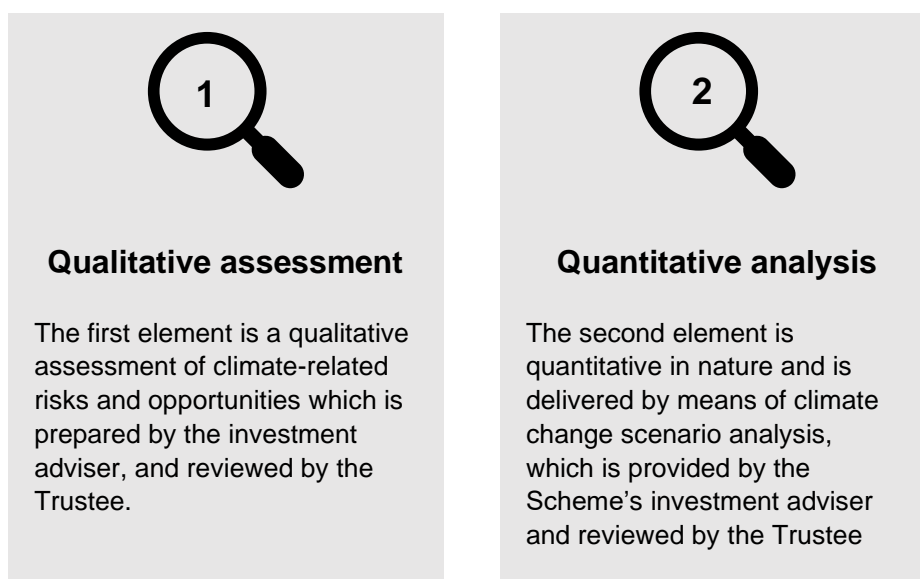
Unite Pension Scheme (“the Scheme”)

Prepared by: Aon

Date: October 2022

# Trustee's process for identifying and assessing climate-related risks

The Trustee has established a process to identify, assess and manage the climate-related risks that are relevant to the Scheme. This is part of the Scheme's wider risk management framework and is how the Trustee monitors the most significant risks to the Scheme in its efforts to achieve appropriate outcomes for members.



Together these elements give the Trustee a clear picture of the climate-related risks that the Scheme is exposed to. Where appropriate, the Trustee distinguishes between transition and physical risks. And all risks and opportunities are assessed with reference to the time horizons that the Trustee has identified as relevant to the Scheme.

When prioritising the management of risks, the Trustee assesses the materiality of climate-related risks relative to the impact and likelihood of other risks to the Scheme. This helps the Trustee focus on the risks that pose the most significant impact.

# Trustee’s process for managing climate related risks

The Trustee recognises the long-term risks posed by climate change and has taken steps to integrate climate-related risks into the Scheme’s risk management framework.

The Trustee has developed the following risk management plan, to help with its ongoing management of climate related risks and opportunities. The Trustee has delegated a number of tasks, but still retains the final approval responsibility.

Activity	Actions	Owner	Input	Frequency of review	First year schedule
<b>Governance</b> (incorporating content and commitments set out in the Governance statement)					
Framework	Approve climate risk management framework	Trustee Board	ESG working group, Investment Consultant	One off	In progress.
Training	Receive training on climate-related issues	Trustee Board	Advisers	Annual	<b>Schedule</b> within <b>existing</b> training plan
Advisers	Review adviser objectives to ensure advisers have appropriate climate capability, and bring important, relevant and timely climate-related issues to the Trustee’s attention	Trustee Board	Advisers	Annual	<b>Incorporate</b> climate objectives into <b>existing</b> annual review
Investment strategy	Ensure investment proposals explicitly consider the impact of climate risks and opportunities, and seek investment opportunities.	Investment Committee	Investment consultant	Ongoing	<b>Instruct</b> Aon to factor climate-related considerations into <b>future</b> investment proposals and advice
Actuarial and covenant	Ensure that actuarial and covenant advice adequately incorporate climate-related risk factors where they are relevant and material.	Trustee Board	Scheme Actuary, Covenant adviser	Triennial	<b>Ensure</b> considered in 30 September 2023 funding valuation process, and <b>future</b> valuations.
Managers	Engage with the investment managers to understand how climate risks are considered in their investment approach, and stewardship activities are being undertaken appropriately	Investment Committee	Fund managers, ESG Working Group, Investment consultant	Annual	<b>Considered</b> as part of Climate Risk Assessment <b>undertaken in May 2022</b> .



Activity	Actions	Owner	Input	Frequency of review	First year schedule
<b>Strategy</b>					
Climate Scenarios	Undertake quantitative scenario analysis to understand the impact of climate related risks	Trustee Board	ESG Working Group, Investment consultant	First year, Triennial thereafter (with annual review)	Trustee reviewed December 2021 and scheduled for refresh in Q3 2023. To be reviewed annually to ensure suitability.
Risks and opportunities	Identify the climate-related risks and opportunities for investment & funding strategy and assess their likelihood and impact.	Investment Committee	ESG Working Group, Advisers	Annual	<b>Considered</b> as part of Climate Risk Assessment <b>undertaken in</b> May 2022.
<b>Risk management</b>					
Risk prioritisation	Consider the prioritisation of those climate-related risks, and the management of the most significant in terms of potential loss and likelihood.	Trustee Board	Investment Committee, ESG Working Group, Advisers	Annual	Considered as part of Climate Risk Assessment undertaken in May 2022.
Scheme documentation	Include consideration of climate-related risks in the Scheme's other risk processes and documents, such as the risk register and the SIP, and regularly review these.	Trustee Board	Advisers	One-off, ongoing thereafter	Trustee to <b>incorporate</b> into <b>existing</b> SIP at next review.  Trustee to <b>incorporate</b> climate-related risks into risk register in December 2023.
Covenant	Seek to understand the climate-related risks to the employer over the short, medium and long term.	Trustee Board	Covenant adviser	Annual	<b>Ensure</b> considered in 2023 funding valuation process, and <b>future</b> valuations.
<b>Metrics and targets</b>					
Metrics	Obtain data for metrics	Trustee Board	ESG Working Group, Investment consultant, fund managers	Annual	Obtain via a combination of Aon and investment managers in Q4 2023.  Schedule to take place annually.
Targets	Review continued appropriateness of metrics	Trustee Board	ESG Working Group, Investment adviser	Annual	Review in Q4 2023, alongside production of TCFD disclosure.

The Trustee has taken the following steps to integrate climate-related risks into its risk management framework and processes.



## Training

The Trustee completes regular training on responsible investment to understand how ESG factors, including climate change, could impact the Scheme assets and liabilities.



## Monitoring

As part of ongoing monitoring of the Scheme investment managers, the Trustee uses ESG ratings provided by the Scheme's investment adviser, Aon, to monitor the level of ESG integration within managers.



## Annual ESG assessment

On an annual basis, the Trustee requests that investment managers provide their responsible investment policy; details of how ESG is integrated within their decision-making process; and details of outstanding ESG issues within portfolios.



## Integrated into risk framework

Climate-related risks are included in the Scheme's wider risk management framework, which is overseen by, the ISC on an annual basis



## ESG focussed investments

The Trustee's investment adviser keeps them informed on investment opportunities that could contribute to the Trustee ESG aims.

As part of the assessment of the managers' policies and processes to assess climate related risks, the Trustee has posed "top" questions as outlined in guidance from the Pensions Climate Risk Industry Group<sup>1</sup> to its investment managers. The questions were designed to assist the Trustee with its assessment of each managers' capabilities and approach to climate management and focused on areas such as TCFD reporting, managers ability to conduct climate scenario analysis, engagement and escalation policies, managers ability to provide carbon related data and align their strategies to a particular temperature level.

The table below summarises the responses from the investment managers.

The Trustee viewed this as a suitable starting position to understand what its investment managers are doing more broadly in relation to climate risk. Over time, the Trustee expects to see improvements from its investment managers.

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<sup>1</sup> [Aligning your pension scheme with the TCFD recommendations: Part II - Trustee governance, strategy and risk management: how to integrate and disclose climate-related risks \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

Manager	TCFD report	Climate-related risks analysis	Industry initiatives	Carbon reporting	Temperature alignment <sup>1</sup>
Henderson	In progress	✓	✓	✓	In progress
Neuberger	-	✓	✓	✓	-
BlackRock	✓	✓	✓	✓	-
Newton	✓	✓	✓	✓	-
Nuveen	-	In progress	✓	✓	✓
PIMCO	-	✓	✓	✓	-
Pictet	-	-	✓	✓	-
JP Morgan	-	In progress	✓	-	-
LGIM	✓	✓	✓	✓	-

Source: Managers.

The Trustee will engage with its managers to understand future changes to the management of the Scheme's assets, including the integration of climate related risk analysis, improvements in carbon reporting and temperature alignment and the associated timescales involved with these.



# Metrics and Targets

Unite Pension Scheme (“the Scheme”)

Prepared by: Aon

Date: November 2022

# Trustee’s climate-related metrics

The Trustee uses some quantitative measures to help it understand and monitor the Scheme’s exposure to climate-related risks.

The Trustee’s investment adviser, Aon, collected information from the Scheme’s managers on their greenhouse gas emissions. Aon collated this information to calculate climate-related metrics for the Scheme’s portfolio.

## Measuring greenhouse gas emissions

Measuring greenhouse gas emissions is a key way for pension schemes to assess their exposure to climate change. Greenhouse gases are produced by burning fossil fuels, meat and dairy farming, and some industrial processes. When greenhouse gases are released into the atmosphere, they trap heat in the atmosphere causing global warming and contributing to climate change.

Greenhouse gases are categorised into three types or ‘scopes’ by the Greenhouse Gas Protocol, the world’s most used greenhouse gas accounting standard.

<u>Scope 1</u>	<u>Scope 2</u>	<u>Scope 3</u>
All direct emissions from the activities of an organisation which are under their control; these typically include emissions from their own buildings, facilities and vehicles	These are the indirect emissions from the generation of electricity purchased and used by an organisation	All other indirect emissions linked to the wider supply chain and activities of the organisation from outside its own operations – from the goods it purchases to the disposal of the products it sells

Scope 3 emissions are often the largest proportion of an organisation’s emissions, but they are also the hardest to measure. The complexity and global nature of an organisation’s value chain make it hard to collect accurate data.

The Trustee is keen to understand the carbon emissions in the Scheme’s portfolio, but notes that at the current time, data is limited for certain asset classes. In particular this has been noted for certain types of fixed income assets and DGF.

The Trustee expects over time, the carbon emissions data will become more meaningful as more data is collected for each reporting year, enabling comparisons to be made. The Trustee is also incorporating this into its due diligence for any new mandates implemented, to ensure that these investment managers are able to support the Trustee in its climate reporting in the future.

Over the short term, the Trustee is aware that it is likely that its reporting of greenhouse gas emissions and carbon footprint may “increase” as the availability and coverage of data expands – particularly where coverage is currently low. In addition, the Trustee expects the total GHG emissions to increase in its second year report, as it begins to collate and report on scope 3 emissions, which are often the largest proportion of an organisation’s emissions (as noted above).

# The Scheme's greenhouse gas emissions

<b>Total Greenhouse Gas emissions</b>	<b>87,830</b> tons CO <sub>2</sub> e	The total greenhouse gas ("GHG") emissions associated with the portfolio. It is an absolute measure of carbon output from the Scheme's investments.
<b>Carbon footprint</b>	<b>81.6</b> tons CO <sub>2</sub> e/£m	Carbon footprint is an intensity measure of emissions that takes the total GHG emissions and weights it to take account of the size of the investment made.
<b>Data quality</b>	<b>75.4%</b>	A measure of the proportion of the portfolio that the Trustee has high quality data for.

Source: Aon. Managers.

Because not all the Scheme's managers were able to provide all the requested data, the reported emissions metrics do not include all the Scheme's GHG emissions. And so, the metrics show the Scheme's GHG emissions to be lower than they really are, as noted on the previous page.

The Trustee expects that in the future better information will be available from managers and this improvement will be reflected in the coming years' reporting.

The Trustee's investment adviser, Aon, requested data from all the Scheme's managers. The table below summaries observations of data for the Scheme.



## Current position

Aon requested emissions data from managers that cover c.**100%** of the Scheme's asset portfolio, which represented all of the assets except for the cash account held by the Scheme.



## Data availability

Data was received from the managers covering **75.4%** of the portfolio. Data was not available for around **24.6%** of the assets.



## Data consistency

Emissions data that came from the Scheme's investment managers covered **75.4%** of the assets. The data included scope 3 emissions for one mandate since the managers confirmed that there were no scope 1&2 emissions associated with strategy.

The table below show a more detailed breakdown of the emissions from each asset class in the Scheme's portfolio (where available).

### Scheme's Carbon Emission Data

Asset class	Asset allocation as at 31 March 2022	Total Scope 1 & 2 emissions (tCO <sub>2</sub> e)	Scope 1 & 2 Carbon Footprint (Tonnes CO <sub>2</sub> e/£m invested)	Carbon Intensity (Tonnes CO <sub>2</sub> /£m sales) <sup>1</sup>	Data coverage
<b>Equities</b>	<b>29%</b>	<b>31,799</b>	<b>100.2</b>	<b>246.1</b>	<b>93%</b>
Passive Global Equities	24%	25,614	98.6	210.2	92%
Emerging Market Equities	5%	6,185	107.8	408.4	96%
<b>Diversified Growth Funds</b>	<b>17%</b>	<b>13,590</b>	<b>74.5</b>	<b>222.7</b>	<b>56%</b>
Real Return Fund	8%	4,696	56.5	223.0	70%
Dynamic Diversified Growth Fund	9%	8,895	89.5	222.5	44%
<b>Illiquids<sup>2</sup></b>	<b>3%</b>	<b>368*</b>	<b>16.4</b>	<b>n/a</b>	<b>83%</b>
<b>Bonds</b>	<b>51%</b>	<b>42,073</b>	<b>76.6</b>	<b>191.0</b>	<b>71%</b>
Global ESG Bonds	8%	3,446	39.2	122.7	71%
Diversified Income Fund	6%	10,931	170.0	361.9	46%
Absolute Return	7%	111	1.4	n/a	16%
Multi Asset Credit	7%	5,928	79.2	n/a	88%
Bonds	7%	6,158	78.6	146.8	74%
LDI	15%	15,500	94.1	181.8	100%
<b>Total</b>	<b>100%</b>	<b>87,830</b>	<b>81.6</b>	<b>199.3</b>	<b>75.4%</b>

Source: Investment managers. Investment managers provided carbon emissions data in line with the [Carbon Emissions Template \(CET\)](#). Where managers provided information in USD terms, Aon converted it to GBP terms as at 31 March 2022 FX rate.

<sup>1</sup>Some managers were able to provide carbon intensity information in the form of weighted average carbon intensity (WACI). These allocations have been removed from the weighted total.

<sup>2</sup>The Scheme is invested into two illiquid mandates. One manager only was able to provide carbon information. Another manager's fund was launched last year and is therefore still in its investment period. This manager, thus, does not disclose them until they get more robust and consistent data which is currently being collected.

\*These are scope 3 emissions. The manager commented that since the fund's assets are all debt assets, they have no Scope 1 or Scope 2 emissions associated with them and the figures are therefore entirely captured in the Scope 3 questions.

n/a = data was not provided

Cash was excluded from carbon data analysis due to the nature of asset class and on the materiality basis.

# Looking to the future

## Trustee’s climate-related target

Climate-related targets help the Trustee track its efforts to manage the Scheme’s climate-change risk exposure.

### Data Quality Target

The Trustee has set a target for improving the data quality metric / reducing carbon emissions. Without meaningful data from the investment managers, it is very hard for the Trustee to measure its climate-risk exposure. So, it is important to set a target to improve the quality of GHG emissions data from the managers.



Based on the observation of data quality summarised in the previous section, the Trustee has agreed to the following data quality target for its Scheme’s assets below.

**The Trustee has agreed to continue improving data quality and coverage by the end of 2024.** This will allow future targets to be considered to reduce carbon footprint and aligns to the aspirational goals set by the Trustee. The Trustee will achieve this by:

- Engagement with managers who were unable to provide data.
- Ensure managers are providing consistent data.

### Carbon footprint Target

The Trustee agreed to the following carbon footprint target in its Mission Statement.



**Identify and implement measures which lead to reductions to the Scheme’s carbon footprint by 2024.**

Using 31<sup>st</sup> March 2022 as a benchmark.

**2022 carbon footprint**

**81.6**

(Tonnes CO<sub>2</sub>e/£m invested)

### What is the Trustee doing to reach the target?

To reach its target the Trustee is considering reducing the carbon footprint of individual mandates whilst looking to retain a similar risk and return profile.

The Scheme’s performance against the target will be measured and reported on every year. Over time, this will show the Scheme’s progress against the target.