

CLIMATE-RELATED FINANCIAL DISCLOSURES REPORT 2021 - DRAFT

1. 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



The Nottinghamshire Pension 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.

2. About this report

This report is Nottinghamshire Pension Fund’s (NPF or ‘the Fund’) second climate-related disclosures report. It describes the way in which climate-related risks are currently managed within the Fund.

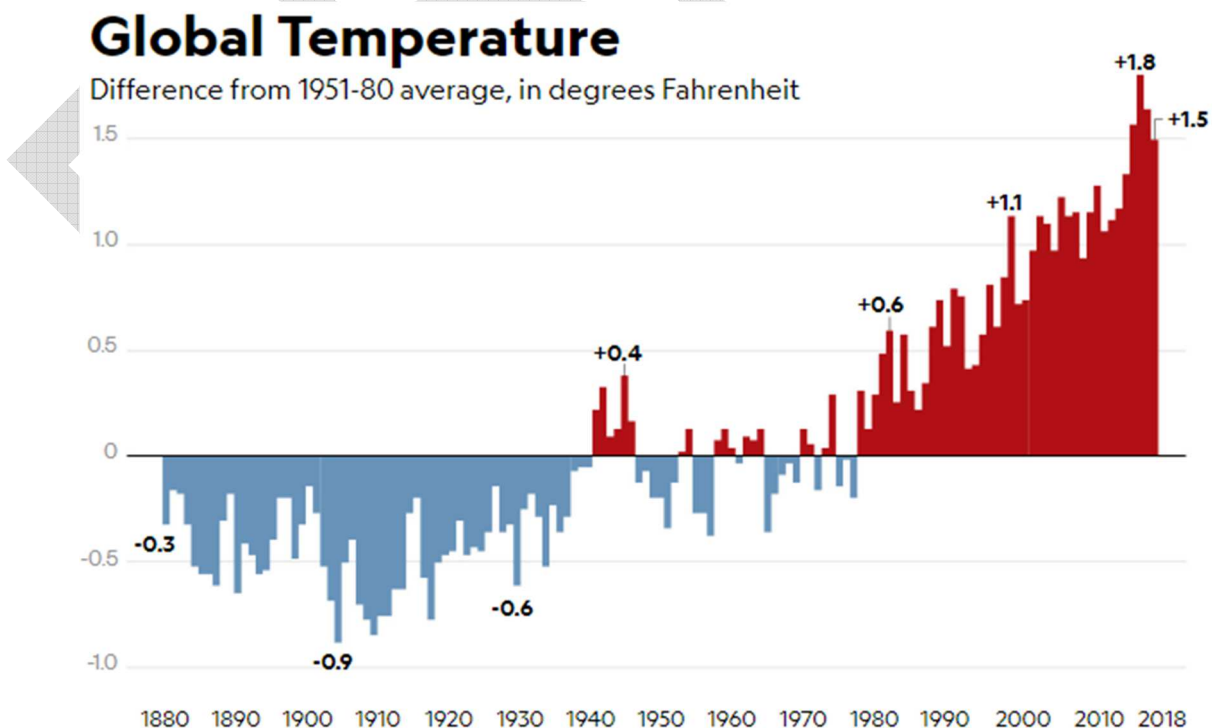
The report follows the release of NPF’s Climate Strategy and Climate Stewardship Plan in 2021. Both documents were developed based on the findings of the Fund’s first Climate Risk Report; an in-depth review of the Fund’s climate risks under different climate change scenarios from the Fund’s pooling company, 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 risk, 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.

3. 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 will 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 preindustrial 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:

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.

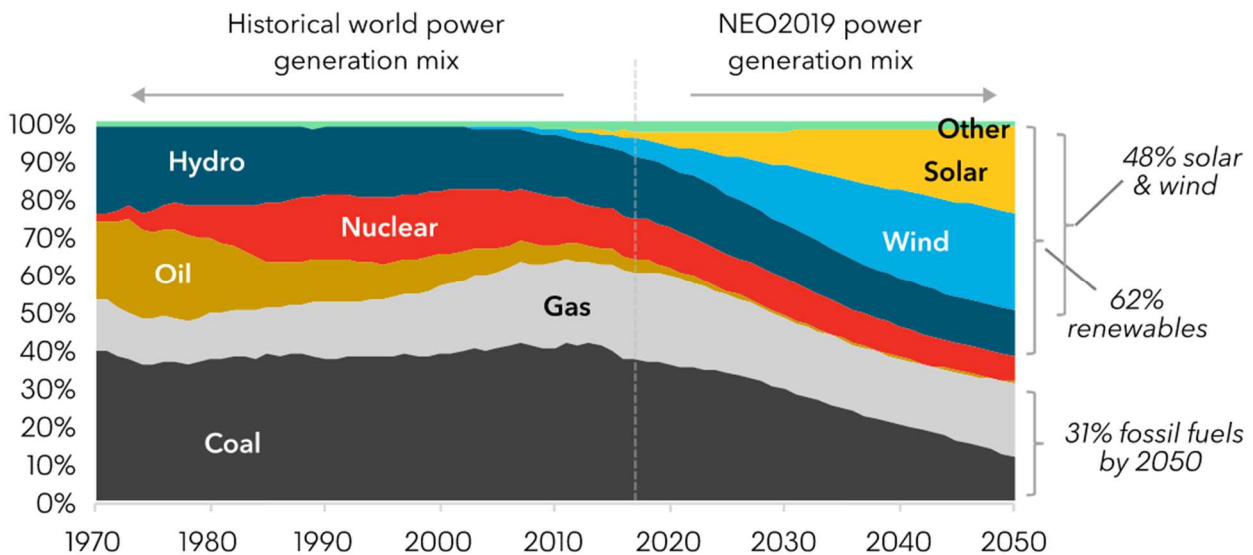
UNFCCC.

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. It is important to recognise however 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 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, a 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.



4. Disclosure Pillars

The TCFD Recommendations set out four disclosure pillars; Governance, Strategy, Risk Management and Metrics and Targets. This TCFD Report is structured in line with Asset Owner TCFD Recommendations by each pillar as follows.

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 the Nottinghamshire County Council which has delegated the management and administration of the Fund to the Nottinghamshire Pension Fund Committee.

The Nottinghamshire Pension Fund Committee is responsible for approving the Fund’s Investment Strategy Statement (ISS) and Climate Change Strategy. The ISS includes the Fund’s approach to responsible investment and recognises climate change as factor that could have a serious impact on financial markets. 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 on an annual basis. The Nottinghamshire Pension Fund Committee

meets eight times a year, and reports from an Independent Adviser (which include advice on the Fund's approach to responsible investment) are received regularly.

As per the *Climate Change Strategy*, the Fund is committed to providing decision-makers with appropriate training, including specialised training on climate change.

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 Service Director for Finance, Infrastructure and Improvement, Group Manager Financial Services and Senior Accountant Pensions and Treasury Management have primary day-to-day responsibility for the way in which climate-related investment risks are currently managed. 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 Service Director for Finance, Infrastructure and Improvement, the Group Manager Financial Services, and the Senior Accountant Pensions and Treasury Management 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 the Nottinghamshire Pension Fund Committee.

Ref	Category	Action	Timing	Notes
	Governance			
1	Governance	Publish a TCFD Disclosure. This will incorporate the key elements of the Carbon Risk Report.	December 20	LGPS Central to provide support
2	Policies	Develop a Climate Strategy. This should be consistent with the TCFD recommendations and include a Climate Stewardship Plan, monitored	March 21	LGPS Central to provide support

Ref	Category	Action	Timing	Notes
		regularly by the Nottinghamshire Pension Fund Committee		
3	Governance	<p>Schedule agenda time at Nottinghamshire Pension Fund Committee meetings at least annually for discussion of progress on climate strategy</p> <p>Additionally report 6 monthly on progress for the first two years of the Action Plan.</p>	An annual review will take place to coincide with the annual update of metrics	LGPS Central to advise on timing of metric updates
4	Governance	Schedule one training session on general RI matters and one climate-specific training per year	6 months	LGPS Central to provide training
5	Policies	<p>Update policies to reflect climate risk e.g. consider:-</p> <ul style="list-style-type: none"> communications on climate risk into communications strategy make clear the roles of key governance committees, especially the Pension Fund Committee, in approving and monitoring the Fund's approach to responsible investment and climate change in the ISS Update the Governance Policy Statement to explain how climate risks are governed Review as part of the FSS the extent to which climate risks could affect other risks noted in the FSS Update the Fund's "Approach to Responsible Investment" in the ISS to include the six responsible investment beliefs. Consider incorporating the Fund's "Approach to Environmental Risk within this disclosure" 	July 21	

Ref	Category	Action	Timing	Notes
6	Reporting	In the Annual Report include a summary of this Climate Risk Report in a manner consistent with the TCFD Recommendations and a summary of the Fund's annual voting activities.	Oct 21	LGPS Central to provide support with this
Strategy				
7	Asset Allocation	Notwithstanding other factors in the Fund's asset allocation process, seek to move towards the Long Term Target Strategic Asset Allocation weightings	Ongoing	
8	Asset Allocation	The Fund should attempt to take a view on the likelihood of different climate scenarios, drawing on its suppliers and advisers.	Ongoing	With the support of LGPS Central
9	Asset Allocation	Monitor fund managers, discussing with equity managers the influence of climate factors on their sector positioning and with real assets managers their physical risk resilience & GRESB participation. Use IIGCC's "Addressing climate risks and opportunities in the investment process"	Ongoing – will form part of the annual stewardship plan	With the support of LGPS Central
10	Asset Allocation	Explore the potential for additional allocations to Global Sustainable Equities and Infrastructure if evidence suggests there could be asymmetrical return profiles (i.e. with expected relative upside in a 2°C scenario and no meaningful relative downside)	Will be reviewed as part of the annual review of asset allocation	Initial and current allocations to be explored first...
11	Asset Allocation	Explore potential investments in sustainable private equity, green bonds and low-carbon passive equities.	Ongoing	Longer term consideration
12	Policy Engagement	Continued public support for the Paris Agreement and join collaborations of like-minded institutional investors to collectively lobby for Paris-aligned climate policies via LGPS Central	Ongoing	With the support of LGPS Central
Risk Management				

Ref	Category	Action	Timing	Notes
13	Company Stewardship	Create an annual stewardship plan	April 21	With the support of LGPS Central
14	Company Stewardship	Through LGPS Central, engage corporate bond managers on their approach to assessing climate risk within their portfolio in the absence of reported GHG emissions data	Ongoing – will form part of the annual stewardship plan	With the support of LGPS Central
15	Company Stewardship	Prioritise the most material/ strategic real assets investment manager exposure for dialogue on climate risk. Consider using the recent IIGCC guide for this endeavour.	Ongoing – will form part of the annual stewardship plan	With the support of LGPS Central
16	Company Stewardship	Continue to engage the companies highlighted in the Climate Stewardship Plan through selected stewardship partners	Ongoing – will form part of the annual stewardship plan	With the support of LGPS Central
17	Company Stewardship	Report progress on the Climate Stewardship Plan to the Nottinghamshire Pension Fund Committee on an annual basis.	July 22	With the support of LGPS Central
17a	Company Stewardship	Ensure that the Fund's voting behaviour supports and enhances engagements highlighted in the Climate Stewardship Plan.	Ongoing – will form part of the annual stewardship plan	With the support of LGPS Central and Hermes EOS
	Metrics and Targets			
18	Metrics	Repeat Carbon Risk Metrics analysis annually	Timescale dependent on LGPS Central availability	Timescale dependent on LGPS Central availability

Ref	Category	Action	Timing	Notes
19	Metrics	Repeat Climate Scenario Analysis every 2-3 years	Summer 22-23	
20	Metrics	Report annually on progress on climate risk using the TCFD framework	Autumn 21	Timescale dependent on LGPS Central availability

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. A subset of risk factors is presented in Table 1.

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

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 impact of climate-related risks. The main management techniques within investment strategy are: measurement and observation; policy review; asset allocation; selection and due diligence; purposeful stewardship; and transparency and disclosure.

The Fund is exploring options to further embed climate-related risks and opportunities into its investment strategy, including reviewing potential investments in sustainable asset classes where this supports the Fund’s investment and funding objectives.

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 LLC¹, 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 is provided below.

Table 2: Annualised climate change impact on portfolio returns – to 2030 and 2050².

Scenario	Timeline	Estimated climate impact on returns
2°C	2030	0.13%
	2050	0.01%
3°C	2030	-0.02%
	2050	-0.07%

¹ Via LGPS Central Limited

² Extract above from Mercer Limited’s (Mercer) report “Climate Change Scenario Analysis” dated 03 July 2020 prepared for and issued to LGPS Central Limited for the sole purpose of undertaking climate change scenario analysis for Nottinghamshire 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°C	2030	-0.06%
	2050	-0.11%

The Climate Scenario Analysis suggests that the lowest outcome is, according to the model used, the best climate scenario from a returns perspective (adding 0.13% 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). The Fund is using the analysis to shape a climate strategy which will be agreed in due course.

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.

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 both top-down and bottom-up analyses³. 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, EOS at Federated Hermes, and LAPFF (see below). The Fund has devised a Climate Stewardship Plan (based on the Climate Risk Report) in order to focus engagement resources on the investments most relevant to the Fund.

³ Climate Scenario Analysis only included in the 2020 Climate Risk Report.

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 Strategy, the main management techniques are: measurement and observation; policy review; asset allocation; selection and due diligence; purposeful stewardship; and transparency and disclosure.

Engagement and shareholder voting are 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, i.e. 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. In September 2020, CA100+ introduced a Benchmark Framework which identifies ten key indicators of success for business alignment with a net zero emissions future and goals of the Paris Agreement.

Either through its own membership or through LGPS Central’s membership, the Fund has several engagement partners that engage investee companies on climate risk which are described in the following table.

Table 3: The Fund’s Stewardship Partners

Organisation	Remit
	<p>The Fund is a 1/8th owner of LGPS Central.</p> <p>Climate change is one of LGPS Central’s stewardship themes, with quarterly progress reporting available on the website.</p> <p>The Responsible Investment Team at LGPS Central engages companies on the Fund’s behalf, including via the Climate Action 100+ initiative.</p>
	<p>EOS at Federated Hermes is engaged by LGPS Central to expand the scope of the engagement programme, especially to reach non-UK companies.</p> <p>In 2020, EOS conducted engagements on 258 climate change issues across its company universe.</p>
	<p>The Fund is a long-standing member of the Local Authority Pension Fund Forum (LAPFF). LAPFF conducts engagements with companies on behalf of local authority pension funds.</p>

The instruction of shareholder voting opportunities is an important part of climate stewardship. The Fund's votes are executed by 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. LGPS Central recently co-filed climate-related shareholder resolutions at the meetings of BP Plc, Barclays Plc, and Citigroup.

The Fund reports quarterly on its voting activities. These reports are publicly available on the Pension Fund website. In addition LGPS Central reports quarterly on its voting and engagement activities. These reports are publicly available via the LGPS Central website.

Based on its first Climate Risk Report, the Fund has developed a Climate Stewardship Plan which, alongside the widescale engagement activity undertaken by LGPS Central, investment managers, EOS at Federated Hermes, and LAPFF, includes targeted engagement with eight investee companies of particular significance to the Fund's portfolio. Wherever feasible, the engagement objectives are designed to be SMART (Specific, Measurable, Actionable, Relevant and Time-bound) to enable the Fund to adequately assess a company's progress. The Fund believes that 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
BHP	Materials
BP	Energy
CRH	Materials
ExxonMobil	Energy
Glencore	Materials
Rio Tinto	Diversified Mining
Royal Dutch Shell	Energy
TotalEnergies	Energy

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 Fund Committee. While specific macro-economic risks are not usually included in isolation, the Fund has deemed climate risk to be sufficiently significant and therefore included it on the Fund's Risk Register.

Climate risk is 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 Limited on carbon risk metrics for its listed equities portfolios. An attempt was made to assess corporate fixed income portfolios, but the coverage of fixed income portfolios - i.e. the proportion of securities in the portfolios which report their GHG emissions data, or for which a reasonable estimation can be made – is low (ranging between 30.5% to 62.3%). 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 footprints⁴,
- 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

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 and following receipt of a report from LGPS Central Limited we provide below the carbon footprints of our equity portfolio⁵:

⁴ Following TCFD guidance we use weighted average portfolio carbon footprints.

⁵ 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 Core Index, Schroders, Specialist and LGPS Central portfolios weighted according

Table 4: Carbon risk metrics for the equity portfolios⁶

Portfolio Name	Benchmark	Carbon Footprint (tCO ₂ e/\$M revenue)			Weight in Fossil Fuel Reserves %			Weight in Thermal Coal Reserves %			Weight in Clean Technology %		
		PF	BM	% Diff	PF	BM	% Diff	PF	BM	% Diff	PF	BM	% Diff
Total Quoted Equities	Total Quoted Equity Blended Benchmark	124.0	151.5	-18.11%	7.86%	9.19%	-1.32%	3.73%	3.69%	0.04%	30.9%	33.2%	-2.24%
Core Index portfolio	N/A	151.3	N/A	-	9.07%	N/A	-	3.65%	N/A	-	33.5%	N/A	-
Schroders portfolio	Schroders Blended Benchmark	108.2	144.4	-25.04%	8.09%	9.53%	-1.44%	4.57%	3.72%	0.85%	29.9%	30.9%	-1.09%
Specialist portfolio equities	Specialist Blended Benchmark	34.2	118.2	-71.09%	0.00%	7.29%	-7.29%	0.00%	3.99%	-3.99%	20.1%	43.1%	-23.06%
LGPS Cental portfolio equities	LGPS Central Blended Benchmark	159.0	275.6	-42.30%	7.60%	8.96%	-1.36%	1.30%	3.11%	-1.81%	37.9%	39.4%	-1.48%

The Fund's Total Quoted Equities portfolio is around 18% more carbon efficient than the benchmark. This means that, on average, for every \$m of economic output companies produce, the Fund's investee companies emit 18% fewer greenhouse gas emissions than the companies in the index. The report received from LGPS Central Limited shows that the equities in the Schroders portfolio, the Specialist portfolio and the LGPS Central portfolio are all more carbon efficient than their respective blended benchmarks. The exposure of the Total Quoted Equity portfolio to fossil fuel producers is 1.32% lower than the benchmark.

Whilst the Fund's carbon risk metrics results show the Fund already 'outperforms' its benchmarks, 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.

to their size in GBP. The Core Index portfolio contains 7 underlying passive portfolios managed for the Fund by LGIM. As the core Index is passively managed the carbon risk metrics of the portfolios are almost identical to those of the respective index. For this reason no benchmark comparison is provided. The Schroders portfolio contains 9 underlying active portfolios managed by Schroders, and the results are presented next to a blended benchmark (a pro-rata composition of the regional benchmarks). The Specialist portfolio contains two active portfolios managed by RWC, and the results are presented next to a blended benchmark. The rest of the Specialist portfolios were excluded from the analysis due to (i) low market value of the portfolios (ii) limited data availability. The LGPS Central portfolio contains two active managed multi manager funds and two passively managed funds and the results are presented next to a blended benchmark.

⁶ Certain information ©2020 MSCI ESG Research LLC. Reproduced by permission.

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 Fund wishes to explore options to further manage climate-related risks and work is underway to assess options within the limitations of currently available data.

As per the Climate Change Strategy the Fund has articulated a number of Strategic Actions within the following areas: (1) Measurement & Observation (2) Policy Review (3) Asset Allocation (4) Selection, Due Diligence and Monitoring (5) Purposeful Stewardship (6) Transparency and Disclosure.

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: Important Information

Extract above from Mercer Limited's (Mercer) report "Climate Change Scenario Analysis" dated 03 July 2020 prepared for and issued to LGPS Central Limited for the sole purpose of undertaking climate change scenario analysis for Nottinghamshire 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.

The following notices relate to Table 5 (above), which are produced for the Fund by LGPS Central Limited based on a product licensed by MSCI ESG Research LLC. This report confers no suggestion or representation of any affiliation, endorsement or sponsorship between LGPS Central and MSCI ESG Research LLC. Additionally:

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