Derbyshire Pension Fund

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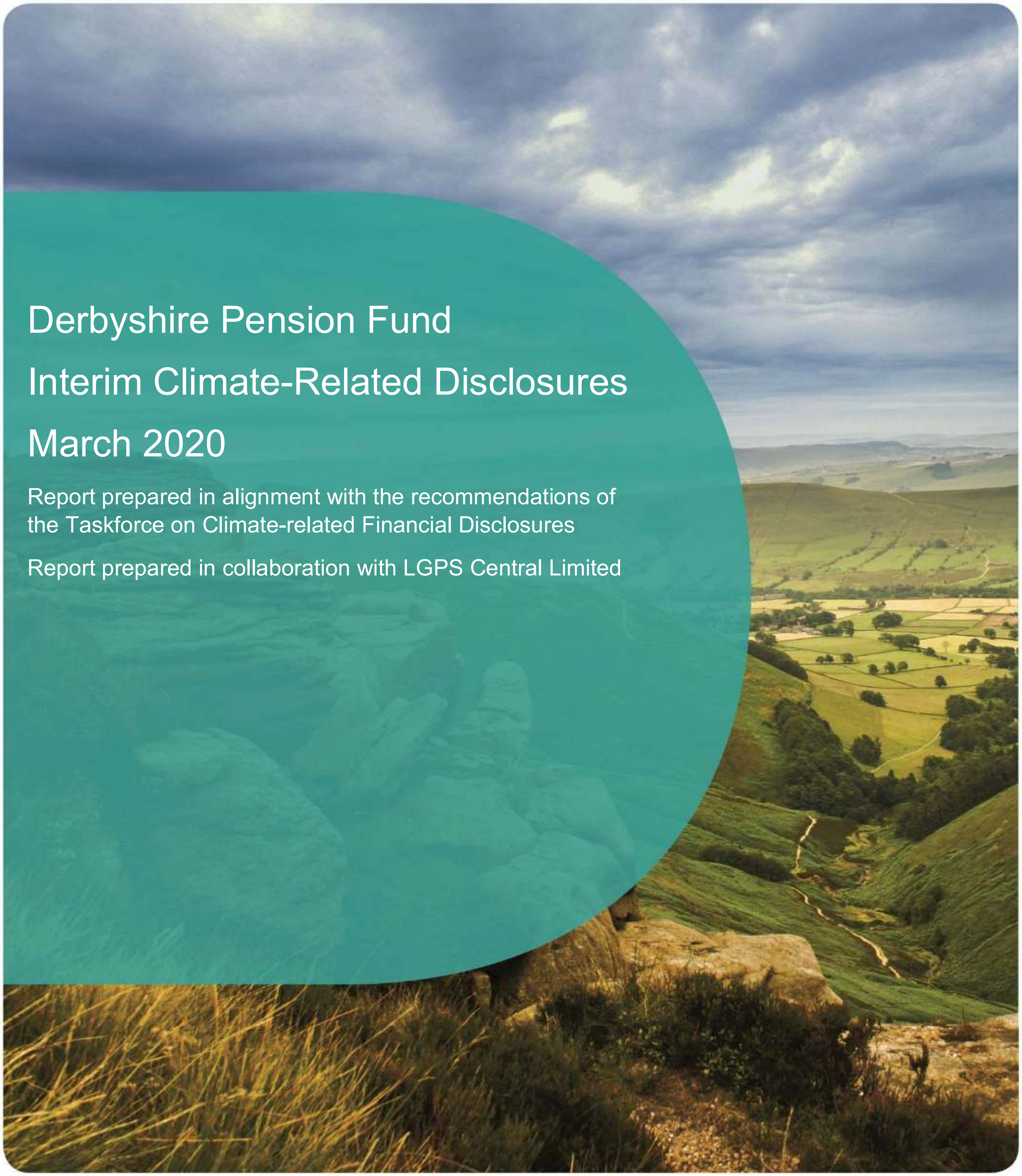


Derbyshire Pension Fund
Interim Climate-Related Disclosures
March 2020

Report prepared in alignment with the recommendations of the Taskforce on Climate-related Financial Disclosures

Report prepared in collaboration with LGPS Central Limited

County Hall, Matlock, Derbyshire, DE4 3AH
Administered by Derbyshire County Council

lgps

Glossary of Terms and Abbreviations

Financial Stability Board

The Financial Stability Board is an international body that monitors and makes recommendations about the global financial system. It was established after the G20 London summit in April 2009 as a successor to the Financial Stability Forum.

Greenhouse Gases

Greenhouse gases are gases in the Earth's atmosphere that are capable of absorbing infrared radiation and thereby trap and hold heat in the atmosphere. The main greenhouse gases are: Water vapour; carbon dioxide; methane; and nitrous oxide.

Scope 1 Greenhouse Gas Emissions

Scope 1 emissions are direct emissions produced by the activities of the emitter.

Scope 2 Greenhouse Gas Emissions

Scope 2 emissions are indirect emissions generated by the electricity, heat, or steam consumed and purchased by the emitter.

Scope 3 Greenhouse Gas Emissions

Scope 3 emissions are other indirect emissions, such as 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 & distribution losses) not covered in Scope 2, outsourced activities, waste disposal, etc.

UNFCCC

The UNFCCC secretariat (UN Climate Change) is part of the United Nations and was established in 1992 when countries adopted the United Nations Framework Convention on Climate Change (UNFCCC).

Abbreviations

CO_2	Carbon Dioxide
CH_4	Methane
DPF	Derbyshire Pension Fund
ESG	Environmental, Social & Governance
GHG	Greenhouse Gas
LGIM	Legal & General Investment Management
LGPSC	LGPS Central Limited
NDC	Nationally Determined Contribution
TCFD	Taskforce on Climate-related Financial Disclosures
WEF	World Economic Forum

Introduction to the TCFD

The Taskforce on Climate-related Financial Disclosures (The Task Force/TCFD) was commissioned in 2015 by Mark Carney in his remit as Chair of the Financial Stability Board, in recognition of the risks caused by greenhouse gas emissions to the global economy and the impacts that are likely to be experienced across many economic sectors. The Task Force was asked to develop voluntary, consistent climate-related financial disclosures that would be useful to investors, lenders and insurance underwriters in understanding material climate-related risks.

In 2017, the TCFD released its recommendations for improved transparency by companies, asset managers, asset owners, banks, and insurance companies with respect to how climate-related risks and opportunities are being managed. Guidance was also released to support all organisations in developing disclosures consistent with the recommendations, with supplemental guidance released for specific sectors and industries, including asset owners.

In his introduction to the final TCFD report, Michael Bloomberg (TCFD Chair) noted: 'it is difficult for investors to know which companies are most at risk from climate change, which are best prepared, and which are taking action. The Task Force's report establishes recommendations for disclosing clear, comparable and consistent information about the risks and opportunities presented by climate change. Their widespread adoption will ensure that the effects of climate change become routinely considered in business and investment decisions. Adoption of these recommendations will also help companies better demonstrate responsibility and foresight in their consideration of climate issues. That will lead to smarter, more efficient allocation of capital, and help smooth the transition to a more sustainable, low carbon economy.'

The Task Force divided climate-related risks into two major categories: risks related to the **transition** to a lower-carbon economy; and risks related to the **physical** impacts of climate change. The TCFD report noted that climate-related risks and the expected transition to a lower carbon economy affect most economic sectors and industries, however, opportunities will also be created for organisations focused on climate change mitigation and adaptation solutions. The report also highlights the difficulty in estimating the exact timing and severity of the physical effects of climate change.

The Task Force structured its recommendations around four thematic areas that represent core elements of how organisations operate: **governance, strategy; risk management;** and **metrics and** targets (see Figure 1).

Figure 1: Core Elements of Recommended Climate-Related Financial Disclosures

The four overarching recommendations are supported by recommended disclosures that build out the framework with information that will help investors/stakeholders understand how reporting organisations assess climate related risks and opportunities. The disclosures are designed to make TCFD-aligned disclosures comparable, but with sufficient flexibility to account for local circumstances. Examples of pension funds that have been early adopters of the TCFD recommendations include: AP2; NEST; PGGM; RPMI Railpen; The Pensions Trust; and Environment Agency Pension Fund.

Derbyshire Pension Fund (the Pension Fund/Fund) supports the TCFD recommendations as the optimal framework to describe and communicate the steps the Fund is taking to manage climate-related risks and incorporate climate risk management into investment processes. The Fund is a long-term investor, diversified across asset classes, regions and sectors. It is in the Fund's interest that the market is able to effectively price climate-related risks and that policy makers are able to address market failure. The TCFD report noted the important role that large asset owners have in influencing the organisations in which they invest to provide better climate-related financial disclosures.

Official supporters of the TCFD total 930 organisations (as at December 2019) representing a market capitalisation of over $11 trillion. Disclosure that aligns with the TCFD recommendations currently represents best practice. The Fund believes TCFD-aligned disclosure from asset owners, asset managers, and corporates, is in the best interest of the Fund's stakeholders.

About this report

This Interim Climate-related Disclosures report, which has been prepared in collaboration with LGPS Central Ltd (LGPSC), describes the way in which climate-related risks are currently managed by the Fund. It includes the results of recent climate scenario analysis and carbon risk metrics analysis undertaken on the Fund's assets as part of LGPSC's preparation of a Climate Risk Report for the Pension Fund.

Climate scenario analysis carried out at the asset class level estimates the effects of different climate scenarios on key financial parameters (e.g. risk and return) over a selection of time periods.

The Task Force recognised that the use of scenarios in assessing climate-related issues and their potential financial implications is relatively recent and that practices will evolve over time, but believed that such analysis is important for improving the disclosure of decision-useful, climate-related financial information.

Carbon risk metrics analysis on the Fund's listed equities portfolios considers: portfolio carbon footprint (weighted average); fossil fuel exposure; carbon risk management; and clean technology (portfolio weight in companies whose products and services include clean technology).

The challenges of measuring the potential impact of climate change on investment portfolios are well recognised. The Fund believes that a suite of carbon risk metrics and climate scenario analysis currently provides the most appropriate method of analysing climate risk to support the development of a detailed strategy for integrating climate risk into investment decisions.

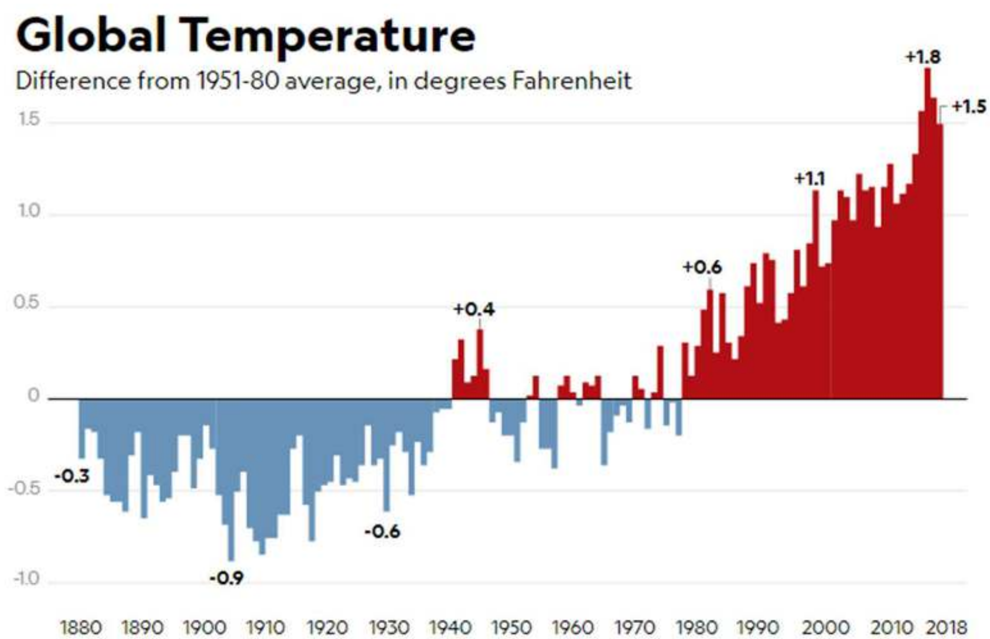
The findings of the Climate Risk Report, which is structured around the TCFD's four thematic areas of governance, strategy, risk management and metrics and targets, are being utilised to support the development of a Climate Strategy and a Climate Stewardship Plan for the Pension Fund. In addition, high level climate change risk analysis from the Fund's actuary, Hymans Robertson LLP, which considers the potential effect of climate change on the Fund's liabilities as well as on the assets of the Pension Fund, will support the development of the Climate Strategy. Guidance on implementing the TCFD recommendations for asset owners from the TCFD and the Principles for Responsible Investment will also be utilised.

The Fund's climate-related disclosures will develop over time and this report will be updated after a Climate Strategy and a Climate Stewardship Plan have been developed for the Fund. It is anticipated that climate-related disclosures will be included in the Pension Fund's Annual Report.

Climate-related risks

Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels. Most of this warming has occurred in the last 35 years, with the five warmest years on record taking place since 2010. As shown in Figure 2, the observed global mean surface temperature has risen from around 1950 onwards. Over 97% of climate scientists (Source: NASA) agree that this trend is the result of greenhouse gas (GHG) emissions which are being trapped in the atmosphere and creating a 'greenhouse effect' – a warming that occurs when the atmosphere blocks heat radiating from Earth towards space. These climate scientists have observed that these climactic changes are primarily the result of human activities including electricity and heat production, agriculture and land use change, industry, and transport.

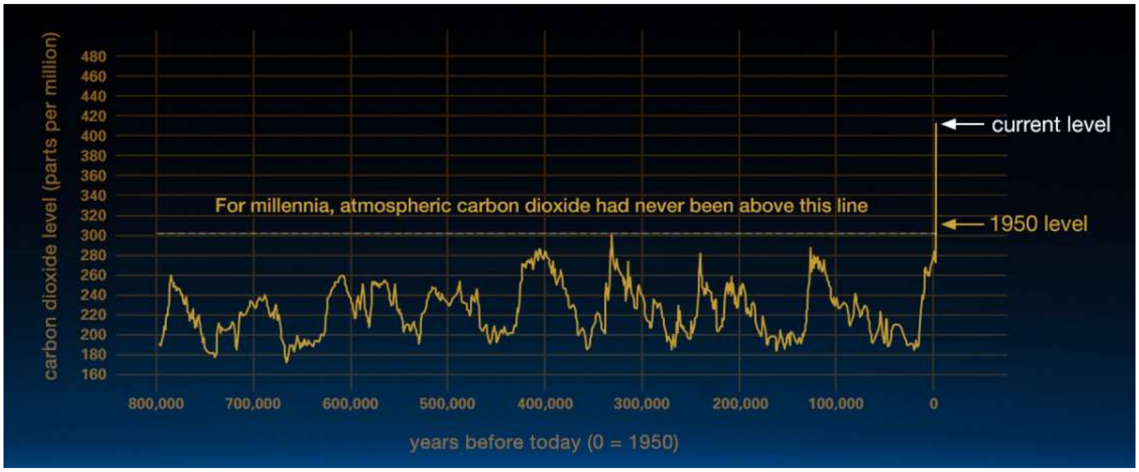
Figure 2: Graph showing Global Temperature Difference from 1951-80 average. Source: NASA



The principle source of GHG emissions, particularly carbon dioxide, is the burning of fossil fuels for the production of energy. The second largest contributor is methane, primarily related to agrarian activities (i.e. relating to cultivated land or the cultivation of land), fossil fuel production and waste.

During the last 250 years, atmospheric concentrations of carbon dioxide (CO_2) and methane (CH_4) have increased by 40% and 150%, respectively. In March 2019, the global monthly average concentration of carbon dioxide was 411.04ppm compared to its pre-industrial equivalent of 280ppm.

Figure 3: Levels of atmospheric carbon dioxide. Source: NASA



Climate scientists believe that in order to mitigate the worst economic impacts of climate change, there should be a globally co-ordinated policy response. The majority of climate scientists anticipate that given the current level of climate action, the world will be between 2°C and 4°C warmer by 2100, with significant regional variations. This is substantially higher than the Paris Climate Change Agreement (see Figure 4 for selected extracts of the Paris Agreement), which reflects a collective goal to hold the increase in the climate's mean global surface temperature to well below 2°C above preindustrial levels and to pursue efforts to limit the temperature increase to 1.5°C.

Figure 4: Selected extracts from the Paris Agreement on climate change. Source: UNFCCC.

Paris Agreement Article 2(1)a

Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;

Paris Agreement Article 2(1)c

Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

Paris Agreement Article 4(1)

In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.

The Paris Agreement commits signatories to the establishment of Nationally Determined Contributions (NDCs), which are intended to be individually equitable and collectively sufficient to achieve Article 2(1)a. It is estimated that under current global policies (and assuming successful implementation), the world is heading towards a warming of 3.2°C.

The low-carbon transition is already underway, with a number of governments and institutions around the world intensifying their climate change policies, and corporates responding in turn. One example is the recent UK declaration to bring all greenhouse gas emissions to Net Zero by 2050. This change in legislation amends the 2008 Climate Change Act target of an 80% reduction in GHG emissions compared to 1990 levels. The Committee on Climate Change have since revealed that current policy is insufficient to meet this target, meaning new and tougher measures are likely to be introduced, affecting businesses across the UK economy.

Acknowledgement of the risks posed by climate change among business and government leaders is reflected in the World Economic Forum (WEF) Global Risks Report, which illustrates the increased focus on environmental and social risks (compared with purely economic and political risks) over time. The likelihood of environmental risks, particularly those associated with climate change, account for the top five risks of global business leaders, and four of the top five risks by impact (if water crises are included).

Figure 5: WEF Top global risks. Source: World Economic Forum Global Risks Perception Survey 2019-20

The more attention business leaders pay to managing climate risk, the greater the implications for investors. The WEF's global risks are also highly interconnected. For example, climate change potentially exposes businesses to more natural disasters, extreme weather and water shortages. These in turn may lead to involuntary migration or conflict. Taking the interconnectivity of risks into account will continue to be important for long-term investors seeking to anticipate the effects of climate change and prepare their portfolios for a changing global context.

Given its contribution to global GHG emissions, the energy sector is expected to play a significant role in the long-term decarbonisation of the economy, albeit fossil fuels are expected to continue to provide a large proportion of the global energy mix for many years to come. The behaviour of private and state-owned energy companies will be as important as the actions taken by their publicly traded counterparts. It is also important to recognise that the demand for energy and the type of energy demanded will also play a crucial role in global decarbonisation.

However, the potential climate-related issues faced by diversified investors (such as pension funds) are not limited to the oil & gas and power generation sectors. Investors focussing exclusively on primary energy suppliers could fail to identify material climate risks in other sectors. There is considerable uncertainty in the crystallisation pathway for climate risk.

Well known concepts such as stranded assets risk are not homogeneous within certain sectors (e.g. oil & gas and power generation), and robust due diligence will be required in order to identify the potential winners and losers. The uncertainty of climate change stems from the complexity and inter-relationship of value and supply chains, the flow through of fossil fuels to by-products and services across multiple sectors and industries, the pass through cost of carbon, policy fragmentation, and the consideration that certain companies are too big to fail. The likelihood of asset stranding depends on the commodity, the asset quality, the customer base, the rate of technology change, cost curve dynamics, mitigating strategies (e.g. company diversifying portfolio), and the ability of the market to price risk and timing thereof.

The Fund recognises that climate-related risks can be financially material and that the due consideration of climate risk falls within the scope of the Fund's fiduciary duty. Given the Fund's long-dated liabilities and the timeframe in which climate risks could materialise, a holistic approach to risk management covering all sectors and all relevant asset classes is warranted.

Governance

TCFD Recommended Disclosure
a) Describe the board's oversight of climate-related risks and opportunities

Roles and responsibilities at the Fund are clearly set out in the Fund's Governance Policy & Compliance Statement.

The Pensions & Investments Committee is responsible for approving the Fund's Investment Strategy Statement, which includes the Fund's approach to responsible investment and climate change. The committee will in due course be presented with a Climate Strategy for approval. The committee meets six to eight times a year. The committee has historically received a quarterly voting report in respect of the directly held direct equity holdings but these have now largely been transitioned into pooled products, and going forward the committee will receive copies of the stewardship and voting reports of the managers managing these pooled products. As reported in the Annual Report, the committee has received training on responsible investment (including climate change).

In 2020, the Pensions & Investments Committee received a report from LGPSC which will support the formulation of the Fund's Climate Strategy.

Derbyshire Pension Board has an oversight role in ensuring the effective and efficient governance and administration of the Fund, including securing compliance with the LGPS Regulations and any other legislation relating to the governance and administration of the Scheme.

In order to support good decision-making, the Fund applies the Myners Principles. Disclosure of the Fund's compliance against the Myners Principles is made annually in the Fund's Annual Report.

TCFD Recommended Disclosure
b) Describe management's role in assessing and managing climate-related risks and opportunities.

The Head of Pension Fund and the Investments Manager have primary day-to-day responsibility for the way in which climate-related investment risks are currently managed. As a largely externally managed fund, the implementation of much of the management of climate-related risk is delegated to portfolio managers. Each manager's approach to Environmental, Social and Governance (ESG) factors and how these are integrated into their investment process is assessed as part of the manager selection process. The Fund's external managers are monitored on a regular basis, and following the receipt of a report from LGPSC, the Fund plans to develop a Climate Stewardship Plan.

In 2020, the Fund Officers received a report from LGPSC which will support greater consideration of climate change within strategy setting, including asset allocation and specific investment selection. Receipt of a report from LGPSC is expected to occur annually.

Strategy

TCFD Recommended Disclosure
a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.

As a diversified asset owner, the range of climate-related risks and opportunities are varied and constantly evolving. A subset of risk factors is presented in Table 1.

Table 1: Examples of Short, Medium & Long-Term Risks

	Short & Medium Term	**Long Term**
Risks	Carbon prices Policy change Technological change Consumer preferences Stock selection Timing	Resource scarcity Extreme weather events Sea level rise
Asset class	Listed equities Growth assets Energy-intensity industry Oil-dependent sovereign issuers Carbon-intensive corporate issuers	Infrastructure Property Agriculture Commodities Insurance

Short-term risks include stock price movements resulting from increased regulation to address climate change.

Medium-term risks include technology and policy changes leading to rapid product obsolescence or changes in consumer behaviour (e.g. uptake in electric vehicles), stock selection (there will be winners and losers across all sectors) and timing (being the first adopter does not guarantee success or better returns).

Long-term risks include stranded assets, physical damages to real assets and resource availability. Examples would the risk to coastal infrastructure assets from rising sea levels.

The Fund has received a report from LGPSC and will use its findings to develop a Climate Strategy.

TCFD Recommended Disclosure
b) Describe the impact of climate-related risks and opportunities on the organisation's business, strategy and financial planning.

The Fund believes that diversification across asset classes, regions, and sectors is an important investment risk management tool to reduce risk. The Fund recognises that climate risk is systemic and is unlikely to be eliminated through diversification alone. As part of the last review of the Fund's Investment Strategy Statement, the Fund approved a 3% allocation to Global Sustainable Equities. This allocation will target investments in global companies that are sustainable in financial, environmental, social and governance terms and, where appropriate, that are providing solutions to sustainability challenges. Furthermore, the Fund has invested in several renewable energy opportunities, and continues to actively assess and invest in these opportunities. Research commissioned by LGPSC from Mercer (presented below) suggests that these allocations could lead to a positive return impact on the Fund's investment portfolio were a 2°C scenario to be suddenly priced in by the market.

The Fund's allocated weighting to the UK equity market has also been reduced from 30% in December 2016 to 18% in December 2019. This has significantly reduced the Fund's exposure to companies with fossil fuel reserves. The Fund's carbon risk metrics analysis (Figure 8 below) shows that the UK equity market has the highest exposure to fossil fuel reserves compared to other regional equity markets, although it should be noted that some of the largest UK companies with fossil fuel reserves are among the most progressive in terms of factoring climate risk into their long-term strategy. In each regional equity portfolio, the Fund has a lower exposure to fossil fuel reserves companies than the benchmark.

The Fund is exploring options to further embed climate-related risks and opportunities into its investment strategy.

TCFD Recommended Disclosure
c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Analysis has been carried out by Mercer for LGPSC to understand the extent to which the Fund's risk and return characteristics could come to be affected by a set of climate scenarios. This includes an estimation of the annual climate-related impact on returns and climate stress tests (to explore the potential impact of a sudden climate-related price movement). All asset classes are included in this analysis. The climate scenarios considered are 2°C, 3°C and 4°C above pre-industrial levels. Two asset allocations have been analysed: (1) the asset allocation as at 31 July 2019; and (2) the Strategic Asset Allocation. Since 31 July 2019, the Fund has made progress towards the Strategic Asset Allocation weightings, including further investment into sustainable infrastructure, and expects to complete the planned allocation to Global Sustainable Equities in the near-term.

The results of the climate scenario analysis are shown below:

Table 2: Annualised climate change impact on portfolio returns to 2030 and 2050[i]

Scenario	Timeline	Current Asset Allocation	Strategic Asset Allocation
2°C	2030	+0.15%	+0.25%
	2050	+0.02%	+0.08%
3°C	2030	-0.02%	-0.01%
	2050	-0.07%	-0.06%
4°C	2030	-0.06%	-0.06%
	2050	-0.11%	-0.12%

≤ -10 bps   > -10 bps, < 10bps   ≥ 10 bps

The climate scenario analysis forecasts the following:

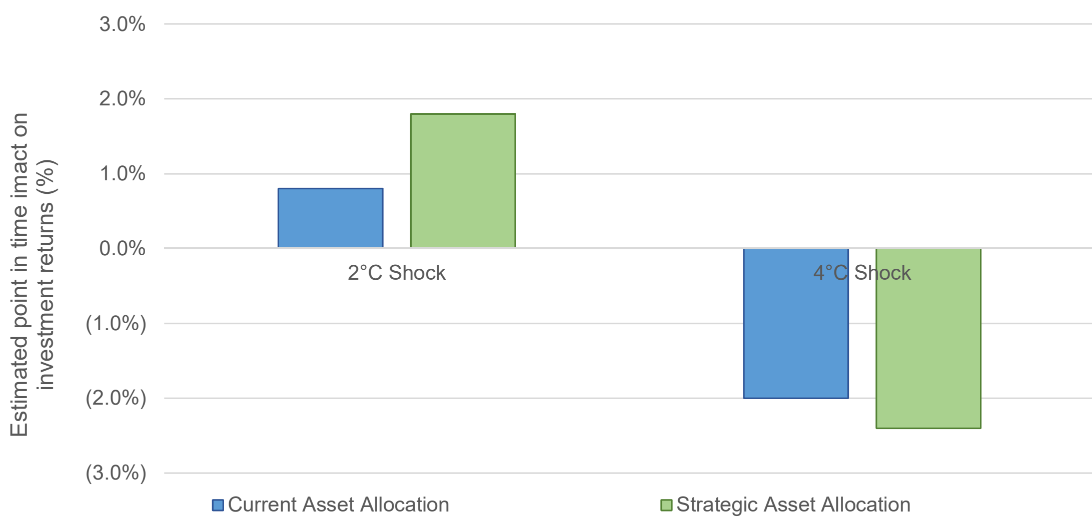
- A 2°C scenario would have a positive impact on the Fund's returns considering both a timeline to 2030 and to 2050. This positive impact is boosted under the Strategic Asset Allocation reflecting the 3% allocation to Global Sustainable Equities.

- A 3°C scenario (which is in line with the current GHG trajectory) has a relatively muted impact on the Fund's annual returns.
- A 4°C scenario would reduce the Fund's annual returns, with most asset classes expected to experience negative returns.

The climate scenario analysis only forecasts the climate related impact on returns, and does not take account of any other factors which may have an impact including economic and market conditions; political and geopolitical events; monetary policy conditions, etc. It is also important to note that the asset allocation required to capture the upside under one scenario, may have a negative impact under an alternative scenario. For example, annual returns under a 2°C scenario benefit from higher allocations to sustainable equities and sustainable infrastructure, whereas these allocations may have a negative impact under a 4°C scenario because the assets will be subject to increased physical risk.

Climate stress testing analysis (Figure 6) suggests that should a 2°C scenario suddenly be priced in by the market, the Fund could benefit in terms of financial returns, whereas the opposite is true should a 4°C scenario be priced in by the market.

Figure 6: Impacts to returns based on the sudden pricing in of plausible climate-scenarios[ii]



Translating climate scenario analysis into an investment strategy is a challenge as: there is a wide range of plausible climate scenarios; the probability of any given scenario is hard to determine; and the best performing sectors and asset classes in a 2°C scenario tend to be the worst performers in a 4°C and vice versa. Despite the challenges, the Fund believes it is worthwhile procuring climate-related research in order to support robust decision making.

Risk Management

TCFD Recommended Disclosure
a) Describe the organisation's process for identifying and assessing climate-related risks.

The Fund seeks to identify and assesses climate-related risks at the total Fund level and at the individual asset level. Both 'top-down' and 'bottom-up' analysis has been received by the Fund from LGPSC. The Fund recognises that the tools and techniques for assessing climate-related risks in investment portfolios are an imperfect but evolving discipline. The Fund aims to use the best available information to assess climate-related threats to investment performance.

As far as possible climate risks are assessed in units of investment return, in order to compare with other investment risk factors.

As a largely externally-managed pension fund, the identification and assessment of climate-related risks is also the responsibility of individual fund managers appointed by the Fund. Existing fund managers are monitored on a regular basis to review the integration of climate risks into the portfolio management, and to understand their engagement activities.

Stewardship activity is conducted with investee companies by the Fund. The Fund values the importance of shareholder voting as a stewardship tool and has retained the services of a specialist third party voting service provider. Historically the Fund executed voting activities directly, but following the transition of the vast majority of its direct equity holdings into pooled products, voting is executed by the Fund's appointed fund managers (see below). The Fund has several selected stewardship partners including LGPSC, Hermes EOS, and Local Authority Pension Fund Forum (LAPFF) (see Table 3 below). The Fund is developing a Climate Stewardship Plan based on the results of the LGPSC Climate Risk Report in order to focus the Fund's engagement resources.

TCFD Recommended Disclosure
b) Describe the organisation's process for managing climate-related risks.

The Fund manages risk by prioritising those risks which it believes will have the biggest impact on the Fund. For climate-related risks, this will likely depend on analyses including Climate Scenario Analysis and Carbon Risk

Metrics. The Fund's approach to climate risk management will be further developed in its forthcoming Climate Strategy.

Stewardship activities will remain an important aspect of the Fund's approach to managing climate risk. The Fund expects all investee companies to manage material risks, including climate change, and the Fund believes that climate risk management can be meaningfully improved through focussed stewardship activities by investors.

Either through its own membership or through LGPSC's membership, the Fund has several engagement partners that engage investee companies on climate risk.

Table 3: The Fund's Stewardship Partners

Organisation	Remit
ISS	Specialist third party voting service provider. ISS' research includes recommendations on casting votes on climate-related shareholder resolutions.
LGPS Central Limited	The Fund is a 1/8th owner of LGPSC. Climate change is one of LGPSC's stewardship themes, with quarterly progress reporting available on the website. The Responsible Investment Team at LGPSC engages companies on DPF's behalf, including via the Climate Action 100+ initiative.
HERMES EOS	Hermes EOS is engaged by LGPSC to expand the scope of the engagement programme, especially to reach non-UK companies. In 2018, Hermes EOS conducted engagements on 307 climate change issues across its company universe.
Local Authority Pension Fund Forum	DPF is a long-standing member of the LAPFF. LAPFF conducts engagements with companies on behalf of local authority pension funds. In 2018 LAPFF conducted over 150 engagements on climate change.

The Fund recognises that the outcomes of engagement are of greater importance than the volume of engagement. The outcomes of engagement activities of the Fund's stewardship partners are published on each provider's website.

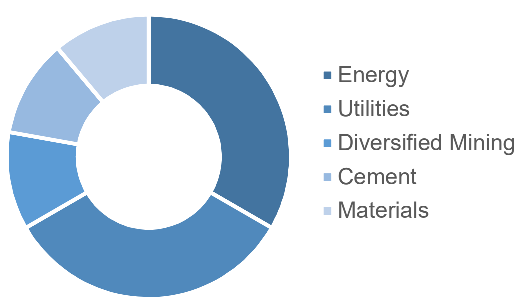
The instruction of shareholder voting opportunities is an important part of climate stewardship. Following the transition of the vast majority of its direct equity holdings into pooled products, voting activity is largely carried out by external fund managers. Legal & General Investment Management (LGIM) currently manage a sizeable proportion of the Fund's assets on a passive basis. The votes in respect of these assets are cast by LGIM. LGIM has a robust approach to incorporating climate change factors in its voting decisions, including on specific climate-related shareholder resolutions. The Fund's direct US Equity portfolio is managed by an external manager, and the manager is responsible for casting the votes in line with their policies.

During 2018/19, the Fund co-filed a Climate Action 100+ shareholder resolution to BP Plc for consideration at the Company's AGM in May 2019. The resolution called on the company to set out a business strategy that is consistent with the goals of the Paris Agreement on Climate Change. The resolution received the support of the board of BP and was passed overwhelmingly.

The results of the Fund's direct voting activities have historically been reported to the Pensions & Investment Committee meetings on a quarterly basis. Given the recent transition of direct equity holdings into pooled vehicles, going forward the committee will receive copies of the quarterly LGIM and LGPSC stewardship and voting reports.

Based on analysis prepared by LGPSC, the Fund plans to develop a Climate Stewardship Plan which, alongside the wide-scale engagement activity undertaken by LGPSC, Hermes EOS, and LAPFF, will include targeted engagement at investee companies of particular significance to the Fund's portfolio.

Figure 7: Sectors to be included in proposed Climate Stewardship Plan



TCFD Recommended Disclosure
c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.

Both 'mainstream' risks and climate-related risks are discussed by the Pensions & Investments Committee. While specific macro-economic risks are not usually included in isolation, the Fund plans to include climate risk as a separate risk on the Fund's Risk Register.

Climate risk will be further managed through the development of a Climate Strategy and a Climate Stewardship Plan.

Metrics and Targets

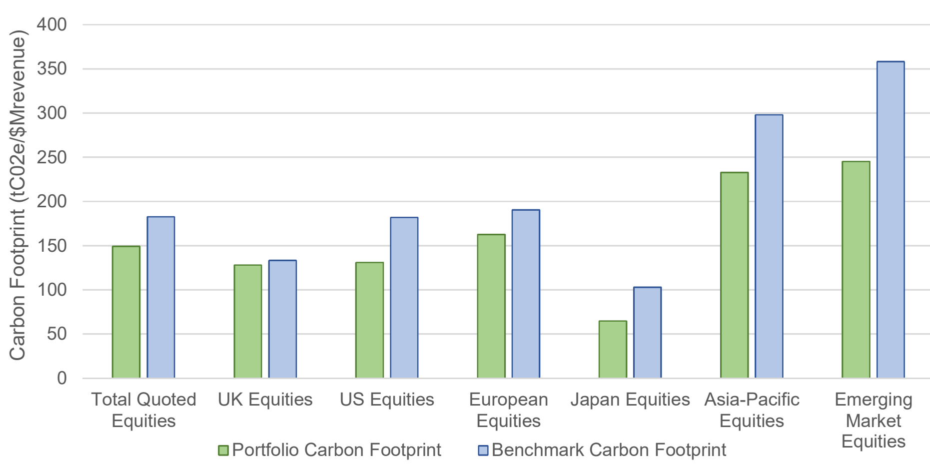
TCFD Recommended Disclosure
a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.

The Fund has recently received a report on carbon risk metrics for its listed equities portfolios, which represent over 50% of the Fund's total assets. The poor availability of data in asset classes other than listed equities prevents a more complete analysis at this time. Carbon risk metrics aid the Fund in assessing the potential climate-related risks to which the Fund is exposed, and identifying areas for further risk management, including company engagement and fund manager monitoring. The Fund additionally monitors stewardship data (see above).

TCFD Recommended Disclosure
b) Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks. TCFD Guidance: *Asset owners should provide the weighted average carbon intensity, where data are available or can be reasonably estimated, for each fund or investment strategy.*

In line with the TCFD guidance the Fund provides below the carbon footprints of the Fund's listed equity portfolios[1]:

Figure 8: Portfolio Carbon Footprints in each regional equity portfolio[2]



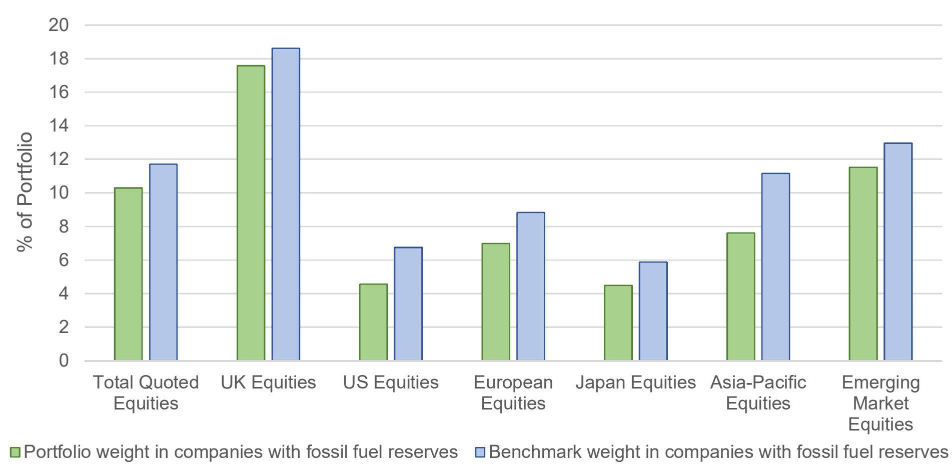
[1] Analysis undertaken on the listed equities portfolios with holdings data as of 31 July 2019.
[2] Certain information ©2019 MSCI ESG Research LLC. Reproduced by permission.

Note: The blended benchmark comprises the underlying regional benchmarks, weighted in proportion to the current GBP amount in each equity region.

Compared to the blended benchmark, the Fund's Total Quoted Equities portfolio is around 18% more carbon efficient than the benchmark (Figure 8). This means that, on average, for every $m of economic output companies produce, the Fund's investee companies emit 18% fewer GHG emissions than the companies in the benchmark. Each regional equity portfolio has a lower portfolio carbon footprint than its regional benchmark. In addition, each regional equity portfolio has a lower than benchmark weight in companies with fossil fuel reserves (the Total Quoted Equities portfolio has around 12% less weight in fossil fuel companies that the benchmark - Figure 9) and a lower weight in thermal coal reserves (c. 25% lower in the Total Quoted Equities portfolio – Figure 10).

The carbon footprint analysis above includes scope 1 and 2 emissions (those emitted either directly by a company or indirectly through its procurement of electricity and steam) but does not include scope 3 emissions (those emitted by a company's suppliers and customers). This means that for some companies the assessment of their carbon footprint could be considered an 'understatement'. Examples could include an online retailer whose logistics emissions are not included in scope 1 or 2. The Fund has chosen not to include scope 3 emissions in the carbon footprint metrics for two reasons: (1) the rate of scope 3 disclosure remains insufficient to use reliably in carbon foot-printing analysis; and (2) the inclusion of scope 3 emissions leads to double-counting at the portfolio level. To overcome the risk of 'understating' carbon risk, the Fund additionally assesses its exposure to fossil fuel reserves (i.e. companies with the greatest proportion of scope 3 emissions).

Figure 9: Exposure to companies with fossil fuel reserves in each regional equity portfolio[3]



[3] Certain information ©2019 MSCI ESG Research LLC. Reproduced by permission.

Figure 10: Exposure to thermal coal reserves in each regional equity portfolio[4]

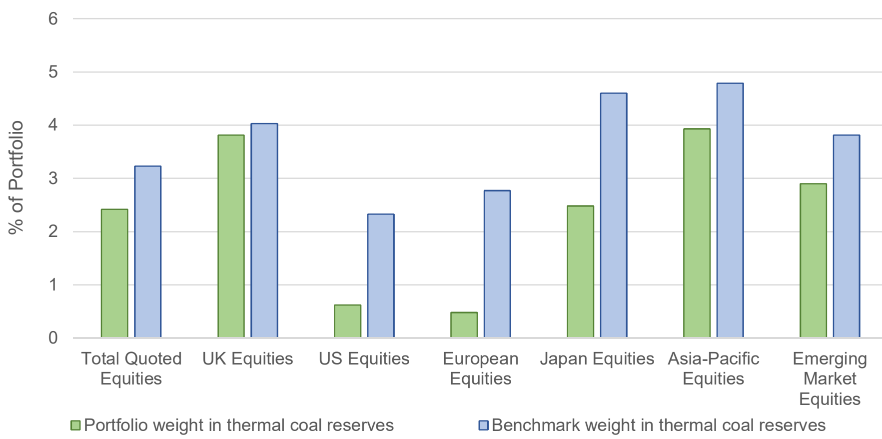
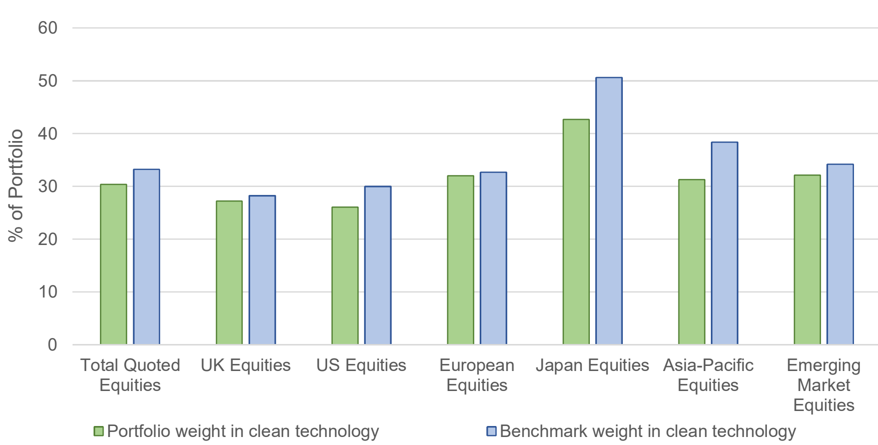


Figure 11 indicates that has around a 9% lower exposure to clean technology than the blended portfolio benchmark. The Fund notes that this measure should be viewed with some caution as there appears to be a moderate positive correlation in the dataset between sectors that have a high carbon intensity (or a higher weight in fossil fuel reserves) and those that have a higher weight in clean technology. For example, Utilities and Oil & Gas are the sectors with the third and fourth highest weight in clean technology. This correlation means that it may be difficult to have a diversified portfolio that is simultaneously carbon efficient, is underweight fossil fuels, and overweight clean technology. The Fund's exposure to clean technology should increase as result of the recent decision (not included in the results above) to invest in Global Sustainable Equities). Furthermore, the analysis takes no account of the Fund's unquoted on-shore & offshore, solar and hydro renewable energy infrastructure investments.

Figure 11: Exposure to clean technology in each regional equity portfolio[5]



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[5] Certain information ©2019 MSCI ESG Research LLC. Reproduced by permission.

Whilst the Fund's carbon risk metrics results show that the Fund already has a lower carbon footprint, together with lower exposure to fossil fuel reserves and thermal coal reserves that the blended portfolio benchmark, the Fund is proactively exploring ways to further embed climate risk management in its investment decision making. The Fund expects to update its carbon risk metrics data on an annual basis.

TCFD Recommended Disclosure
c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

The ability for diversified investors (such as pension funds) to set meaningful climate targets is inhibited by the paucity in credible methodologies and data currently available. Like most investors, the Fund is supportive of the development of target-setting methodologies, and of the increasing completeness of carbon datasets. The adoption of quantifiable climate targets remains, however, under review while the available methodologies mature.

Appendix 1

TCFD Recommendations for Asset Owners

Governance

Recommended Disclosure (a) Describe the board's oversight of climate-related risks and opportunities.

Recommended Disclosure (b) Describe management's role in assessing and managing climate-related risks and opportunities.

Strategy

Recommended Disclosure (a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.

Recommended Disclosure (b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.

Recommended Disclosure (c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Risk Management

Recommended Disclosure (a) Describe the organisation's processes for identifying and assessing climate-related risks.

Recommended Disclosure (b) Describe the organisation's processes for managing climate-related risks.

Recommended Disclosure (c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.

Metrics and Targets

Recommended Disclosure (a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.

Recommended Disclosure (b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

Recommended Disclosure (c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

Appendix 2: Important Information

[i, ii] Extracts above from Mercer Limited's (Mercer) report "Climate Change Scenario Analysis" dated 31 January 2020 prepared for and issued to LGPS Central Limited for the sole purpose of undertaking climate change scenario analysis for Derbyshire Pension Fund. Other third parties may not rely on this information without Mercer's prior written permission. The findings and opinions expressed are the intellectual property of Mercer and are not intended to convey any guarantees as to the future performance of the investment strategy. Information contained herein has been obtained from a range of third party sources. Mercer makes no representations or warranties as to the accuracy of the information and is not responsible for the data supplied by any third party.

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