Shropshire County Pension Fund

Shropshire County Pension Fund Climate-Related Disclosures

March 2022

Administered by Shropshire Council

Contents

Introduction to the TCFD

The Taskforce on Climate-related Financial Disclosures (TCFD) was commissioned in 2015 by Mark Carney in his remit as Chair of the Financial Stability Board. 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. Official supporters of the TCFD total 930 organisations representing a market capitalisation of over $11 trillion. Disclosure that aligns with the TCFD recommendations currently represents best practice.

The recommendations are based on the financial materiality of climate change. The four elements of recommended disclosures (see Figure 1 below) are designed so as 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.

Figure 1: TCFD Disclosure Pillars

The 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. As a pension fund we are long-term investors and are diversified across asset classes, regions and sectors, making us “universal owners”. It is in our interest that the market is able to effectively price climate-related risks and that policy makers are able to address market failure. We believe TCFD-aligned disclosure from asset owners, asset managers, and corporates, is in the best interest of our beneficiaries.

About this report

This report is Shropshire County Pension Fund's (SCPF or 'the Fund') second climate-related disclosures report. It describes the way in which climate-related risks are currently managed within the Fund.

The report is released in conjunction with SCPF's recently created Climate Change Strategy. The Climate Change Strategy draws, in part, from the findings of the Fund's first Climate Risk Report; an in-depth review of the Fund's climate risks under different climate change scenarios from the Fund's pooling company, LGPS Central Ltd. The Fund has since received its second Climate Risk Report from LGPS Central Ltd.

This climate-related disclosure report aims to provide an up-to-date overview of the Fund's approach to managing climate risks, encompassing both the recent changes to the Fund's climate strategy and the findings of the 2021 Climate Risk Report. In the interests of being transparent with the Fund's beneficiaries and broader stakeholder base, this report also discloses the Fund's most recent Carbon Risk Metrics analysis.

At the January 2022 Pension Committee meeting the Fund voted to set a long-term net zero climate target for 2050. In 2022 the Fund will work toward setting both short and medium targets to achieve this long-term target. Partly to reduce its climate-related risks, the Fund is making two changes to its investments in 2022. Firstly the passive fund is being transitioned into a low carbon net-zero aligned benchmark. This is expected to yield an approximate 70% reduction to the carbon emissions of the passive fund in the first year and a 7% annual reduction thereafter. Secondly, the UK Equity portfolio is being transitioned into a Global Sustainable Equity fund, which is expected to further reduce the carbon footprint of the Fund.

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 past 35 years, with the five "warmest" years on record taking place since 2010. Between the years 2006-2015, the observed global mean surface temperature was 0.87°C higher than the average over the 1850-1990 period. The overwhelming scientific consensus is that the observed climactic changes are the result primarily of human activities including electricity and heat production, agriculture and land use change, industry, and transport.

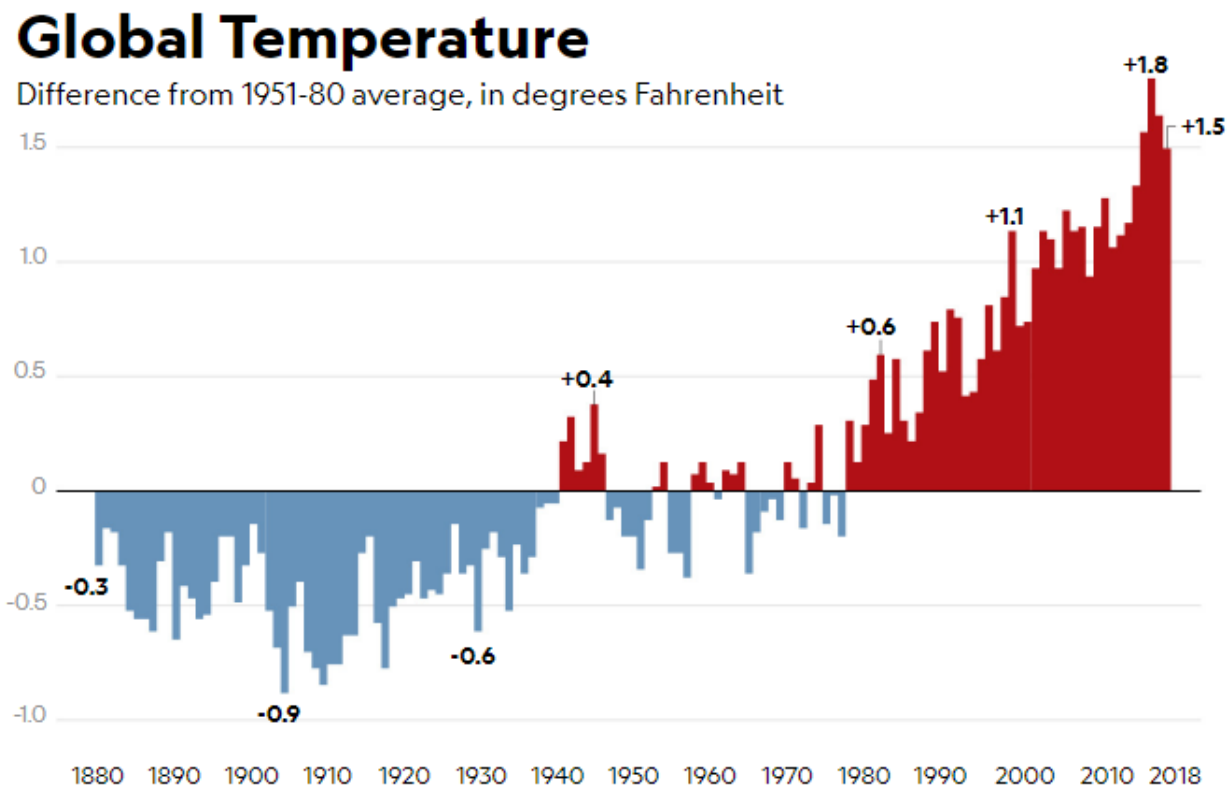


Figure 2: Graph showing Global Temperature Difference from 1951-80 average. Source: NASA

In order to mitigate the worst economic impacts of climate change, there must be a large, swift, and globally co-ordinated policy response. Despite this, the majority of climate scientists anticipate that given the current level of climate action, by 2100 the

world is estimated to be between 2°C and 4°C warmer, with significant regional variations. This is substantially higher than the Paris Climate Change Agreement, which reflects a collective goal to hold the increase in the climate's mean global surface temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C.

Figure 3: 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.

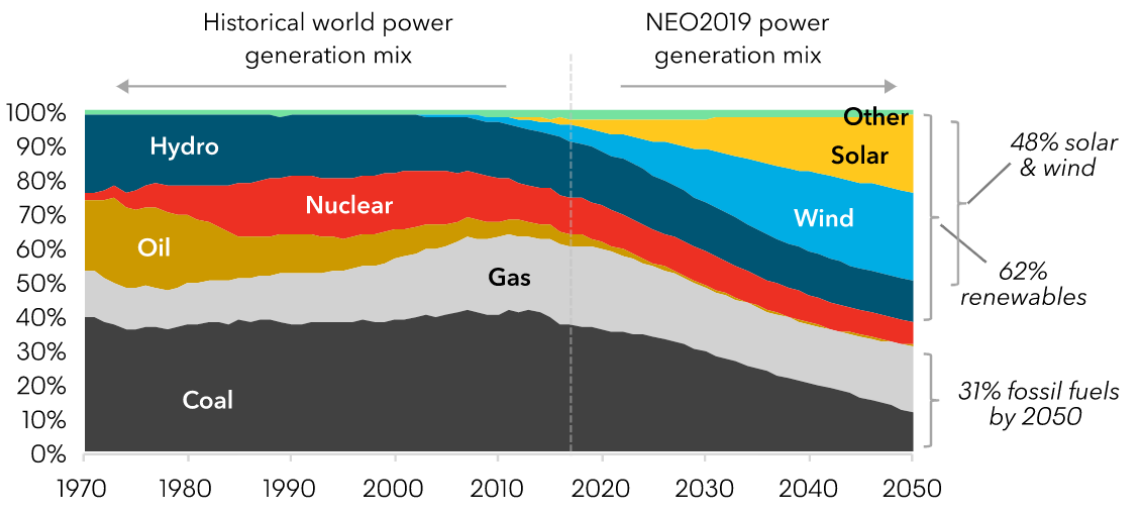
Given its contribution to global GHG emissions, the energy sector is expected to play a significant role in the long-term decarbonisation of the economy. Figure 4 suggests that in one climate scenario the proportion of coal, oil, and gas in the global power generation mix will shrink to 31% of total by 2050. However, it is important to recognise that not only is the supply of energy expected to be a factor in global decarbonisation, but the demand for energy plays a crucial role too. In addition, the

behaviour of private and state-owned energy companies (not commonly invested in by UK pension funds) is as important as their publicly traded counterparts.

The issue faced by diversified investors (such as pension funds) is not only limited to the oil & gas and power generation sectors, but also to downstream sectors. Investors focussing exclusively on primary energy suppliers could fail to identify material climate risks in other sectors. Research suggests that the oil & gas sector is not homogeneous with regards to climate risk: were climate policies to affect the oil price, those companies with assets lower down the cost curve are less likely to be financially compromised by those companies with higher cost assets. Investors that assume each fossil fuel company bears an equal magnitude of climate-related risk could be led towards sub-optimal decision-making.

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, an holistic approach to risk management covering all sectors and all relevant asset classes is warranted.

Figure 4: The Bloomberg New Energy Outlook global power generation mix. Source: BloombergNEF.



Governance

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

Roles and responsibilities at the Fund are set out clearly in the Fund's *Governance Compliance Statement.* Overall responsibility for managing the Fund lies with Shropshire Council which has delegated the management and administration of the Fund to the Shropshire County Pension Fund Committee.

The Pension Committee ('the Committee') is responsible for preparing the Investment Strategy Statement (ISS) and the Climate Change Strategy. The Climate Change Strategy is premised on 10 foundational evidence-based beliefs about climate risk (considering climate science, the energy transition, and climate stewardship). The Climate Change Strategy is reviewed by the Pensions Committee on a three year basis, with progress reviewed every six months.

The Committee meet four times a year, or otherwise as necessary. The Committee includes quarterly engagement reports from both their investment managers and their engagement provider as a standing item on the Pension Committee agendas. Both the Committee and the Pension's Board have received regular training on responsible investment topics. The Committee will continue to receive training on responsible investment, including climate change, every quarter.

The Fund sets aside time at each year's Annual General Meeting (AGM) for presentations on responsible investment, and environmental, social and governance issues generally. These presentations are made public by the Fund on their website.

In order to support good decision-making, the Fund applies the Myners Principles. Disclosure against the Myners Principles is made annually (please see Appendix A of the Fund's Investment Strategy Statement).

The Local Pensions 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.

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

The Scheme Administrator and Head of Treasury & Pensions, in conjunction with our investment advisor, have primary day-to-day responsibility for the way in which climate-related investment risks are currently managed and provide updates to Pension Committee. Where appropriate, the Fund's pooling company, LGPS Central Ltd, assists in assessing and managing climate-related risks. As detailed in the Climate Change Strategy, the Fund leverages partnerships and initiatives – including the Institutional Investors Group on Climate Change (IIGCC) – to identify and manage climate risk. The Scheme Administrator and Head of Treasury & Pensions are accountable to the Pensions Committee for delivery of the Climate Change Strategy.

As a primarily externally managed fund, the implementation of much of the management of climate-related risk is delegated onwards to portfolio managers. External portfolio managers are monitored on a regular basis by Officers and the Pension Committee.

The Pension Committee are supported in this monitoring by the Fund's investment adviser, Aon. Aon provides quarterly monitoring reports on the investment products that the Fund invest in outside of LGPS Central. These reports include ratings on key criteria such as risk management, investment process, performance analysis and

ESG ratings where applicable.[1] Material developments in these areas are communicated to the Pension Committee, which considers whether further action is required.

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 multifarious and constantly evolving. The Fund acknowledges that each of its investments is exposed to climate-related risks to varying extents, and has identified two specific risks which could impact the Fund's investment and funding strategy:

- **Physical risks** are the risks associated with the physical impacts of climate change on companies' operations. It is expected that these will manifest more strongly over the medium to long-term. Physical risks may be:
    - **Acute**: severe and extreme events and are location specific (e.g., droughts, heatwaves, storms, wildfire, etc); or:
    - **Chronic**: represents the background incremental changes in, for example: temperature, precipitation, and sea-level rise over several decades.
- **Transition risks** are those associated with the transition towards a low-carbon economy. For example, shifts in regulation, introduction of new (or withdrawal of obsolete) technology, broad effects on the market, and individual

[1] More information on the Aon ESG Ratings process can be found here: https://www.aon.com/getmedia/0b52d7ec-db77-41bc-bb45-9386034db392/AonCanada-Publication-Investment-GuideESGRatings.aspx

entity reputation. These are expected to emerge more rapidly than physical risks and have a larger impact over the short to medium-term.

Table 1: Example Short, Medium & Long-Term Risks

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

Timeframes of Risks:

- **Short term**: We expect these risks could principally cause impacts in 0-3 years from now.
- **Medium term**: We expect these risks could principally cause impacts 3-10 years from now.
- **Long term**: We expect these risks could principally cause impacts 10 years and beyond.

Short-term risks include stock price movements resulting from increased regulation to address climate change. Medium-term risks include policy and technology leading to changes in consumer behaviour and therefore purchasing decisions – the uptake in electric vehicles is an example of this. Long-term risks include physical damages to real assets and resource availability. Examples would include increase sea level rise for coastal infrastructure assets or supply chain impacts for companies as a result of severe weather events.

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

Although the Fund is diversified across asset classes, regions, and sectors, it is recognised that climate risk is systemic and is unlikely to be eliminated through diversification alone.

The Fund's Climate Change Strategy sets out the Fund's approach to managing the impacts of climate-related risks. The main management techniques within the Fund's investment strategy are:

1. Make regular measurements and observations on climate-related risks and opportunities utilising an array of best-in-class tools and techniques.
2. Integrate climate change considerations into the selection, due diligence and monitoring of investments.
3. Actively engage with companies, fund managers, policymakers and other organisations of influence on climate change issues.

The Fund's investments are managed externally, and expectations on responsible investment and climate change are therefore codified in written agreements such as IMA's, side letters and LPAs. External fund manager's approaches to responsible investment and climate change are considered before appointment and on an ongoing basis.

Partly to reduce its climate-related risks, the Fund is making two changes to its investments in 2022. Firstly the passive fund is being transitioned into a low carbon net-zero aligned benchmark. This is expected to yield an approximate 70% reduction to the carbon emissions of the passive fund in the first year and a 7% annual reduction thereafter. Secondly, the UK Equity portfolio is being transitioned into a Global Sustainable Equity fund, which is expected to further reduce the carbon footprint of the Fund.

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.

In 2020 the Fund engaged the expertise of an external contractor, Mercer LLC[2], to understand the extent to which the Fund's risk and return characteristics could come to be affected by a set of plausible climate scenarios. This includes an estimation of the annual climate-related impact on returns (at fund and asset-class level). All asset classes are included in this analysis. The climate scenarios considered are 2°C, 3°C and 4°C. This analysis is carried out every 2 to 3 years and the results of the 2020 analysis are provided below.

[2] Via LGPS Central Limited

Table 2: Annualised climate change impact on portfolio returns – to 2030 and 2050[3].

Scenario	Timeline	Estimated climate impact on returns
2°C	2030	+0.05%
	2050	-0.06%
3°C	2030	-0.01%
	2050	-0.05%
4°C[4]	2030	-0.06%
	2050	-0.10%

According to the Climate Scenario Analysis in Table 2, the Fund's Asset Allocation appears to be relatively robust in all three climate scenarios. The drivers of this result are the Fund's diversification across asset classes which are modelled as performing differently in different climate scenarios, and a large allocation to fixed income (Unconstrained Bonds) which is relatively insensitive to the different climate scenarios.

[3] Extract above from Mercer Limited's (Mercer) report "Climate Change Scenario Analysis" dated August 2020 prepared for and issued to LGPS Central Limited for the sole purpose of undertaking climate change scenario analysis for Shropshire County 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.

[4] Mercer note that the annualised results are more conservative that what might be expected given current limitations in data and methodology available for modelling climate change, in particular for physical damage risks, together with a myriad of climate change factors not yet captured by this model approach. This means the resulting "climate change impact on return" magnitudes are likely to be underestimated. Combined with long-term timeframes, this also means the annual "climate change impact on return" figures are relatively small in absolute terms in some cases, but often more meaningful when considered on a cumulative basis. As a result, the Fund focuses on the relative, rather than the actual magnitudes, and direction. In addition, the Fund intends to conduct climate scenario analysis in 2022 with an updated model that includes a 1.5ºC scenario.

Over the coming decade, a 2°C outcome is, according to the model used, the best climate scenario from a returns perspective (adding 0.05% in annual returns to the Asset Allocation on a timeline to 2030) while a 4°C outcome is the worst of the three considered (detracting by 0.06% annually over the same period).

Translating Climate Scenario Analysis into an investment strategy is a challenge because 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 in seeking out the best available climate-related research in order to make its portfolio as robust as possible.

The Fund believes that climate risk is a materially financial risk for the Fund, and Climate Scenario Analysis is one of the many tools the Fund uses to assess this risk. The Fund remains conscious however that Climate Scenario Analysis requires by necessity the use of assumptions about an inherently unpredictable phenomena, and as such the results are viewed with these limitations in mind. Climate Scenario Analysis will be repeated on a biennial basis to complement the various other techniques and tools the Fund uses to assess climate risk.

Risk Management

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

The Fund seeks to identify and assess climate-related risks at the total Fund level and at the individual asset level. The Fund's 2020 and 2021 Climate Risk Reports include a combination of top-down and bottom-up analyses to support this endeavour. 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 primarily 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.

Engagement activity is conducted with investee companies through selected stewardship partners including LGPS Central Limited, EOS at Federated Hermes, BMO and LAPFF (see below). The Fund, based on its first Climate Risk Report, has devised a Climate Stewardship Plan that focuses engagement resources on investments most relevant to the Fund.

The Fund will continue to monitor and consider both existing and emerging regulatory requirements relating to climate change.

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

The Fund manages climate risk in different ways according to the nature, duration, magnitude and time horizon of the risk itself. As set out in the Fund's Climate Change Strategy, the main management techniques cover five areas: measurement & observation; asset allocation; selection, due diligence and monitoring; purposeful stewardship; and transparency & disclosure.

Although the Fund's Climate Change Strategy involves more than just engagement and shareholder voting, 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.

The Fund supports the engagement objectives of the Climate Action 100+ initiative, namely that companies: adopt the appropriate governance structures to effectively manage climate risk; decarbonise in line with the Paris Agreement, and; disclose effectively using the TCFD recommendations.

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

Table 3: The Fund's Stewardship Partners

Organisation	Remit
LGPS Central Limited	The Fund is a 1/8th owner of LGPS Central Limited.

	Climate change is one of LGPS Central's stewardship themes, with quarterly progress reporting available on the website. The Responsible Investment Team at LGPS Central engages companies on the Fund's behalf, including via the Climate Action 100+ initiative.
Federated Hermes	EOS at Federated Hermes is engaged by LGPS Central to expand the scope of the engagement programme, especially to reach non-UK companies.
Local Authority Pension Fund Forum	The Fund is a member of the Local Authority Pension Fund Forum (LAPFF). LAPFF conducts engagements with companies on behalf of local authority pension funds.
BMO	BMO Global Asset Management provides engagement services for the Fund's Global Equity portfolios.

The instruction of shareholder voting opportunities is an important part of climate stewardship. The Fund's votes are executed by its fund managers and its asset pool (LGPS Central) according to a set of *Voting Principles,* to which the Fund contributes during the annual review process. LGPS Central's *Voting Principles* incorporate climate change, for example by voting against companies that do not meet certain thresholds in the Transition Pathway Initiative (TPI) scoring system. LGPS Central has co-filed shareholder resolutions that relate to climate change.

The Fund employs BMO Global Asset Management (BMO) to provide a responsible engagement overlay service to its Global Equity portfolios. On behalf of the Fund, BMO enters into constructive discussions with companies on their impacts on the environment and society in general.

The results of engagement and voting activities from the investment managers and the Fund's engagement provider, BMO, are reviewed by the Pension Committee

quarterly. LGPS Central's activities are reported in *Quarterly Stewardship Updates* which are available on the LGPS Central website.

Based on its Climate Risk Report, the Fund has developed a Climate Stewardship Plan which, alongside the widescale engagement activity undertaken by LGPS Central, EOS at Federated Hermes, BMO and LAPFF, includes targeted engagement with nine investee companies of particular significance to the Fund's portfolio. The Fund believes all companies should align their business activities with the Paris Agreement on climate change.

Table 4: Companies included in the Climate Stewardship Plan

Company	Sector
BP	Energy
Duke Energy	Utilities
Glencore	Materials
Holcim	Materials
NextEra Energy	Utilities
Ryanair	Industrials
Shell	Energy
Barrick	Mining
The Southern Company	Utilities

Engagement Example 1 (LGPS Central): Glencore

Background
As co-lead for Climate Action 100+ (CA100+) engagement with Glencore, LGPS Central have engaged the company on their climate change strategy and achievement of the high-level objectives of the CA100+ initiative over several years. In light of constructive dialogue, the company has recently taken some welcome steps including presenting a Climate Transition Plan to the AGM in 2021.

Outcomes
Glencore has made clear progress against CA100+ objectives by setting a net-zero by 2050 ambition across all scopes and a medium-term target of 50% GHG emissions reduction by 2035, which will largely come from decline in coal exposure. The company provides disclosure in line with the TCFD guidance and the level of transparency on how Paris alignment will be achieved has increased. LGPSC voted in favour of Glencore's climate transition plan at the AGM end of April 2021 (which passed with 94% support) in order to support the company's ongoing work to transition in line with Paris.

Next Steps
We would like to see the company set more ambitious short-term targets, including a specific 2030 target, that marries up with the long-term ambition and ensures a steady decline in emissions in line with Paris. Furthermore, engagement will continue with the company to push for pro-active and transparent climate policy lobbying, including through industry associations, that is aligned with their own net-zero target. Glencore is inviting shareholders to vote on their progress against the Climate Transition Plan at the AGM in 2022, which provides an opportunity to voice these expectations.

Engagement Example 2 (LGPS Central): Royal Dutch Shell
Background
LGPS Central through a collaborative engagement with the CA100+ Shell Focus group and through the Paris-aligned financial accounting investor initiative have been engaging with Shell on their climate change strategy. In particular, the objectives of the engagement are:

1. To set and publish targets that are aligned with the goals of the Paris Agreement
2. To fully reflect its net-zero ambition in its operational plans and budget
3. To set a transparent strategy on achieving net-zero emissions by 2050; including valid assumptions for short, medium and long term targets.

Outcomes
In February 2021, Shell held its annual Strategy Day where the firm outlined its proposal to become a net-zero business by 2050 or sooner. Following engagement with CA 100+, Shell put forward an Energy Transition Plan for investors to vote on at their annual general meeting on 18 May 2021. This step makes Shell the first company in the energy sector to allow investors a 'Say on Climate'. The resolution on Shell's Energy Transition Plan passed with 88.7% support from shareholders at the AGM and will allow shareholders an annual advisory vote to express whether sufficient progress has been made in delivering the plan. Shell consider that their net-zero target aligns with a 1.5°C degree target and that scope 3 emission are included.

Next steps
There is concern around the lack of short- and medium targets that can back up the net-zero ambition, as well as an apparent reliance from Shell on customers cutting consumption as part of Scope 3 rather than Shell cutting production to align with Paris. Shell has also been unclear on their use of nature offsets and Carbon Capture and Storage technologies and has not provided sufficient detail on how this will be achieved. A shareholder proposal requesting Shell to set and publish targets for GHG emissions reduction in line with Paris was put to a vote at the AGM and received a healthy 30% support. LGPS Central voted against the Energy Transition Plan and for the shareholder proposal in order to signal that we are asking more also of leading companies in order to really see a step-change for the sector.
Given outstanding issues raised above, LGPS Central, alongside CA 100+, will continue to engage with the company and provide future updates on progress.

Engagement Example 2 (BMO): Ryanair

Background

BMO's previous engagements with Ryanair have been centered around their labour practices and corporate governance, to which they have been accommodative and made a number of important milestones, particularly at the board structure level. BMO met with the Senior Independent Director, executive directors and operational representatives of Ryanair for its annual dialogue with investors on ESG practices and performance, including climate change. In particular, BMO engaged with Ryanair on their carbon emissions management.

Outcomes

BMO believe Ryanair has made concerted efforts to improve climate and carbon reporting, and to lower their overall emissions. These include publishing an environmental policy, committing to producing a monthly CO2 report, and committing to increasing the use of sustainable aviation fuels. However, the company has not yet set a science-based emissions reduction target or committed to net-zero.

Next steps

BMO plan to continue engagement to drive a more robust approach to emissions reduction.

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 Pension Committee. While specific macro-economic risks are not usually included in isolation, the Fund has included climate risk on the Risk Register.

Climate risk will be further managed through the Fund's Climate Stewardship Plan.

Metrics & 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 from LGPS Central on carbon risk metrics for its listed equities portfolios. The poor availability of data in asset classes other than listed equities prevents a more complete analysis at this time.

The carbon risk metrics analysis include:

- portfolio carbon footprints[5]
- weight of portfolios invested in companies with fossil fuel reserves
- weight of portfolios invested in companies with thermal coal reserves
- weight of portfolios invested in companies whose products and services include clean technology
- metrics assessing the management of climate risk by portfolio companies

The scope of the analysis comprises the total equities portfolios as at 31st March 2021 and covers 5 out of 5 equity strategies and 2,669 individual companies. Data coverage for the listed equities portfolios ranges from 97.83% to 100%[6]. The Portfolio Carbon Footprint is calculated as the weighted average (i.e. considering the weight in the portfolio) of the carbon footprints of all portfolio holdings. 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

[5] Following TCFD guidance we use weighted average portfolio carbon footprints.
[6] This includes scope 1 and scope 2 emissions. We have chosen not to include scope 3 emissions in the portfolio carbon footprint metrics for two reasons: (1) the rate of scope 3 emissions disclosure remains insufficient to use reliably in carbon footprinting analysis (2) the inclusion of scope 3 emissions leads to double-counting at the portfolio level. To ensure fossil fuels companies are not unduly omitted from our analysis, we review three Fossil Fuels Exposure metrics.

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 and following receipt of a report from LGPS Central Limited we provide below the carbon footprints of our equity portfolio[7]:

Table 5: Carbon risk metrics for the equity portfolio[10]

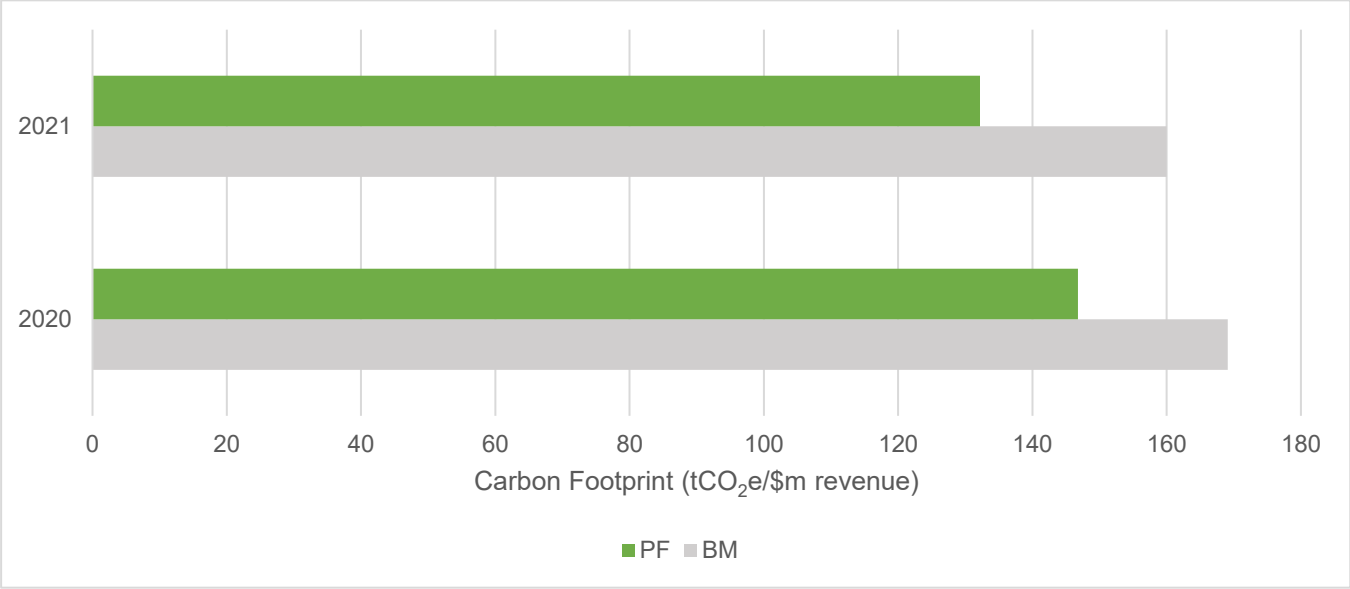
	2020			2021			% Difference Between 2020 and 2021	
	PF	BM	+/-	PF	BM	+/-	PF	BM
Total Equities Carbon Footprint (tCO_2e/$m revenue)[8]	146.8	169.1	-13.2%	132	160	-17.3%	-9.9%	-5.4%
Total Global Equities[9]	148.1	174.2	-15.0%	136	162	-16.5%	-8.4%	-6.8%
Weight in fossil fuel reserves (%)	6.2%	7.3%	-1.0%	6.2%	7.2%	-0.9%	0.0%	-0.1%
Total Global Equities	5.8%	6.5%	-0.6%	6.2%	6.5%	-0.3%	0.3%	0.0%
Weight in thermal coal reserves (%)	2.6%	2.7%	0.0%	2.8%	3.0%	-0.2%	0.2%	0.3%
Total Global Equities	2.7%	2.6%	0.1%	2.9%	2.8%	0.1%	0.2%	0.2%
Weight in coal power (%)	1.9%	2.0%	-0.2%	1.5%	1.6%	-0.2%	-0.4%	-0.4%
Total Global Equities	2.1%	2.3%	-0.2%	1.6%	1.8%	-0.2%	-0.4%	-0.4%
Weight in clean tech (%)	35.4%	35.2%	0.1%	35.6%	36.0%	-0.4%	0.2%	0.8%
Total Global Equities	36.1%	36.5%	-0.4%	36.6%	37.6%	-1.0%	0.5%	1.2%

[7] Analysis undertaken on the listed equities portfolios within holdings data as of 31 March 2021. The information in Table 5 was provided to the Fund in a report authored by LGPS Central Limited. In LGPS Central Limited's Reports the Total Equities portfolio comprises the Majedie UK Equities, LGIM World Developed Equity and LGPS Central Global Equity Active Multi-Manager portfolios weighted according to their size in GBP. The Total Global Equities portfolio contains the LGIM World Developed Equity and the LGPS Central Global Equity Active Multi-Manager portfolio.
[8] Total Equities. Benchmark: Total Equities Blended Benchmark.
[9] Benchmark: FTSE All World
[10] Certain Information @ 2022 MSCI ESG Research LLC. Reproduced by permission.

The Fund's Total Equities portfolio is c.17% (13% in 2020) more carbon efficient than the blended benchmark. This means that, on average, for every $m of economic output companies produce, the Fund's investee companies emit 17% fewer GHG emissions than the companies in the blended benchmark. The Total Equities portfolio has a lower exposure to all three fossil fuel metrics – fossil fuels reserves, thermal coal reserves and coal power – than its blended benchmark.

Figures 5, 6, and 7 depict how the Fund's carbon risk metrics have changed between 31st March 2020 and 31st March 2021. Within this timeframe, the carbon footprint of the Total Equities portfolio decreased by 9.9%. In addition, the Fund's exposure to fossil fuel reserves remained relatively unchanged. The Fund's forthcoming changes to its equity allocation will very likely further drive enhancements to the carbon risk metrics.

Figure 5: Total Equity portfolio carbon footprint, March 2020 vs March 2021[11]



[11] Certain Information @ 2022 MSCI ESG Research LLC. Reproduced by permission.

Figure 6: Total Equity portfolio weight in fossil fuel reserves, March 2020 vs March 2021[12]

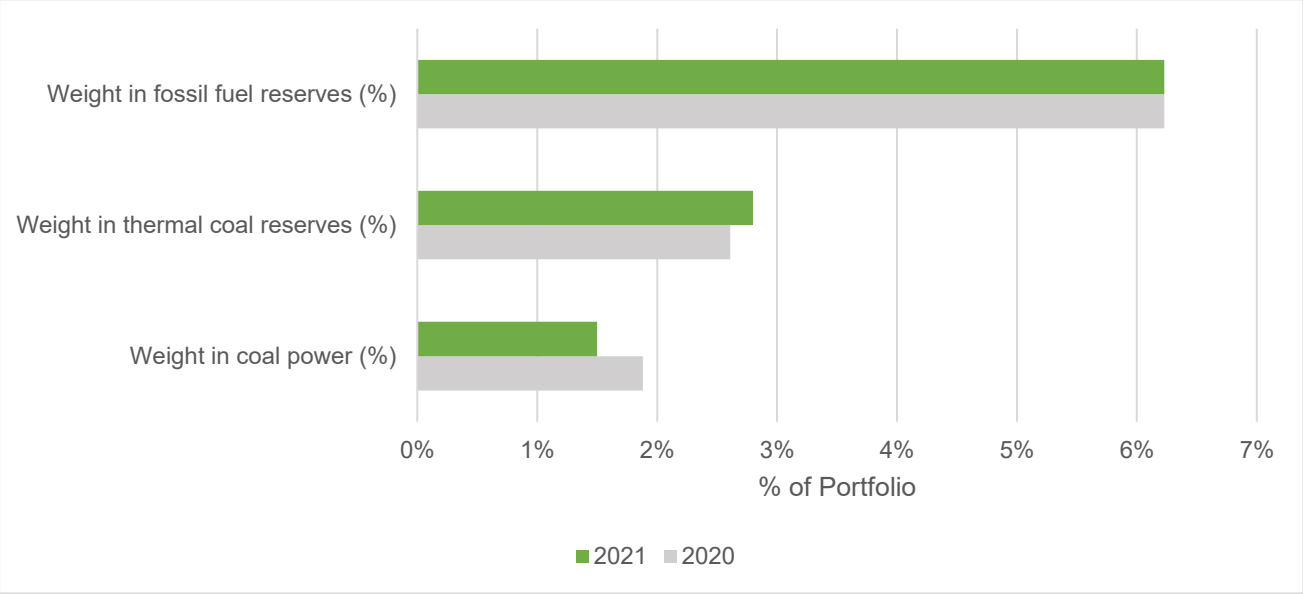
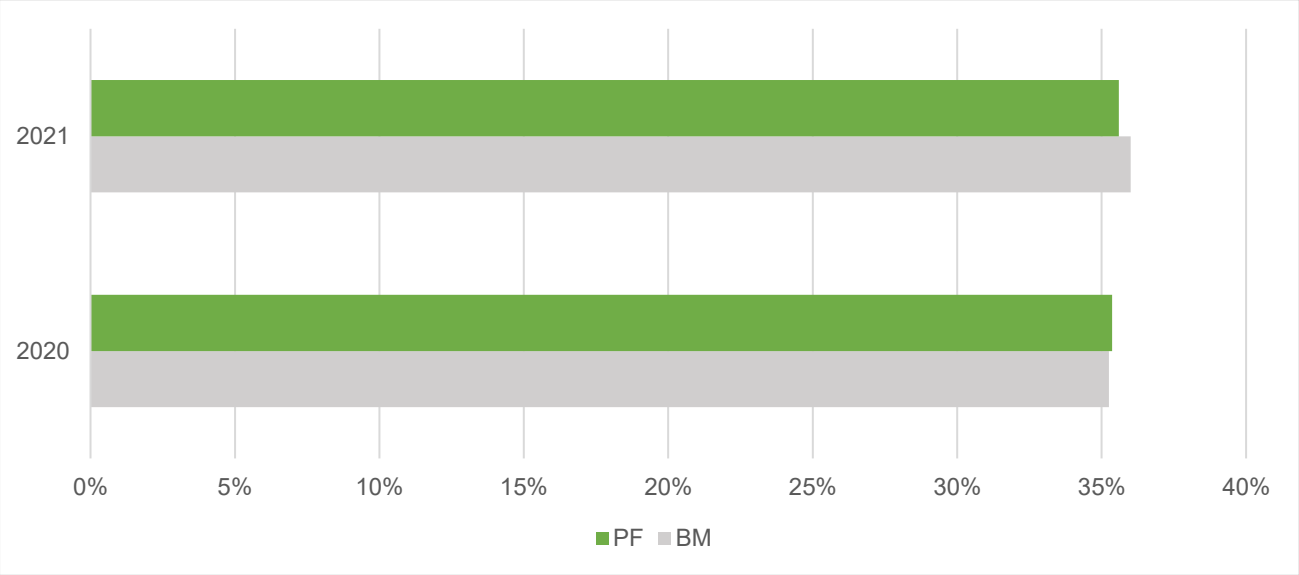


Figure 7: Total Equity portfolio weight in companies with clean technology, March 2020 vs March 2021[13]



[12] Certain Information @ 2022 MSCI ESG Research LLC. Reproduced by permission.
[13] Certain Information @ 2022 MSCI ESG Research LLC. Reproduced by permission.

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

The Fund has reviewed the use of targets. At the January 2022 Pension Committee meeting the Fund voted to set a long-term net zero climate target for 2050. The Fund will establish its short and medium term targets with regards to Net Zero over the course of 2022. This will include considering its emission reduction targets over smaller time periods (5-10 years) and how this is monitored. The Fund will also consider how it will communicate its commitment to underlying investment managers via LGPS Central or otherwise, and how it intends to engage with managers and track their progress towards Net Zero.

Appendix 1

TCFD Recommendations for Asset Owners (source: TCFD)

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: Recommendations and Considerations from the 2021 Climate Risk Report

Category	Recommendation (R)/ Consideration (C)
Governance	
Policies	R: Continue to implement the recommendations and considerations from the 2020 Climate Risk Report
Total Fund	R: Consider reporting against the 2020 Stewardship Code
Strategy	
Alternative Asset Classes	R: Explore the potential options to monitor and manage climate risk in alternative asset classes
Risk Management	
Company Stewardship	R: Continue to engage the companies highlighted in the Climate Stewardship Plan through selected stewardship partners
Company Stewardship	R: Report progress in the next Climate Risk Report
Metrics and Targets	
Metrics	R: Repeat Carbon Risk Metrics analysis annually
Metrics	R: Report annually on progress on climate risk using the TCFD framework
Metrics	R: Continue to include key carbon intensive and fossil fuel stocks in the Climate Stewardship Plan
Metrics	R: Continue to monitor managers' stewardship activities with key carbon intensive and fossil fuel holdings

Appendix 3: Important Information

Extract above from Mercer Limited's (Mercer) report "Climate Change Scenario Analysis" dated August 2020 prepared for and issued to LGPS Central Limited for the sole purpose of undertaking climate change scenario analysis for Shropshire County 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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Contact details

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If you can read this but know someone who cannot, please contact us on 01743 252130 so we can provide this information in a more suitable format.

Office hours

Monday to Thursday	8.45am to 5.00pm
Friday	8.45am to 4.00pm

Contact details

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