CITY OF LONDON

THE GLOBAL CITY

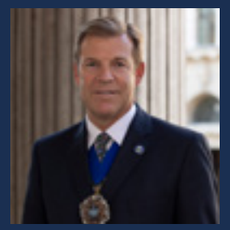
Climate Action:

Managing Climate Risk for our Financial Investments – 2021

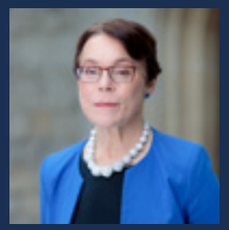
Click to begin

Foreword

With its gleaming towers and winding streets, London's Square Mile isn't the first location to come to mind when thinking of climate change. And yet in our view, we are on the front lines.



Alderman William Russell
Rt Hon Lord Mayor of the City of London



Catherine McGuinness
Policy Chair of the City of London Corporation

Each day, incredible volumes of capital move unseen across the City and from the City across the world. This is the finance that has built and sustained much of the world's infrastructure and companies. But in enabling the growth and prosperity many of us have come to expect, finance has also enabled emissions to grow unchecked for far too long.

The climate science is unambiguous and unequivocal. The world must reach net zero emissions by 2050 if we are to have any hope of limiting climate change to 1.5°C. Above this threshold, the risks to individuals, capital, and our way of life are systemic and irreversible.

The Intergovernmental Panel on Climate Change's most recent warning is urgent and alarming. Time is running out.

Confronting climate change demands urgent, sustained, and comprehensive action. It requires nothing less than the rewiring of the global economy. Finance directly reaches the far corners of the global economy. It is uniquely exposed to the impacts of climate risk, and the best positioned sector to make a decisive change.

In our view, the City has a moral and civic obligation to lead the race to zero. A responsibility beyond the Square Mile City firms can only continue to manage risk and deliver commercial returns if they tackle environmental and wider sustainability challenges. But ambition and rhetoric must result in action. That is why last year, we, City of London Corporation – the governing body of the Square Mile – committed to deliver a net zero Square Mile by 2040 and published a detailed action plan.

A key pillar of our Climate Action Strategy involves addressing the climate risk within our own investment portfolios. These financed emissions are our single largest contribution to climate change, and as we have found, a significant risk to the value of our investments. We are determined to manage these risks promptly and to ensure the resilience of our portfolios as the transition to net zero accelerates. That is why we are delighted to publish our first report following the recommendations from the Taskforce for Climate-Related Financial Disclosures and look forward to continuing to publish annual climate risk disclosures.

Our investments also represent one of our largest levers to drive behavioural change among financial services firms – particularly among our investment managers. We are committed to working with the financial services industry to accelerate progress on the race to zero. That is why we are committing to reach net zero across our financial investments by 2040. And why we have published a set of 12 expectations we expect investment managers to follow to demonstrate they are appropriately managing climate risk.

Executive Summary

The City of London Corporation's core purpose is to promote the long-term interests of the City of London, and thereby support the UK's economy. We have long been champions of sustainability. We were the first local government body to introduce a smokeless zone, in 1954, two years ahead of the Clean Air Act. We developed a climate change adaptation strategy in 2010 and became a world leader in green finance shortly after the Paris Agreement was signed by setting up the Green Finance Initiative, supporting the UK Green Finance Taskforce, and co-founding the Green Finance Institute.

We have long recognised the need to follow the science on climate change and to build greater awareness of climate risk and risk management. This was a core motivation behind the establishment of the Green Finance Initiative, which was instrumental in building momentum in the UK behind the Task Force on Climate-related Financial Disclosures (TCFD).

The inevitable risks of climate change and the inexorable logic of climate science led us to develop an ambitious Climate Action Strategy and implementation in 2020.

The Climate Action Strategy commits the City Corporation to achieve net zero carbon for its own operations by 2027 and across its investments and supply chain by 2040; climate resilience in its buildings, public spaces and infrastructure; and commits to support the achievement of net zero for the Square Mile by 2040.

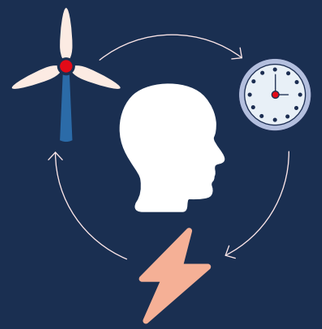
Like many of the financial and professional services firms who inhabit the City, our single largest contribution to climate change comes via our financed emissions. It is unequivocal that climate change represents a significant risk to the value of the City Corporation's financial investments, but also our core mission to maintain a vibrant and thriving City, supporting a diverse and sustainable London within a globally successful UK. For the purposes of this report, the City Corporation's financial investments refers to our local government pension fund, our endowment fund City's Cash, and those of financial investments of Bridge House Estates (Charity Reg. No. 1035628) and two small charitable funds for which the City Corporation is charity trustee. our historic endowment Bridge House Estates, and two small charitable funds.

As an asset owner, we support the objective of the Paris Agreement to keep global warming well below 2°C and preferably 1.5°C – the level considered safe by the Intergovernmental Panel on Climate Change (IPCC). We are alarmed by the IPCC's recent AR6 report[1] which highlights the significant and accelerating impacts of climate change, and which notes that 1.5°C might be exceeded by 2040 without urgent action.

That is why we have committed to aligning our investment portfolios with net zero emissions by 2040. We have made this commitment because leadership on climate is critical and we believe that our fiduciary duties demands it. We recognise that maintaining appropriate risk-adjusted returns from our portfolio requires an investment approach that prioritises change from firms in the real economy and the economic transformation of entire sectors. In response we have adopted a three-pronged approach to climate:

We have committed to aligning our investment portfolios with net zero emissions by 2040

1 https://www.ipcc.ch/report/ar6/wg1/



1

Accelerating Climate Integration:

Working directly with our investment managers to ensure their investment processes are fit-for-purpose and aligned with Paris goals.

Rapidly Decarbonising Investments:

Aiming to cut 24% of financed emissions from our portfolios by 2025 through focused engagement and asset allocation decisions.

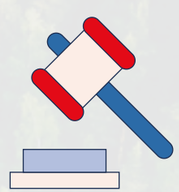
2

3

Collaborating for Outsized Impact:

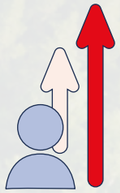
Driving change in the wider investment management ecosystem by focusing and motivating others and modelling good practice.

Short term targets are key to delivering a long-term plan. That is why we have set an interim decarbonisation **target of 24% emissions reduction** across our portfolios by 2025. This means that as an asset owner we will:



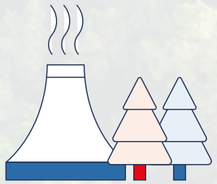
Expect

Our managers to comply with a set of climate expectations.



Implement

A transparent escalation process for engagements with investment managers.



Adopt

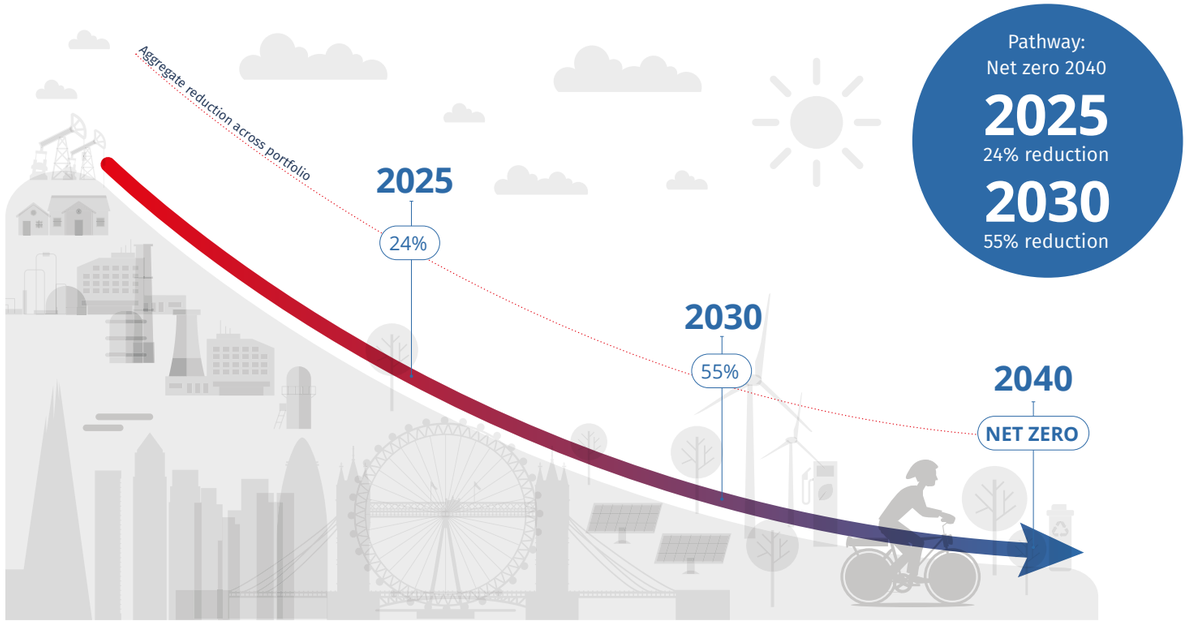
An open stance to investment strategies incorporating climate solutions and negative carbon assets that offer competitive risk and return characteristics.

Promote

A just and net-zero carbon transition, advocating for the adoption of investment strategies and business models that are consistent with 1.5°C and ensure economic shocks to workers, communities and consumers are mitigated.

Consistent disclosure of climate-related risk information is the key to ensuring that all financial decisions – including our own – take climate change into account. That is why we are excited to take our place amongst committed asset owners who lead by example. This is our inaugural detailed disclosure against TCFD and our approach to managing climate risks across our investment portfolios. Responses to each of the 11 TCFD recommendations are highlighted for ease of reading.

Our Investments in Context



Our Investments

£3bn
Assets under management

5
Investment portfolios

25
Investment managers

27%
Holdings in our equity portfolios are aligned with the Paris Agreement[1]

Our Approach to Climate Risk Management

236,800t
Investments responsible for 236,800 tonnes of CO_2 in 2020[2]

76.7
Weighted Average Carbon Intensity (WACI): 76.7

6
Portfolio performance analysed against 6 future climate scenarios

4.2%
Estimated 4.2% of investments exposed to stranded assets

Our Climate Commitments

1.5
Aiming for 1.5 degree world

2040
Net zero by 2040

55%
emissions intensity reduction by 2030

Our Short Term Plan to cut 24% of emissions by 2025

Engage
Full compliance by investment managers with 12 climate expectations

Allocate
Integrate climate risk into asset allocation, including open stance to climate solutions

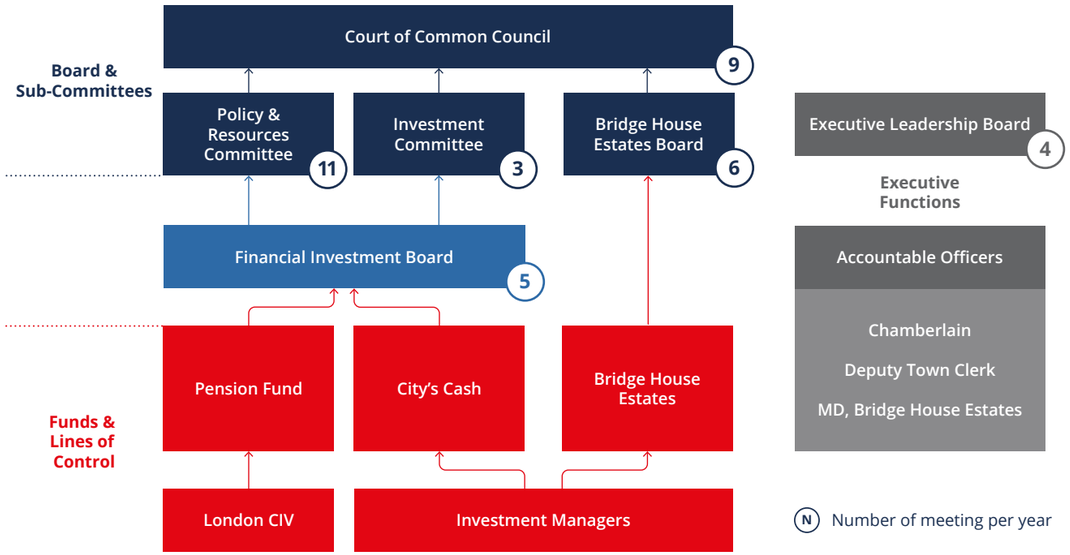
Deliver
Build an internal centre of excellence with responsibility for timely delivery of the net zero pathway

Governance

As part of our ambitious Climate Action Strategy, the City Corporation has integrated the governance arrangements for climate risk management into existing governance structures.

1a&1b. **Governance**

Governance and oversight of climate-related financial risk



The Court of Common Council is the City Corporation's primary decision-making body. The Policy & Resources Committee is responsible for governance, strategic priorities, agreeing policy, and allocating resources other than for Bridge House Estates (BHE). This committee, and the BHE Board for BHE, is accountable for the Climate Action Strategy. The Policy & Resources Committee receives quarterly updates on implementation and climate risk, and regular updates are provided to the Bridge House Estates Board, and other committees of the Court which are key to delivering on the Strategy. The Investment Committee is responsible for the strategic oversight and monitoring of the performance of the City Corporation's investments, other than for BHE where these responsibilities lie with the BHE Board.

Resource allocation is a joint responsibility of the Finance and Policy & Resources Committees who are responsible for City's Cash, City Fund and other funds held by the City Corporation with the exception of the Bridge House Estates (BHE) funds which are the responsibility of the BHE Board. These are governed by the BHE Board. The named Committees and the BHE Board must ensure climate risk is integrated into the medium- and long-term financial plans which drive the return requirements for investments.

Management of the individual investment portfolios is delegated to two Boards by the Court of Common Council

Financial Investment Board

The Financial Investment Board (FIB) is responsible for the financial investments across four portfolios: the Pension Fund, City's Cash (an endowment used to finance activities mainly for the benefit of London as a whole but also of relevant nationwide), the Hampstead Heath Trust Fund (Charity Reg. No. 803392-1), and the City of London Charities Pool (Charity Reg. No. 1021138), and the Charities Pool.[2] FIB also consults and and may advise the BHE Board on matters in respect of the Bridge House Estates' non-property investments.

Bridge House Estates Board

The Bridge House Estates Board (BHE Board) is responsible for the investments of the Bridge House Estates, an historic endowed charity.

These two boards are responsible for ensuring the integration of climate risk into strategic asset allocation, portfolio construction, implementation and overall investment decision-making.

Given its importance, neither board has identified one individual to specifically be responsible for its response to climate risks and opportunities. Rather, each has collective responsibility for setting the portfolios' climate change risk framework. Both boards have discussed and agreed climate-related beliefs and overarching approach to managing climate change risk. These are expressed in detail in the City Corporation's Responsible Investment Policy and Investor Statement on Climate Change.

2 This excludes directly held property for City's Cash and Bridge House Estates.

In summary, the Financial Investment Board and Bridge House Estates Board believe that:

The risks associated with climate change can have a materially detrimental impact on the portfolios' investment returns within the timeframe that the FIB and BHE Board are concerned about.

Climate-related factors may create investment opportunities. Where possible, and where appropriately aligned with strategic investment objectives, the City Corporation will seek to capture such opportunities through its investment portfolio.

The most appropriate time horizons for the portfolios are as follows:

Short term:
1-3 years

Medium term:
4-10 years

Long term:
11+ years

Climate-related risks and opportunities are assessed over the above time horizons. Where appropriate, the boards consider transition and physical risks separately.

The City Corporation's exposure to climate risk and ability to control these risk stem from our investment managers. In the case of the Pension Fund, there is an asset pooling regime and the Pension Fund is a shareholder of, and investor in, the London LGPS CIV Limited (Co. Reg. No. 9136445) (London CIV). For all other funds, the respective Boards appoint investment managers directly. The Boards rely on the advice of a retained investment consultant in making these decisions.

The City Corporation has recently appointed Mercer Ltd as its investment consultant, who will support the Boards with strategic and practical advice. This will include monitoring portfolio-level climate risk, integrating our climate objectives into strategic asset allocation reviews, and actively drawing attention to underperforming and best-in-class managers in terms of financial and climate performance.

To ensure adequate management of climate-related financial risks, the City Corporation is expanding the dedicated team who support the Boards in implementing their decisions. This team will include a dedicated Engagement Manager who will lead climate risk engagements with investment managers and the London CIV.

The two Boards will monitor and review progress against the portfolios' climate change risk management approach on a quarterly basis. The FIB and BHE Board will keep apprised of any material climate-related developments through regular (typically quarterly) updates.

Activity During 2021

The Financial Investment Board and Bridge House Estates Board have spent 2021 developing a sophisticated and balanced approach to climate risk and opportunity. This has been an extensive process that has included:

Direct engagement

With all equity, multi-asset, and infrastructure managers. These engagements explored the climate risk management policies and processes of each manager. The data reaffirmed the Boards' views that there is a wide spread of climate risk across the portfolios and led them to commission Aon to undertake carbon benchmarking and climate risk analysis of all the portfolios.

Carbon footprint

The carbon footprint of each manager across the portfolios was recalculated based on March 2021 data. This exercise was extensive and updated 2018 figures which were largely based on proxies.

Detailed climate risk analysis

A detailed climate risk analysis was undertaken to identify stranded asset risk across the portfolio and evaluate the performance of investments under six climate scenarios.

Training sessions

Members of the Financial Investment Board and Bridge House Estates Board attended 5 training sessions on climate risk. Three sessions were organised by Aon and looked at scenario analysis and transition risk. Two sessions were organised by Carbon Tracker Initiative and focused on the energy transition and climate risk management approaches adopted by small asset owners.

Implementation plan

The development of an implementation plan for the City Corporation's Net Zero 2040 commitment across all portfolios. This included the setting of interim decarbonisation targets for 2025 and 2030, new climate change expectations for investment managers, and a new approach to manager engagement.

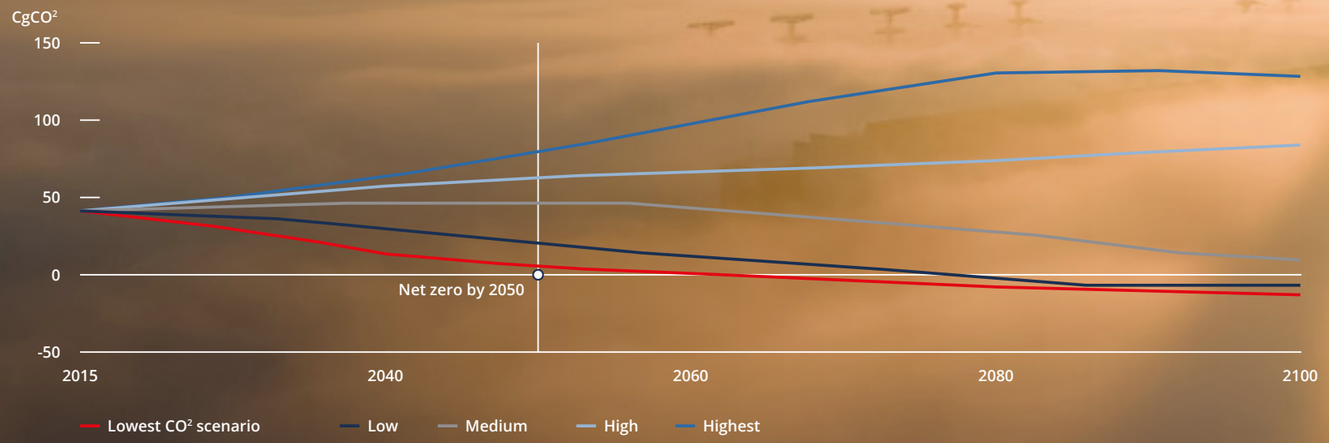
Throughout our assessment of climate risks and opportunities we learned that our invested portfolios are exposed to transition risks across all asset classes, and to physical risks predominantly though property and infrastructure mandates. We have started our journey on working closely with our underlying asset managers to better understand the key risk drivers in each asset class and will address these in the most efficient manner to manage our risk. This report provides a good insight into our efforts of making our portfolios more sustainable and accounting for climate related risks.

Strategy

The Intergovernmental Panel on Climate Change's (IPCC) 1.5°C report highlights that, if the Paris 1.5°C target is to be met, then "global net anthropogenic CO_2 emissions must decline by about 45% from 2010 levels by 2030, reaching Net Zero by around 2050". The IPCC's more recent AR6 report raised the urgency, noting that unless corrective action is taken, the planet is likely to surpass 1.5°C of warming by 2040.

A Path to safety

An emission scenario that can keep global warming below 1.5°C reaches zero emissions around 2050.



Source: Intergovernmental Penal on Climate Change

2a. Approach to Climate Related Risks and Opportunities

As part of our implementation plan for the Net Zero 2040 commitment, we determined which risks and opportunities can have a material impact on the portfolios through asset-class-level scenario testing and holdings-level carbon footprint analysis.

The City Corporation used these results to understand the portfolios' current greenhouse gas emissions, identify climate related risks and form transition pathways towards Net Zero emissions.

Climate change poses a systemic risk to the financial system, and to our investments. These risks fall into two categories.

Physical risk

The risks associated with the physical impacts of climate change on companies' operations. The portfolios are most directly exposed to these risks through its property and infrastructure holdings, but they are also expected to indirectly impact other asset classes too. Physical risks are expected to have the largest long-term impacts for all asset classes and economies in general.

Transition risk

The risks associated with the transition towards a low-carbon economy. For example, shifts in policy, technology or supply and demand in certain sectors. These are expected to have a larger short- to medium-term impact. These risks are likely to impact all asset classes over short to medium term horizons.

Climate Risk Assessment

We have made use of three approaches to assess the level of climate risk across our financial investment portfolios. We retained the services of Aon to support our climate risk analysis in 2021.

1 Direct manager relationships:

We meet with each investment manager on a regular basis to discuss performance and their approach to climate risk. Using the information gathered from these engagements, we have developed a maturity spectrum inspired by the Transition Pathway Initiative. This spectrum allows us to systematically compare climate approaches between managers in the same asset class (e.g. UK equity). The underlying premise is that climate-related risks are most likely to impact in those portfolios with high carbon exposure and where the asset manager is not paying sufficient attention to climate risk.

2 Portfolio-level monitoring:

We have baselined the carbon footprint and exposure to stranded asset risk[3] for each investment manager based on March 2021 data. These metrics will form the basis for annual monitoring of the portfolio. Additional metrics will be added as data quality and coverage increases.

3 Asset-level scenario testing:

We undertook our first scenario analysis based on six climate scenarios consistent with the recommendations of the Network for Greening the Financial System. We intend to undertake regular scenario analysis every 2-3 years to ensure new information is fed into allocations decisions.

We recognise that there are two dimensions of climate-related risk in the assets: strategic risk (through the asset allocation) and holdings risk (through the holdings in the various portfolios).

The City Corporation analysed the climate-related strategic risks through climate change scenario testing which showed that the portfolios' equity holdings were the main asset class-level driver of climate-related risk.

The City Corporation also engaged with its portfolio fund managers, to undertake a qualitative assessment of climate related holdings risks and understand how they are likely to evolve over time. It identified those managers with a high carbon footprint and little or insufficient plans to address that footprint, which therefore pose a medium- and long-term risk of the portfolios not reaching their Net Zero target without targeted intervention.

It became evident that equity, alternative credit and multi asset holdings contributed the most to the overall carbon footprint of the portfolio. Furthermore, we identified which managers were the top emitters within these asset class brackets.

3 Defined as exposure to fossil fuel sectors including thermal coal and oil & gas.

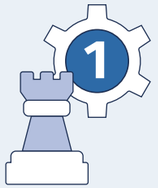
2b. Impact of climate change risks and opportunities

We recognise that climate related risks can have a meaningful impact on our organisation's business, strategy, and financial planning. As such, we committed to a net zero emission target on our investment portfolios by 2040.

We have assessed our portfolios' capability to align with a net zero emission target by 2040 whilst retaining its existing financial objectives, and to develop a corresponding transition pathway to encourage more sustainable investing and reduce emissions.

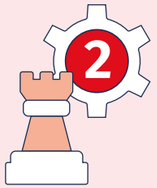
As well as carrying out scenario analysis modelling with current portfolio compositions, we also modelled alternative asset allocation strategies to better understand the varying impact of potential downside risks while retaining existing financial objectives. This modelling has led us to conclude that climate change is likely to lead to additional financial stress on City Corporation's investment portfolios.

Following a careful discussion of the results of the scenario analysis, in particular the projected funding stresses and the associated impact on the City Corporation, the FIB and BHE Board are evaluating a number of changes to the portfolios' strategy which broadly fall into two areas:



Strategy area 1

Changes to the asset allocation including explicit consideration of climate opportunities



Strategy area 2

Reducing the exposure of the underlying portfolios to emissions

In order to support the achievement of these approaches, FIB and the BHE Board have identified certain focused engagement practices to proactively promote more sustainable practice among the asset managers and monitor the managers' progress against their climate related targets. The proposed actions will be described in a Risk Management Pillar.

2c. Portfolio Resilience and Scenario Analysis

We strongly recognise the importance of assessing our portfolios' resilience against climate-related stress that have the potential to occur over the short, medium and long-term. To better understand and quantify climate related risks, we conducted scenario analysis comparing five different climate scenarios against a base case. Scenarios included: no transition, disorderly, abrupt, orderly, and smooth transitions.

These scenarios were chosen because we believe that they provide a reasonable range of plausible climate change pathways over the time horizons that concern us. These scenarios have been developed by Aon and are based on a detailed series of assumptions. However, they remain projections and are subject to considerable uncertainty.

1 **Base Case:**

To begin with, we established a **"base case"** scenario, which is based on current long-term return views of what is currently priced into the market. This is judged to be consistent with a temperature rise of ~2°C – 2.5°C. This and the other scenarios considered are outlined in Annex 1. Three of the scenarios considered are expected to deliver warming of 2 degrees or less.

2 **Modelling:**

We modelled the **current strategic asset allocations**, which consist of well-diversified portfolios exposed to major asset classes. The scenario analysis considered the potential impact of climate change on the assets and liabilities of each portfolio assets and liabilities and, therefore, their funding position. The analysis also considers how the Funds' asset portfolios may perform against the base case in each scenario over the short, medium, and long-term. Of the scenarios, we believe the Abrupt Transition scenario to be the most likely. This scenario has been used to inform each portfolio's climate strategy.

3 **Impact Assessment:**

Under the most severe downside scenario, **"disorderly transition"**, the Funds are expected to experience a significant deficit shock in the early 2030s. The FIB and BHE Board are actively considering and implementing ways to mitigate these shocks to provide further downside protection. Three of the five scenarios suggest deficits approaching or exceeding £500m within the next 15 years (i.e. by 2035).

The tables below summarise our portfolios' base case performance results and the subsequent changes in the performance under each climate scenario in relation to the base case.

Table 1: Short-term (3 year performance) Scenario Analysis & Portfolio Performance Relative to Base Case to 2050[4]

	Bridge House Estates	City's Cash	Pension Fund	Charities Pool and Hampstead Heath Trust Fund
Base Case 3-year absolute return (% p.a.)	5.40%	6.40%	6.10%	7.20%
Orderly Transition Return Relative to Base Case	-7.20%	-8.80%	-7.90%	-9.70%
Disorderly Transition Return Relative to Base Case	0.10%	0.00%	0.00%	0.00%
Abrupt Transition Return Relative to Base Case	-0.20%	-0.40%	-0.30%	-0.40%
Smooth Transition Return Relative to Base Case	2.30%	2.80%	2.40%	3.20%
No Transition Return Relative to Base Case	0.10%	0.00%	0.00%	0.00%

Table 2: Medium-term (10 year performance) Scenario Analysis & Portfolio Performance Relative to Base Case to 2050[2]

	Bridge House Estates	City's Cash	Pension Fund	Charities Pool and Hampstead Heath Trust Fund
Base Case 3-year absolute return (% p.a.)	5.70%	6.50%	6.30%	7.20%
Orderly Transition Return Relative to Base Case	0.10%	0.00%	0.00%	-0.10%
Disorderly Transition Return Relative to Base Case	0.00%	-0.10%	-0.10%	-0.20%
Abrupt Transition Return Relative to Base Case	-2.00%	-2.60%	-2.30%	-2.90%
Smooth Transition Return Relative to Base Case	1.00%	1.20%	1.10%	1.40%
No Transition Return Relative to Base Case	-0.10%	-0.20%	-0.20%	-0.20%

Table 3: Long-term (30 year performance) Scenario Analysis & Portfolio Performance Relative to Base Case to 2050[2]

	Bridge House Estates	City's Cash	Pension Fund	Charities Pool and Hampstead Heath Trust Fund
Base Case 3-year absolute return (% p.a.)	5.80%	6.60%	6.40%	7.20%
Orderly Transition Return Relative to Base Case	0.40%	0.30%	0.30%	0.30%
Disorderly Transition Return Relative to Base Case	-2.00%	-2.50%	-2.30%	-2.80%
Abrupt Transition Return Relative to Base Case	-0.50%	-0.70%	-0.60%	-0.80%
Smooth Transition Return Relative to Base Case	0.80%	0.90%	0.80%	1.00%
No Transition Return Relative to Base Case	-0.60%	-0.80%	-0.80%	-0.90%

4 Based on analysis performed by AON based on 31 March 2021 position.

Risk Management

3a. Identifying and assessing climate-related risks

Our approach to identifying and assessing climate-related risks and opportunities is comprised of two elements.

Element 1 - Qualitative Analysis

The first element is a qualitative assessment of climate-related risks and opportunities, which this year was conducted as part of the transition pathway work prepared by Aon. The underlying premise is that climate-related risks are most likely to impact the portfolios in those portfolios with high carbon exposure and where the asset manager is not paying sufficient attention to climate risk. The assessment included engagement with all investment managers employed by the portfolios to gather and evaluate climate related metrics and rank the managers' Responsible Investment ("RI") policies on the basis of their transparency, alignment and engagement with underlying companies. We intend to carry out a similar engagement approach but with focus on greater detail from the managers in future years.

Element 2 - Quantitative Analysis

The second element was quantitative in nature and delivered by means of climate change scenario analysis, which was also provided by Aon. This analysis is designed to help assess the potential impact of climate-related risks on each portfolio. We intend to carry out climate scenario work in future years to monitor each portfolio' climate related risks. This scenario analysis will be complemented by routine monitoring of climate risk data at holdings level reported by each of our managers.

Both elements complement each other and taken together give us a clear picture of the climate-related risks that the portfolios are exposed to. Where appropriate, we distinguish between transition and physical risks and all risks and opportunities are assessed with reference to the time horizons that we have identified.

When prioritising our engagement activity, we consider the overall significance of each mandate within the overall portfolios. Factors that go into this include:

- **Contribution towards overall portfolio carbon footprint:** We will focus on portfolios which make a high contribution to the overall carbon footprint since this is where the highest impact of any climate-related risks is likely to occur.
- **Asset class and possible climate relate risk associated with it:** Certain asset classes have a higher climate-related risk exposure than others and will be a particular engagement focus. We will engage with these managers to monitor and interrogate their progress to manage and mitigate that exposure.

Three key insights are clear from our climate risk analysis.

1st **There are four strategic risks arising from climate change across the investment** portfolios that are within the City Corporation's sphere of influence:

- Failure to manage climate risk through poor awareness and responsiveness over how climate risks will impact on markets, managers and portfolios.
- Failure to anticipate and effectively manage changes in the market in terms of regulation, disruption, best practice, innovation and demand – both top-down in terms of asset allocation and bottom-up in terms of the impact on individual asset managers and investments.
- Failure to adapt investment strategy that effectively respond to climate risk in the context of return objectives.
- Failure to positively impact industry behaviour, due to mismanagement of all the above risks.

2nd **The systemic nature of climate risk implies we must catalyse change in the financial system at scale.** This suggests we need to change the behaviour of our investment managers – encouraging them to internalise climate risk management into their investment process. But also influence the behaviour of prospective managers in the UK and beyond. We also recognise the power of collaboration with our peers and industry wide initiatives around sustainable solutions and promote greater awareness of climate related issues and opportunities. We are undertaking to make more extensive use of the City Corporation's unique role in the UK's financial system status as a significant charitable investor, and idiosyncratic capabilities to drive better management of climate risk.

3rd **We are not well positioned to capture climate opportunities.** Few of our managers cannot yet articulate how their investment strategies are positioned to benefit from sustainability tailwinds over the coming decade.

Carbon Footprint

We re-baselined our carbon footprint based on March 2021 data. The total carbon footprint across the portfolios is 236,800 Tonnes CO_2. The full breakdown of carbon metrics is included at Table 4 below. A more detailed assessment of carbon emissions and emissions intensity for each fund and asset class is also provided. Table 4 also provides an estimate of stranded asset risk based on holdings in oil, gas, mining, and associated fossil fuels. The analysis suggests across the portfolios the exposure is £131.7m of stranded asset risk – approximately 4.2% of investments. These numbers are estimates only and should not be mistaken for a precise quantification of risk.

Table 4: Carbon Footprint and Stranded Asset Risk by Portfolio (31 March 2021)[5]

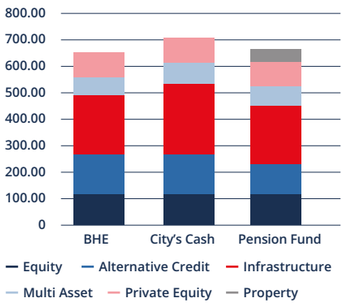
	Bridge House Estates	City's Cash	Pension Fund	Charities Pool and Hampstead Heath Trust Fund
Carbon Footprint (Tonnes CO_2)	72,200	63,400	95,900	5,300
Carbon Intensity (Tonnes CO_2/£ invested)	113.9	119.6	110.7	100.2
Stranded Asset Risk (as % of portfolio)	4.4%	3.9%	4.1%	11.3%
Share of mandates with stranded asset exposure	15/22	14/21	18/23	2/2

Source: Managers, Aon.

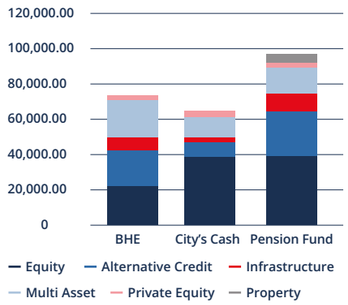
Note 1: Carbon footprint, intensity and stranded assets were obtained from the Managers or estimated by Aon when not available from managers. Where the data was denominated in foreign currency (predominantly USD) Aon converted it to GBP using the latest appropriate FX rate.

Note 2: Stranded assets were calculated as a weighted exposure to fossil fuel, oil, gas and mining assets based on the portfolio allocations to each of the managers' mandates.

Carbon Intensity (tonnes CO^2)



Carbon Footprint (tonnes CO^2)



5 Based on analysis performed by AON. The carbon footprint of each portfolio is constructed from reported figures from each manager based on 31 March 2021 position. For private equity managers a proxy constructed by Aon was used. In future we will continue to use the methodology provided by Aon, making appropriate revisions to the baseline as actuals become available.

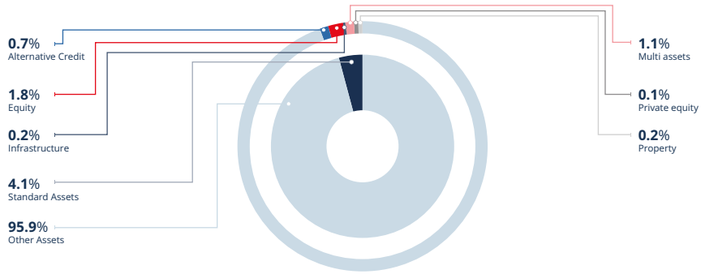
Understanding our sector exposure was important aspect of transition pathway to allow us gain insight into the underlying sectors our investments are most exposed to. Based on our analysis it became evident that equity and multi asset holdings were the major contributors to stranded asset exposure within all our portfolios. We have defined stranded assets as investments within fossil fuel, oil, gas, and mining industries. These are summarised at the portfolio level for each each portfolio below.[6]

236,800t

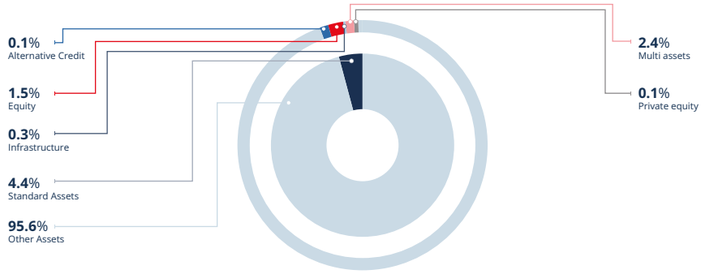
The total carbon footprint across the portfolios is 236,800 Tonnes CO_2

6 The Charities Pool and Hampstead Heath Trust Fund are managed by a single manager and are not reported below.

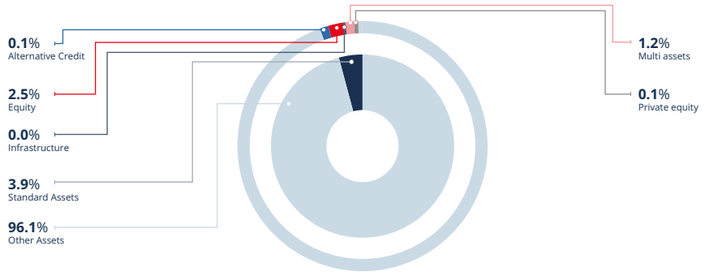
Pension Fund Stranded Assets



BHE Stranded Assets



City's Cash Stranded Assets



3b.&c. Approach to Manager Engagement

Managing the climate risk exposures across the investment portfolios and delivering our net zero target hinges on our ability to drive our managers to accelerate integration of climate risk into their investment process. We have significant mandates with many of our managers and these are our greatest point of leverage to drive climate action across our portfolio.

We are taking three concrete steps to integrate climate risk into our manager monitoring and engagement process.

Deepening engagement with our managers

These meetings will include a review of climate and financial performance. Managers will also be expected to routinely share a fixed set of climate and financial risk information. The objective of these engagements is to ensure the managers are aware of and working towards the same objectives as the City Corporation.

We ensure that our portfolios are well diversified, and that our managers have a deep understanding of both the companies and assets in which they invest and the risks to which they are exposed. While we do not require managers to exclude high emission assets, we expect their portfolios to be fit for a net zero future. Where managers continue to hold high emission assets, we will require an explanation of the transition pathway of these assets, expected upside, and steps the manager is taking to manage downside risk. If investment managers are not able to robustly and credibly explain their investment strategies and how they have integrated climate risk, we will look to replace them with investment managers that do.

Minimum expectations for our managers

Outlining a set of minimum expectations for our managers, with clear timed cut-offs for actions on disclosure, climate integration into investment processes, engagement and voting. A list of minimum expectations is included in the box opposite on page 22 as part of a proposed statement on climate change.

Reflecting the scope and impact of climate risks to our investments, the imperative to drive systematic change from investment managers, and to achieve our own emissions targets, below we set out minimum expectations for current and prospective investment managers.

These minimum expectations will operate on a comply or explain basis and we will work with all managers to support full compliance over time.

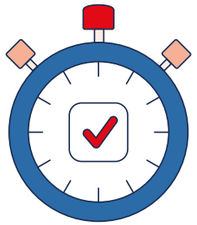
Publishing a transparent escalation process

This process outlines when and how we will escalate climate risk issues with our investment managers who fail or are slow to meet our minimum expectations.

We aspire for all our managers to become climate leaders with comprehensive climate risk management processes, and exposure to the upside of the transition. However, we recognise that best practice continues to evolve, that there are meaningful differences between asset classes, and that some managers will take time to align their strategies with our minimum expectations.

We will continue to engage with each of our investment managers in good faith to support compliance with our expectations and we are keen to give our investment managers the space to develop the most appropriate strategies for reducing climate risk exposure. In many cases, our expectations are not new and nor do they deviate from expected market norms. Managers have had a number of years to evolve significant and sophisticated approaches to managing climate risk.

Climate Expectations for Manager Selection and Monitoring

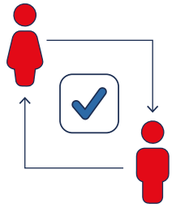


Time-Bound Expectations

1. By end 2022, all managers should set out a net zero target for 2050 or earlier at firm level. This should be consistent with the Science Based Targets Initiative.
2. By end 2022, all managers should set out a clear transition pathway at firm level, with milestones for 2025 and 2030. Consistent with viable decarbonisation pathways, interim milestones should reflect at least 50% emissions reductions from 2018 levels by 2030 at the latest. Appropriate governance, training, and remuneration policies are expected.
3. By end 2022, all managers should have made their first disclosure against all 11 recommendations of the Taskforce for Climate-Related Financial Disclosures.

Investment Process

4. Managers will document their process for identifying, evaluating, and managing physical climate and climate transition risks and opportunities in the investment process of the relevant mandate. This should cover fundamental analysis of sector transition pathways, whether an investee company's offerings impair or improve the present and future, and how growth would be impacted by a realistic price on carbon.
5. Investment models should integrate scenarios aligned to the 1.5°C ambition in the Paris Agreement (e.g. IEA NZE 1.5°C) and not overly rely on negative emissions technologies or offsets.
6. A statement regarding treatment of high emission sectors/assets within the mandate. This should include risk controls, metrics being monitored, and thresholds for exit. Treatment of high emission assets such as thermal coal should be consistent with science-based target requirements for phase out.



Engagement and Active Ownership

7. A presumption to vote in favour of shareholder resolutions on climate change on a comply or explain basis.
8. Engage investee companies to publish 1.5°C transition plans with short- and medium-term science-based targets. These plans should include steps to align capital expenditure, remuneration strategies, and public engagement including corporate lobbying with 1.5°C. Transition plans should also incorporate social risks and opportunities to ensure a just transition. All investee companies should have set a science-based target before 2025.
9. An engagement escalation policy should be disclosed which will include details of how and when engagements will be escalated. This should include escalation to public statements, voting against management-proposed resolutions, and ultimately divestment or refusal to purchase new bonds in active strategies.

Reporting & Transparency

10. Disclosure of holdings, voting record and engagement activity at least every six months.
11. Develop environmental impact reporting for investments, including climate impact (positive and negative). Impact performance should be reported alongside financial performance.
12. Routine sharing of climate-related insight and research, including sectoral roadmaps and perceived policy barriers to decarbonisation.

Metrics & Targets

4a.&4b. **Metrics & Targets**

We use a number of metrics to assess climate related risks and opportunities and expect this to continue increasing over time, as the availability and quality of data being provided improves.

In 2021, we collated the following information to complete a climate analysis on our portfolios:

- Carbon Intensity
- Carbon Footprint
- Data quality, which included assessments on the below:
  - Fund alignment with net zero targets
  - Fund transparency: responsiveness, availability of data, etc
  - Fund engagement with underlying investments regarding climate change
- Exposure to stranded assets

As part of the climate analysis, we implemented a traffic light system summarising the above information for each fund, whereby we can monitor the risks and opportunities associated with each investment on a regular basis.

We have set out the current suite of metrics for each portfolio at Table 5. Due to coverage and quality issues, we only report data for our equity managers this year. We intend to present data covering our full portfolio from 2022 onwards.

We are considering adding "CDP alignment" (i.e. portion of portfolio holdings that disclose in line with CDP recommendations) as an additional metric to enhance to the data quality assessment in the following years. In addition to the reported portfolio metrics we have yet to implement forward looking metrics but remain interested in climate value at risk and portfolio warming potential. We look forward to further guidance from MHCLG in terms of the recommended metrics for the LGPS.

Table 5: Tracked Portfolio Metrics vs Benchmark

Portfolio Metrics	Equity Managers (City's Cash)	Equity Managers (BHE)	Equity Managers (Pension Fund)
Scope 1& 2 Intensity (Tonnes CO_2/£ million sales)	123.5	121.1	123.0
Scope 1&2 Footprint (Tonnes CO_2)[1] (Also shown as a % of equity portfolio)	39,291	22,383	39,536
Number of managers reporting Scope 3 emissions	3/8	3/8	3/8
Exposure to Stranded Asset (as a % of total assets)	2.5%	1.5%	1.8%
% of portfolio holdings with SBTI Paris-aligned targets	26%	28%	26%

* *An estimated based on MSCI data as at 30 June 2021. Calculated by using 25% carbon intensity (tonnes per $1m sales) for UK Equities and 75% or carbon intensity (tonnes per $1m sales) for Global Equities. These were converted to GBP terms as at 30 June 2021.

1 Please note that scope 3 carbon footprint is not available as managers are still working on standardising their calculations.

2 Some managers may not report directly to CDP, however they can use CDP data to complete their analysis of climate related risks.

3 Managers who currently do not report against TCFD are looking to release their first TCFD report in the following 12 months.

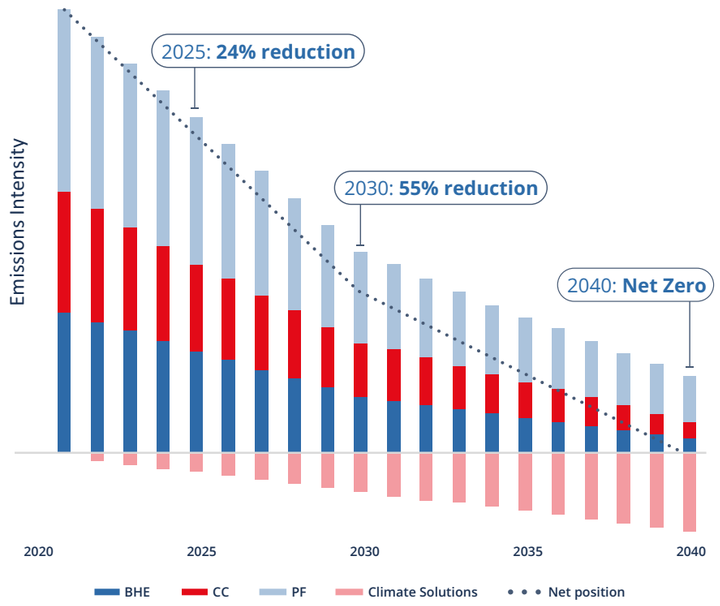
4c. Net Zero Commitment

We seek to align our financial investments with a pathway towards Net Zero carbon emissions and ensure consistency with the 1.5°C ambition of the Paris Agreement. We are setting targets for how we will transition our portfolios and will publish updates on our progress. We target a reduction in the carbon footprint of our investments by 24% by 2025 and by 55% by 2030, and we aim to transition all assets to Net Zero by 2040. We are closely examining investments into climate solutions before 2025. In figure below, we set out the City Corporation's pathway to meet net zero.

Consistent with best practice set by the Glasgow Finance Alliance for Net Zero, our interim targets frontend decarbonisation in the next decade recognising that progress from 2030 will be slower due to hard-to-abate emissions. The trajectory beyond 2030 is dependent on the IPCC's climate scenarios and the structure of the City Corporation's financial investment portfolio. We intend to closely monitor progress and report this annually.

Realising a 2040 net zero target across the portfolio and the proposed interim targets will require three significant shifts in the way the City Corporation approaches financial investments.

Net Zero Trajectory for Financed Emissions



55%

We target a reduction in the carbon footprint of our investments by 24% by 2030

1

We will implement a **comprehensive engagement strategy** and intensively work with managers to accelerate their integration of climate risk into the investment process.

We are in the process of evaluating changes to asset allocations, including determining an appropriate approach to increase exposure to **climate solutions**. This will be taken forward as part of our Strategic Asset Allocation reviews in 2022/23.

2

3

We are building **in-house capability** to implement the strategy and ensure adequate monitoring of targets.

The Road Ahead

There is a long road ahead to 2040 and there is much more work we need to do to ensure our portfolios are transition resilient. In parallel, there is much required among the investment management industry to enhance approaches to climate-related risk and opportunity identification, assessment, and execution within investment strategies.

As the City Corporation, we will aim to expand our measurement and monitoring of portfolio and forward-looking metrics. We will continue to push for greater transparency and availability of meaningful data. We will partner with others in this endeavour and seek to leverage our unique capabilities to drive systemic change.

Annex 1: Modelled Climate Scenarios

Scenario	Degree warming	Scenario description
Base case	~2°C – 2.5°C	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. Current pricing suggests that the market does not expect a bad climate change outcome – that is, the effects are not as damaging as first thought, and some progress is made to limit greenhouse gas emissions and global warming.
No transition	>4°C	The world economy remains oriented towards improving near-term economic prospects, with companies and governments taking a "business as usual" approach. While some climate change policies are implemented, global efforts are insufficient to halt significant global warming. Impacts from physical risks gradually become more severe over time and some become irreversible by 2100 as tipping points are crossed.
Disorderly Transition	<4°C	The world economy continues taking a "business as usual" approach. Eventually, market participants begin to fully grasp the implications of climate change and there is a growing realisation that current levels of action are inadequate. Market values price in high levels of economic damage and the irreversible loss.
Orderly Transition	<2°C	Increased public awareness of climate change risks galvanises opinion and leads to governments undertaking widespread action globally to aggressively mitigate and adapt to climate change. A high global greenhouse gas tax and carbon cap is introduced.
Abrupt Transition	<2°C	The effects from increasingly extreme weather events in the next five years lead to widespread public concern over climate change. This leads to governments introducing policies to drive a rapid reduction in greenhouse gas. Delayed action on reducing emissions mean that the costs of tackling the problem are higher.
Smooth Transition	<1.5°C	Private sector innovation and a green technology revolution, combined with government coordination, help drive progress towards tackling climate change.

CITY OF LONDON

THE GLOBAL CITY