London CIV TCFD Report 2024

For the reporting year ending 31st December 2023

Delivering Sustainable Growth





Contents

- 1 Message from our CEO and Chair
- 2 Key metrics
- 3 About London CIV
- The Task Force on Climate-Related **Financial Disclosures**
- 5 Governance
- 8 Strategy
- 23 Risk Management
- 28 Metrics and Targets
- 35 Appendix
- 46 Glossary



We confirm that the disclosures in this report, including any thirdparty disclosures cross-referenced in it, comply with Chapter 2 of the FCA's Environmental, Social and Governance sourcebook requirements.

Dean Bowden, CEO



Message from our CEO and Chair

Dean Bowden / Mike Craston





London CIV is proud to present our fourth annual **Task Force on Climate-Related Financial Disclosures** (TCFD) Report as part of our ongoing commitment to climate action and responsible investment.

This report describes our ongoing efforts to effectively manage climate-related risks as part of our fiduciary duty to our beneficiaries, as well as our commitment to take responsibility for our own climate footprint and impact on the world of the future. Managing climate risk is integral to our strategic planning and purpose, "Working together to deliver sustainable prosperity for the communities that count on us all."

Climate change is one of the most pressing global challenges facing our planet and our financial system. 2023 served as a stark reminder of these risks – it was the hottest year on record, with global temperatures exceeding 1oC above pre-industrial levels on every single day, for the first time ever. There were recordbreaking heatwaves in Europe and North America, devastating droughts in parts of Africa and Asia, and severe flooding around the world. These events had a disastrous impact on human life and livelihoods, causing widespread damage, displacement, and loss of life. Climate-related events have a disproportionate impact on the most socioeconomically vulnerable, particularly citizens of less economically developed countries in the Global South, who are often more exposed to effects on infrastructure, agriculture, food security and public health.

Yet many key players are not taking responsibility for the impact they have on the world. This year has seen attitudes amongst some business and investors, particularly in North America, shifting back towards climate-scepticism, and the rolling back or watering down of climate commitments. Meanwhile, many key companies in highemitting sectors, including some of our own oil and gas exposures, are not doing enough to adapt to the climate transition, increasing their vulnerability to stranded asset risk and potentially jeopardizing the long-term viability of their businesses. This short-sighted approach not only threatens progress on climate action but also exposes investors to significant financial risks.

For our Partner Funds, climate change risk management is a critical concern, with 30 of the London Local Authority Councils having declared a climate emergency. As of 2023, 11 of our Partner Funds have announced Net Zero commitments with an average target year of 2040. At London CIV, we believe we have a responsibility to manage our impact on the world, to help create a safe and stable future for our Partner Fund beneficiaries, and for everyone.

To this end, we have set an ambitious target to achieve Net Zero for our portfolio by 2040, as well as interim targets to reduce emissions 35% by 2025 and 60% by 2030. We have already met our 2025 target for our investee's Scope 1 and 2 emissions, although our progress for Scope 3 has varied, often driven by issues with underlying data quality. We recognise that there is still much work to do, and are in the process of developing a more detailed climate action plan which will be published later in 2024.

This year we have also worked on launching new products and services which support the transition to a Net Zero world, including our LCIV Nature Based Solutions Fund which is due to launch in the second half of 2024. We provide our Partner Funds with free of charge climate analytics reporting, covering both pooled and off-pool holdings, to support them in their own Net Zero journeys. We have also calculated our own operational footprint for the first time and are in the process of engaging with the British Standards Institute (BSI) to become a carbon neutral organisation.

At London CIV we are committed to transparency and continuous improvement in our approach to climate change. This report serves as a valuable tool to communicate our actions and progress with our stakeholders, and we welcome your feedback.

Dean Bowden, CEO | Mike Craston, Chairman

https://www.weforum.org/publications/global-risks-report-2023/

 $[\]underline{https://climate.copernicus.eu/copernicus-2023-hottest-year-record\#: @copernicus-203%20marks \% 20the \% 20first \% 20time, than \% 202\% C2\% B0C\% 20 warmer with the first operation of the first warmer warmer with the first operation of the first warmer warmer with the first operation of the first warmer warmer with the first warmer war$

https://climateemergencydeclaration.org/climate-emergency-declarations-cover-15-million-citizens/



Key metrics

About London CIV

£48bn held by 32 Partner Funds

£30.6bn4 pooled through London CIV

Our targets

Net Zero by 2040

35% reduction in carbon intensity by 2025

60% reduction in carbon intensity by 2030

Net Zero operationally by 2025

Our progress to date for reporting year ended 31st December 2023 (2022 in brackets)⁵



75% climate data coverage

24%

lower Weighted Average Carbon Intensity than the MSCI World⁶

A lower WACI indicates less exposure to carbon intensive industries. (2022: 47%)

reduction in carbon to value intensity7

A lower carbon to value intensity indicates a lower carbon impact on the world. (2022: 44%)

0.71%

revenue-weighted fossil fuel exposure

Low fossil fuel exposure may mean reduced stranded asset risk and a lower impact on global emissions (2022: 0.81%)





£1.4bn called to date

Climate data available for 20 out of 23 investments

contributed towards

tCO₂e avoided emissions8

Emissions are avoided when renewable energy from infrastructure assets displaces fossil fuels.

invested in renewable infrastructure9

(2022: £387m)

Passive funds



Passive funds held with BlackRock and LGIM

89% climate data coverage

lower Weighted Average Carbon Intensity than the MSCI World

Although London CIV has no control over these funds, we track key climate metrics to ensure

reduction in carbon to value intensity10

revenue-weighted fossil fuel exposure

revenue-weighted fossil fuel exposure

- Includes called and uncalled capital from private market funds and £150m LPPI commitment in the London Fund.
- Metrics refer to Scope 1 and 2 emissions, unless otherwise specified.

 London CIV WACI declined 17% in 2023 compared to 2022, whilst the MSCI World WACI declined 42%. The reason for this major decline is due to an increase in revenues and a fall in emissions across the index, in part because of shifting towards less carbon-intensive industries, particularly technology. Therefore, although our absolute performance improved, relative performance compared to the MSCI World is lower than in 2022.
- Compared to 2020 baseline. London CIV carbon to value intensity increased by approximately 10% in 2023 compared to 2022, whilst MSCI World intensity declined by approximately 29%. The 39% reduction compared to baseline means that we are already exceeding our 35% reduction target by 2025.
- Based on data obtained from investment managers; note that this has not been verified by London CIV. This metric refers to the aggregate impact from the underlying investments and has not been apportioned to London CIV. Due to data lags for some private market investments, this figure uses a combination of data from 2022 and 2023.
- Includes called capital in LCIV Infrastructure Fund and LCIV Renewable Infrastructure Fund.
- 10 Compared to 2021 baseline.

About London CIV

London CIV manages the investment of the pension assets of the 32 Local Government Pension Scheme (LGPS) Funds in London, who are our clients and shareholders (Partner Funds). We are one of eight LGPS pools, bringing together c.£30.6 billion investments¹¹ across 20+ public and private market investment solutions.

Our purpose

Working together to deliver sustainable prosperity for the communities that count on us all

Our values

Collaboration

We work together to build and sustain strong partnerships both internally and externally

Responsibility

We are committed to deliver on our promises, meet the needs of our stakeholders and go the extra mile

Diversity

We respect and celebrate our differences and create an inclusive environment where everyone feels welcome

Integrity

We act with honesty, ethics, and respect in everything we do



The Task Force on Climate-Related **Financial Disclosures**

The Task Force on Climate-Related Financial Disclosures was established in 2015 by the Financial Stability Board ("FSB") at the request of the G20 to review how the reporting on climate-related issues in financial reporting could be improved.

In June 2017, the TCFD published its final recommendations, providing a framework for financial institutions and non-financial organisations alike to reflect and report on their climate-related risks and opportunities.

As of October 2023, the Task Force had over 4,850 supporters globally, including more than 1,800 financial institutions who are responsible for assets of \$222.2 trillion.¹³ Multiple jurisdictions have proposed or finalised laws and regulations to require disclosure aligned with the TCFD recommendations, including the UK, and in December 2021, the FCA published a policy statement introducing TCFD-aligned disclosure requirements for asset managers, life insurers, and FCA-regulated pension providers. For London CIV, these climate-related disclosure rules applied from 1 January 2023.

The TCFD recommendations provide a framework organised around four themes, as outlined in Figure 1: governance, strategy, risk management, and metrics and targets. The following report has been structured to provide disclosures across each of these topics.

Figure 1: The core elements of recommended climate-related financial disclosures



Governance

The organization's governance around climate-related risks and opportunities

Strategy

The actual and potential impacts of climaterelated risks and opportunities on the organization's businesses, strategy, and financial planning

Risk Management

The processes used by the organization to identify, assess, and manage climate-related risks

Metrics and Targets

The metrics and targets used to assess and manage relevant climate-related risks and opportunities

Governance

The TCFD recommendations highlight the importance of good governance structures to ensure effective oversight of climaterelated risks and opportunities.



Governance continued

A. How the Board oversees climaterelated risks and opportunities

Board oversight

The London CIV Board approves our overall strategy and high-level statements and policies including our purpose statement and investment beliefs. This includes ultimate accountability for London CIV's Responsible Investment and Climate Change Policies, emissions reduction targets and Net Zero action plan. Key climate risk disclosures such as the TCFD report play a key role in monitoring progress against those targets.

The Chief Executive (CEO), supported by an Executive Committee (ExCo) of senior managers, is responsible for the day-to-day management of London CIV, including developing and implementing our strategy, of which climate change strategy is an integral part. The Chief Sustainability Officer (CSO) reports direct to the CEO and is responsible for the oversight and management of operational climate-related matters. This is described in more detail in the following section.

The governance framework is designed to ensure that the Board is accountable for the company's overall strategy and governance including climate-related risk. The s172 statement in our Annual Report approved by the Board in late June 2024¹⁴ describes the approach to engagement with key stakeholder groups in respect of climate and communities.

The Board maintains oversight by receiving regular reports on ESG matters at each meeting, and through the reports made to the Investment and Customer Outcomes Committee. Progress updates are also made to ExCo. There are also periodic in-depth reports to both the Board and ExCo, including as part of the Board's Development and Briefing Programme.

Partner Funds

Our Partner Funds retain responsibility for their asset allocation and investment strategy, and thus exposure to environmental, social and governance (ESG) risks. We see our role as helping them implement their strategy by providing relevant products, engagement and services and tools such as our climate analytics reporting service and this TCFD report.

As signatories to the Financial Reporting Council (FRC) UK Stewardship Code, London CIV are committed to ensuring that our governance structures and arrangements for strategic decision-making and leadership achieve best practice stewardship for the benefit of Partner Funds and other stakeholders. Climate change is recognised by both London CIV and our Partner Funds as a key strategic risk.

This informs London CIV's strategy, products and services, as well as our annual and medium-term financial planning, which is discussed with Partner Funds and approved annually by shareholders.

Our governance structure provides for formal shareholder involvement through general meetings, a shareholder agreement, and a representative Shareholder Committee. This is complemented by informal forums including a Sustainability Working Group (SWG), Cost Transparency Working Group (CTWG), and arrangements designed to ensure engagement throughout the fund launch process and development of our product and service offer. The composition of the SWG (formerly the Responsible Investment Reference Group or RIRG) was reviewed during 2023 and now includes a wider membership, open to all Partner Funds. The group meets quarterly to discuss a programme of ESG issues with a particular focus on climate change.

B. How management assess and manage climate-related risks and opportunities

As described above, the CEO, supported by ExCo, is responsible for the leadership and day-to-day management of London CIV and the development of strategy to which the climate change strategy is integral. The Chief Investment Officer (CIO) is responsible for managing the integration of climate change into fund design, implementation, and overall investment decision making. The CSO sits in on investment team and Executive Investment Committee meetings in order to monitor progress on integration, and produces a quarterly report to the Investment and Customer Outcomes Committee (ICO).

The CSO is supported by a team of three Responsible Investment (RI) specialists who monitor climate performance across key exposure and impact metrics and meets with fund managers on a quarterly basis to monitor compliance with London CIV's Climate Change Policy and Stewardship Policy. Further details are outlined in the Strategy and Risk Management sections of this report. The arrangements for reporting to, and monitoring progress by, the Board, the Investment and Customer Outcomes Committee (ICO) and ExCo are described in the section above.

London CIV's wider climate-related engagement activity is supported by an outsourced voting and engagement service provider. This activity is informed by Stewardship Policy and Voting Guidelines, which are reviewed annually, informed by our annual stewardship outcomes assessment.



Figure 2: London CIV committee structure and oversight of climate-related risks

London CIV committee structure

Formal Governance



Strategy

The TCFD recommendations call on asset managers to describe how climate-related risks and opportunities are factored into investment strategies.



A. Climate-related risks and opportunities identified over the short, medium, and long term

Definitions and taxonomy

As part of our annual climate-risk assessment, London CIV considers our exposure to climate-related physical and transition risks across the following time-horizons:

Short-term: by 2025Medium-term: by 2030Long-term: 2050 and beyond

In line with TCFD guidelines, London CIV divides climate-related risks into two major categories:

Table 1: TCFD risk categories

Risk category	Description
Transition risks	Risks and opportunities associated with the transition to a lower-carbon economy. This includes risks associated with policy changes designed to discourage carbon-intensive activities, technological changes, shifts in consumer demand, changes in investor sentiment, reputational risks and disruptive business model innovation.
Physical risks	Risks related to the physical impacts of climate change. These risks can be event-driven (acute) or result from longer-term shifts in climate patterns (chronic).

London CIV's key climate-related risks and opportunities

The primary and most material way in which climate change is likely to impact London CIV is through the impact on the underlying assets within our funds. In line with the TCFD framework, we have identified several climate-related risks and opportunities which have the potential to have a material financial impact on these assets, as outlined in Table 2. The resulting impact of these effects on London CIV is discussed in the following section.

The impacts and disruption from climate change will vary significantly across assets and asset classes. Disruption from physical climate risks is heavily location-specific, and will also vary by vulnerability and preparedness, whilst transition risks are dependent on specific jurisdictions and markets, and other external factors like technology development and geopolitics. Impacts are often complex and interrelated – for example, strong regulatory action may reduce exposure to physical risk hazards, but presents significant transition risk, whilst inaction may delay legislative impacts but exacerbate physical disruption.

As we invest across a wide range of sectors, geographies and asset classes, the range of potential impacts on the portfolio is broad. We have therefore drawn on the analysis of the TCFD framework to summarise them.

Table 2 provides a high-level outline of how our assets may be affected, but the extent and timeframes of these impacts will vary significantly by climate scenario and the underlying portfolio construction at any given point in time. For further details on how our assets may be affected under different scenarios, see Strategy Section C.

Strategy continued

Table 2: Climate-related risks and opportunities – based on TCFD framework¹⁵

Climate-related risks and opportunities	Timeframe to impact	Potential impacts on assets within our funds
Transition risks		
Policy and legal: Increased emissions costs Enhanced reporting obligations Regulation of products and services Exposure to litigation	Short to medium term	 Increased operating costs Write-offs, asset impairments and early retirement of assets Fines and judgements Reduced demand due to reputational impacts
Substitution of products and services in favour of low-carbon alternatives Unsuccessful investment in new technologies Costs of transitioning to lower emissions technologies	Medium to long term	 Write-offs and early retirement of existing assets Reduced demand for products and services Research and development (R&D) expenditures Costs to adopt/deploy new practices and processes
Market: Changing consumer behaviour Uncertainty in market signals Increased supply chain costs	Short, medium, and long term	 Reduced demand due to shift in consumer preferences Increased production costs due to changing input prices Abrupt and unexpected shifts in energy costs Change in revenue mix and sources Re-pricing of assets (e.g., fossil fuel reserves, security valuations)
Reputation: • Shifts in consumer preferences • Stigmatisation of high-emitting sectors • Increased stakeholder concerns	Short to medium term	 Reduced demand for goods/services Reduced revenue from impact on production capacity (e.g. supply chain interruptions) Reduced revenue from negative impacts on workforce management and planning Reduction in capital availability
Physical risks		
Acute: Increased likelihood and/or severity of extreme weather events such as wildfires, heatwaves, extreme cold, coastal floods, fluvial floods, droughts and cyclones Chronic: Rising mean temperatures Rising sea levels Increased water stress Changes in precipitation patterns Extreme variability in weather patterns	Short, medium and long term	 Increased capital costs (e.g. damage to facilities) Increased operating costs Reduced revenues from lower sales / output Increased insurance premiums / reduced availability of insurance on "high risk" assets / locations Reduced production capacity (e.g. supply chain interruptions, disruption, productivity loss) Higher costs from workforce impacts (e.g. health, safety, absenteeism) Write-offs and early retirement of existing assets (e.g. due to damage)
Climate opportunities		
 Resource efficiency and circular economy Changes in energy markets Changes in products and services Changes in consumer preferences Access to new markets Public-sector incentives Diversification 	Medium to long term	 Reduced operating costs Increased value of fixed assets New / shifting revenue streams Reduced exposure to volatile input prices and stranded assets Increased access to capital Increased demand for products and services Improved competitiveness Improved reputation Improved resilience Increased production capacity Workforce benefits

 $^{15 \ \}underline{https://www.tcfdhub.org/Downloads/pdfs/E06\%20-\%20Climate\%20related\%20risks\%20and\%20opportunities.pdf} \\$

Assessing the financial materiality of climate risks

Given the complex and changing nature of our clients' portfolios and the interrelated nature of different climate risks, we do not model individual climate risks in isolation. Instead, we model the impact of physical and transition risk separately at a high-level for each of our funds, under a number of different climate scenarios. The results of this analysis are provided in Strategy Section C. Whilst we recognise that these risks are highly interrelated, as discussed above, we believe considering their impact under different scenarios provides decision-useful information to help manage our exposures under variable assumptions.

- Transition risks: We model the financial impact of transition risks on our underlying assets through carbon pricing models, as an indicator of wider legislative and market impacts. This allows us to estimate the carbon earnings at risk across our funds.
- Physical risks: We model the expected financial impacts from seven different climate hazards an asset, fund and portfolio level under different scenarios, relative to a baseline. This allows us to estimate the proportion of asset value at risk across our funds.

Our data provider is S&P Global Sustainable1, and we draw on their methodologies for measuring both carbon earnings at risk and physical risk.

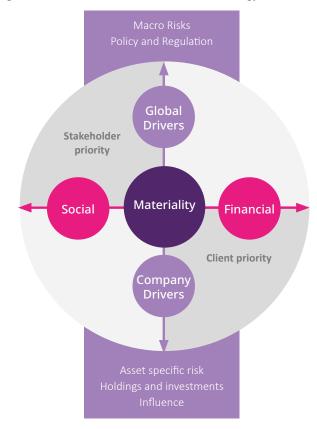
For further details please see Strategy Section C and Appendix 3.

Climate change and London CIV's wider ESG risk identification methodology

While the Task Force on Climate-Related Financial Disclosures (TCFD) framework has formalised and mandated climate risk reporting, London CIV has long recognised the importance of proactively identifying and managing these risks. Since 2020, our comprehensive ESG risk identification methodology has consistently identified climate change as the most material priority, driving our annual stewardship and engagement strategy. This methodology, carried out by our Responsible Investment team, incorporates data from the World Economic Forum (WEF) Global Risk Report¹⁶, stakeholder views, and independent analysis, assesses ESG risks across the portfolio to inform our actions and ensure our investment decisions are resilient to the changing climate landscape.

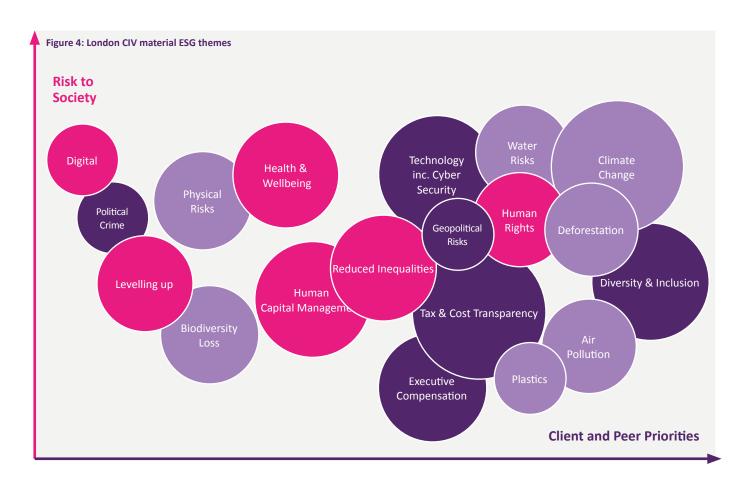
Our risk identification methodology is designed to address the complex interconnectivity of a myriad of issues to help determine our ESG priorities. At the macro-level we are affected by top-down global risks and client priorities. From a bottom-up perspective, we recognise micro-risks to our assets and specific areas where we can have influence. This ever-evolving system of prioritisation is nuanced by a values versus value-based approach that sees risk as greater in terms of magnitude and likelihood when financial and social materiality combine.

Figure 3: London CIV's ESG risk identification methodology



Based on this exercise, London CIV has consistently identified "Planet" as a priority theme for stewardship and engagement, with climate-change clearly identified as the most ESG material issue affecting the portfolio, as illustrated in Figure 3.

Strategy continued



People

Planet

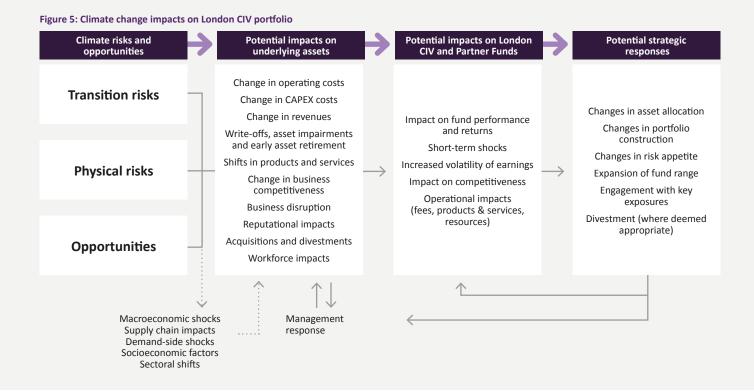
Governance

Size of Bubble = Financial Materiality

B. The impact of climate-related risks and opportunities on our business, strategy, and financial planning

Impact on London CIV

The impact of climate-related risks and opportunities on our portfolio is complex and dependent on a wide range of external factors and stakeholders. This is illustrated in Figure 5 below.



This diagram is illustrative of possible outcomes only and is not intended to illustrate expected impact.

Strategy continued

Our climate strategy

London CIV's <u>Climate Change Policy</u> details how we manage climate-related risks throughout the investment process. We are currently updating this policy and developing a Net Zero roadmap, which will outline our targets and key actions for achieving Net Zero by 2040, which will be published in the second half of 2024 following approval by the Board. This will build upon the Net Zero Investment Framework developed by the Paris Aligned Asset Owners initiative.

Figure 6: Net Zero Investment Framework, Paris Aligned Asset Owners



 $Source: \underline{https://www.parisalignedassetowners.org/net-zero-investment-framework/}\\$

We have developed a three-step approach to responsible investment, as depicted in Figure 6. Climate change issues are dynamically integrated within each of these stages and are underpinned by a set of governance principles that define accountability and strategic responsibilities within the organisation.

Figure 7: London CIV's approach to responsible investment





Climate transition

As significant asset managers, we also have a key role to play in accelerating the transition to a Net Zero economy. The systemic risks associated with climate change seriously threaten the long-term socioeconomic stability of the world in which our beneficiaries live. Mitigating climate-related financial exposure in our clients' portfolios by investing in line with the 1.5°C objectives of the Paris Agreement is therefore not only consistent with, but a requirement of our fiduciary duty.

The Intergovernmental Panel on Climate Change ("IPCC") Special Report on the impacts of global warming has clearly indicated that faster CO₂e reductions will result in a higher probability of limiting warming to 1.5°C. Accordingly, London CIV committed to Net Zero GHG emissions by 2040, becoming the first Local Authority pension pool to do so. To achieve this, the progress which will be made over the next ten years is critical. We have set ambitious interim targets which require an average carbon intensity reduction of 35% by 2025, and of 60% by 2030, relative to a 2020 baseline, across all funds within the London CIV fund range. Of course, we recognise that the targets of our Partner Funds may vary. As such, our role as a local authority pension pool is to provide a range of investment solutions which help our 32 Partner Funds meet their own climate objectives.

Integration

Climate change and ESG are integrated into our investment strategy, manager monitoring processes, and product design.

Investment strategy

As an LGPS pool, London CIV aims to deliver stronger investment returns over the long term, protecting our clients' interests through contributing to a more sustainable and resilient financial system. Climate change considerations are embedded within our Investment Beliefs – the established set of principles which underpin the way we invest. Effective management of climate risks forms the basis of Principle 3c, and is considered alongside our wider duty of care, our commitment to responsible investing, and sound risk management.

Investment manager monitoring and due diligence

We meet with our investment managers on a quarterly basis, which allows us to raise any climate or wider ESG-related concerns. For further details, please see Risk Management Section B on investment manager monitoring and due diligence.

Product design

We consider environmental, social and governance (ESG) factors when designing new investment mandates. All tendering investment managers must demonstrate their approach to identifying and mitigating exposure to climate risk and articulate how their investment objectives support the transition to the low carbon economy. This is assessed based on their ESG credentials, climate policy and responses to London CIV's investment manager due diligence questionnaire.

Whilst responsible investment is a key part of our manager selection process, we do not systematically stipulate minimum levels of climate ambition in the design of funds where there is not a specific climate focus. This provides our clients with a range of products which allow them to meet their strategic objectives and climate goals.

Strategy continued

Products and strategies

Although we do not decide upon the strategic asset allocation for our clients, London CIV aims to produce a variety of funds to best suit the needs of our shareholders and allow them to meet their own objectives, including on climate.

Our ACS funds with specific climate objectives as of 31st December 2023 are:

Table 3: London CIV ACS funds with climate considerations

Fund	Climate-related parameters			
LCIV Global Alpha Growth Paris Aligned Fund	The Sub-fund aims to have a weighted average greenhouse gas intensity that is lower than that of the MSCI ACWI EU Paris Aligned Requirements Index.			
LCIV Passive Equity Progressive Paris Aligned Fund	The Sub-fund tracks the performance of the S&P World Net Zero 2050 Paris-Aligned ESG Index (GBP).			
LCIV Sustainable Equity Fund	The investment philosophy employed by the investment manager should enable the Sub-fund to deliver, over the long term, a carbon foot print which is lower than that of the MSCI World Index (Net) (Total Return).			
LCIV Sustainable Equity Exclusion Fund	The investment philosophy employed by the investment manager should enable the Sub-fund to deliver, over the long term, a carbon foot print which is lower than that of the MSCI World Index (Net) (Total Return).			
LCIV Global Equity Quality Fund	The Sub-fund is expected to achieve a greenhouse gas emissions intensity for the portfolio that is lower than that of the MSCI All Country World Index.			
LCIV Long Duration Buy and Maintain Credit Fund	The Sub-fund seeks a Weighted Average Carbon Intensity (WACI) that decreases over time. The initial portfolio will have a WACI that is at least 25% less than the reference index.			
LCIV Short Duration Buy and Maintain Credit Fund	The Sub-fund seeks a Weighted Average Carbon Intensity (WACI) that decreases over time. The initial portfolio will have a WACI that is at least 25% less than the reference index.			

Additionally, in 2024 we are in the process of enhancing the climate-related parameters of our investment manager agreements for the LCIV Global Bond Fund and the PIMCO-managed portion of the LCIV MAC Fund. Our new LCIV Global Equity Value Fund launching later this year will also have climate objectives.

From our private market funds, the following funds have climate considerations incorporated into the strategy:

Table 4: London CIV EUUT funds with climate considerations

Fund	Climate-related parameters	
LCIV Infrastructure Fund The fund targets a minimum of 25 per cent exposure to renewable investments.		
LCIV Renewable Infrastructure Fund	The fund focuses on investing in renewable energy infrastructure including generation, transmission and distribution and enabling assets across greenfield and brownfield sites.	

In 2024, we are also launching the LCIV Nature Based Solutions Fund, which seeks to invest in strategies which protect, sustainably manage or restore natural ecosystems (land and/or water-based) and address challenges related to climate change, human wellbeing and biodiversity.

Even where funds do not have specific climate objectives, we aim to ensure that the climate risk profile exceeds that of our benchmarks, and we work closely with our fund managers to review leading responsible investment practices and improve processes on a best-efforts basis.

 $For more \ details \ on \ how \ each \ of \ our \ funds \ is \ affected \ under \ different \ climate \ scenarios, see \ Strategy \ Section \ C \ and \ Appendix \ 1.3.$

Engagement

We believe engagement is our most effective tool to bring about emissions reductions in the real economy. For more details on our Stewardship Policy and Voting Guidelines, please see Risk Management Section B below.

Disclosure

Accurate and timely disclosure of climate-related financial information is central to the effective implementation of our climate strategy. London CIV has developed robust monitoring and accountability mechanisms to improve transparency and quality of reporting to and from all its stakeholders. This includes efforts to:

- Engage more intensively with companies that do not yet disclose climate-related data in alignment with the recommendations of the $% \left(1\right) =\left(1\right) \left(1\right) \left$ TCFD and the Sustainability Accounting Standards Board (SASB).
- Monitor the climate performance of our investment managers on a quarterly basis.
- Report on key climate metrics in our mainstream financial filings as well as this TCFD report.

Client climate analytics

Since 2022 we have been providing a climate analytics service to Partner Funds, free of charge. This includes in-depth analysis of the carbon footprint and climate risk exposure of both on- and offpool holdings, to help inform the development of decarbonisation strategies, internal risk management and strategic asset allocation.

Continuous improvement

We are continually seeking to improve our work on climate and draw on the latest leading practice amongst asset owners and managers, to enable us to effectively manage climate risk, meet our Net Zero commitments and bring about real-world change.

Impact on financial position

The impact of climate-related risks on our portfolio is modelled annually under different climate scenarios. The results are provided in Strategy Section C. This analysis does not consider any potential strategic actions taken by London CIV, our investment managers or our Partner Funds to respond to mitigate potential impacts.

Impact on financial planning

To support the management of physical and transition risks, we have incorporated climate change-related deliverables into our high-level Medium Term Plan and financial planning processes. This includes consideration of our Net Zero targets, the development of a Net Zero strategy and roadmap, and the associated requirements on resourcing, ESG data, voting, engagement and other relevant areas. In this way, climate-related issues are integrated into our financial planning processes in a holistic and forward-looking way, which ultimately strengthens our long-term ability to create value.

We also leverage the active management strategies of our funds to improve the portfolio's resilience to climate risks. Our investment managers are engaged in ongoing assessments of climate impacts and incorporating these into investment decision making and stewardship activities.

Own operations

This year we have also calculated the footprint of our own operations, covering Scope 1, 2 and material Scope 3 categories (excluding Category 15). The total footprint is estimated to be <25 tonnes of CO₂e, which comprises <0.00001% of the footprint from our ACS funds alone. We intend to fully offset this, once any potential emissions reduction opportunities have been explored, and are in the process of obtaining certification from the British Standards Institute (BSI) to become a fully carbon neutral organisation.

Spotlight: Climate change and nature

London CIV is keenly aware of the interrelation between climate and nature-related risks and opportunities. A warming planet disrupts natural ecosystems, accelerates biodiversity loss, and threatens the possibility of exceeding global 'tipping points' associated with ice sheets, permafrost, mountain glaciers, ocean currents, ocean health, and biomes, with potentially devasting consequences on natural and human systems. Meanwhile, deforestation, soil degradation from agriculture and ocean acidification further exacerbate the impacts of climate change.

But natural ecosystems also hold part of the solution. Forests, oceans, wetlands and peatlands act as carbon sinks, absorbing and storing carbon from the atmosphere, whilst natural habitats can reduce the risk of flooding, help prevent coastal erosion and provide numerous benefits to human health and wellbeing.

To improve our impact on climate and nature, London CIV is in the process of launching a new Nature Based Solutions Fund, which seeks to invest in strategies that protect, manage and restore natural ecosystems. Since 2021, we have been one of the early pension fund group members of the deforestation-free pensions guidance working group, set up by Global Canopy, Systemiq and Make My Money Matter, and are a signatory to the Financial Sector Commitment Letter on Eliminating Commodity-Driven Deforestation. Natural resource stewardship remains an ongoing focus of our engagement efforts. We are also an early adopter of the TNFD and will publish our first report on nature-related risks, dependencies and impacts in 2025.





Strategy continued

C. The resilience of our strategy under different climate-related scenarios

To better understand the impact of physical and transition risks on our portfolio, we conducted a climate scenario analysis covering listed equity and corporate fixed income instruments across our funds. For further details on our methodology please see Appendix 3.

This analysis does not consider any potential strategic actions taken by London CIV, our investment managers or our Partner Funds to respond to mitigate potential impacts. The analysis provides a point-in-time snapshot based on the portfolio as of 31st December 2023, which is not necessarily reflective of the portfolio construction at any point in the future.

Our analysis focusses on the portfolio (as opposed to our own operations) due to the materiality of impact – our operational carbon footprint is <0.00001% of our portfolio footprint (which affects our operational exposure to transition risks) and we use a single, leased office space (which affects our operational exposure to physical risks).

The results of this analysis will help inform the development of our Net Zero action plan.

Transition risk

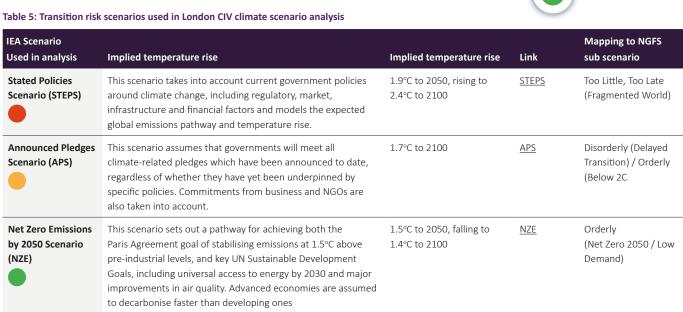
We analyse our exposure to transition risks through assessing our "carbon earnings at risk" – our exposure to carbon pricing mechanisms such as emission trading schemes and carbon taxes. This provides useful insights into the potential impact of these policy tools on our assets, as well as a proxy for wider carbon policy, through allowing us to hotspot key areas of vulnerability in our portfolio.

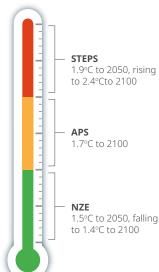
Methodology and data sources

We draw on analysis from S&P Global Sustainable1, which models current carbon prices for different sectors and jurisdictions and projects them into the future using scenario data from the IEA and OECD, as well as independent research. This analysis is used to estimate impact on EBITDA at an asset level under different scenarios and time periods, and then aggregated up to the fund and portfolio level.

Scenarios

Our analysis draws on scenario data from the IEA Global Energy and Climate Model. We consider three different scenarios:



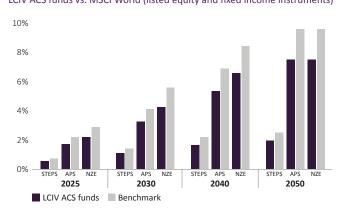


Results and insights

The diagram below illustrates the unpriced carbon costs as a %of EBITDA across our consolidated ACS portfolio. As expected, our exposure to unpriced carbon costs is highest under a Net Zero scenario and generally decreases under less extensive policy interventions (higher average global temperature increases). The impact increases in the longer term under every scenario, up to 7.4% by 2050 under APS and NZE.

As a consolidated ACS portfolio, we outperform the benchmark (MSCI World) in every policy scenario and every time period. This is because 13 out of our 18 ACS funds have a lower exposure to unpriced carbon costs than the MSCI World. The exceptions are: LCIV Global Alpha Growth Fund, LCIV Diversified Growth Fund, LCIV Absolute Return Fund, LCIV MAC Fund and LCIV Global Bond Fund.

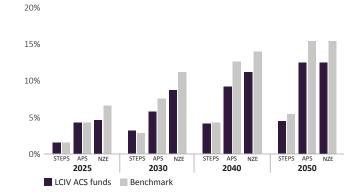
Figure 8: Unpriced carbon costs as a proportion of EBITDA LCIV ACS funds vs. MSCI World (listed equity and fixed income instruments)



To help identify key areas of vulnerability, we consider companies with >10% of EBITDA at risk. In 2030, 2.9% of AUM has >10% EBITDA at risk under a Stated Policies Scenario, rising to 8.4% under a Net Zero scenario. By 2050 this increases to 4.3% and 12.0% respectively. This data helps identify assets with high exposure to transition risk, and informs our engagement on climate transition, either directly, as part of wider investor collaboratives, or through our investment managers.

Figure 9: Proportion of AUM with >10% EBITDA at risk

LCIV ACS funds vs. MSCI World (listed equity and fixed income instruments)





Strategy continued

Physical risk

We analyse physical risks through modelling the financial impact of seven different climate hazards on our investments. The following hazards are considered:

Figure 10: Physical climate hazards modelled in LCIV climate scenario analysis

Hazard type	Hazards	
Chronic	Extreme heat, water stress	
Acute Fluvial flood, drought, wildfire, tropical cyclone, coastal flood		

Methodology and data sources

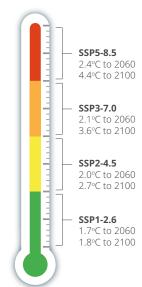
We take financial impact data from S&P Global Sustainable1, which provides estimated financial losses under different scenarios from CapEx, OpEx, business interruption and other pathways as a proportion of asset value, at a corporate level. We use composite indicators which aggregate risk across the hazards listed above, as we believe this provides a more decision-useful projection of potential risks in the long-term. This is then aggregated up to the fund and portfolio level.

Scenarios

Our analysis draws on the Shared Socioeconomic Pathways from the IPCC. We consider four different scenarios:

Table 6: Physical risk scenarios used in LCIV climate scenario analysis

IPCC Scenario Used in analysis	Implied temperature rise	Implied temperature rise	Link	Mapping to NGFS sub scenario
SSP1-2.6	This scenario assumes global emissions are cut severely, avoiding some of the worst impacts of climate change but still not fast enough to meet the goals of the Paris Agreement. Progress towards the UN SDGs is accelerated, including reducing global inequality, and improving health and education outcomes.	1.7°C to 2060 1.8°C to 2100	IPCC Sixth Assessment Report	Orderly (Below 2°C) / Disorderly (Delayed Transition)
SSP2-4.5	This scenario assumes global emissions remain roughly static until 2050, declining later in the century. Socioeconomic development is uneven, and progress towards the SDGs continues at historic rates.	2.0°C to 2060 2.7°C to 2100		Too Little, Too Late (Fragmented World)
SSP3-7.0	Under this scenario, global temperatures rise steadily and CO ₂ emissions double by the end of the century. Economic growth is slow and increased focus on energy and food security reduces global cooperation.	2.1°C to 2060 3.6°C to 2100		Hot House World (NDCs / Current Policies)
SSP5-8.5	This scenario assumes global emissions double by 2050. The global economy accelerates, powered by fossil fuels and other intensive sectors, with devastating consequences on the planet.	2.4°C to 2060 4.4°C to 2100		NA



Results and insights

The graph below illustrates the expected financial impact under the four different IPCC scenarios. By 2050, annual losses are 36% greater under the highest warming scenario compared to Net Zero, rising to 139% by 2090. This represents over £1.1bn in expected losses. Expected losses across scenarios are approximately in line with the MSCI World benchmark.

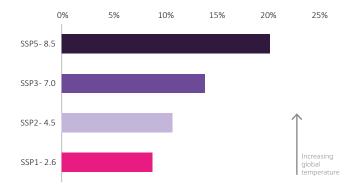
To help identify key areas of vulnerability, we consider companies with >10% of EBITDA at risk. In 2030, 2.9% of AUM has >10% EBITDA at risk under a Stated Policies Scenario, rising to 8.4% under a Net Zero scenario. By 2050 this increases to 4.3% and 12.0% respectively. This data helps identify assets with high exposure to transition risk, and informs our engagement on climate transition, either directly, as part of wider investor collaboratives, or through our investment managers.

Figure 11: % Asset value at risk from physical risk hazards LCIV ACS funds (listed equities and fixed income instruments)



To identify assets with high exposure, we consider the proportion of assets with >5% of total asset value at risk by 2050. This data helps identify assets where engagement on adaptation and resilience may be useful.

Figure 12: % AUM with >5% asset value at risk in 2050 LCIV ACS funds (listed equities and fixed income instruments)



Strategy continued

Comparing physical and transition risks

We note that there are complex interplays and trade-offs between our exposure to physical and transition risks under different climate scenarios. Broadly speaking, our exposure to transition risks is higher under a low-warming scenario, where physical risk is lower, and vice versa. The scale of expected losses from both categories of impact under different scenarios illustrates the need to carefully manage both, in order to build a resilient portfolio which is able to perform well regardless of global outcomes.

Fund level analysis

The results of our fund-level analysis of both physical and transition risks can be found in Appendix 1.3.

Assumptions and limitations

Whilst this is a useful exercise for estimating the scale of exposure to transition risks and identifying key areas of vulnerability, there are several limitations, which must be considered in any decisionmaking. limitations are:

- Scope: Our analysis covers actively managed ACS portfolio. We have prioritised our ACS funds due to better availability of climate data across our public market investments compared to our private market funds. We also exclude passive pooled assets held with BlackRock and Legal and General Investment Management (LGIM), due to the limited nature of our control. However, we aim to expand the analysis to include both passive pooled assets and private market funds where data availability allows.
- Asset class coverage: Analysis covers listed equities and fixed income assets. We exclude certain asset classes such as sovereign exposure and real assets, due to limitations on data quality and availability. However, we have recently acquired access to a dataset on sovereign exposures and hope to expand future analysis to incorporate additional asset classes where data allows.
- **Point-in-time assessment:** This analysis is based on a point-intime snapshot of the portfolio as of 31st December 2023, which is not necessarily reflective of the portfolio construction at any point in the future.

For further discussion of the limitations of our analysis, please refer to Appendix 3.

Next steps

We will use the results of this scenario analysis exercise to help inform the development of our Net Zero action plan, and our manager monitoring and engagement processes.

Risk Management

The TCFD recommendations call on asset managers to describe the processes in place to identify and manage climate-related risks.



Risk Management continued

A. Our process for identifying and assessing climate-related risks

The Responsible Investment team are responsible for identifying and assessing the materiality of climaterelated risks on an annual basis. Climate risks may also be initially identified by our external investment managers, or through our internal quarterly reporting and due diligence and monitoring processes.

Investment manager monitoring of climate risks

Our investment managers review exposure to climate risks during pre-investment and post-investment analysis. This involves the application of risk modelling tools such as scenario analysis as well as qualitative due diligence. The processes and tools used will vary depending on the manager and factors like asset class, sector and geography. Risks may be reviewed at the security, issuer or sector level. Investment managers are ultimately responsible for developing their own climate risk assessment tools and reviewing leading practice to improve processes on a best-efforts basis.

Internal monitoring and due diligence

Climate change risks are also monitored internally at London CIV, using our in-house risk-assessment tools. These have been designed in line with the Global GHG Accounting and Reporting Standard for the Financial Industry developed by the Partnership for Carbon Accounting Financials (PCAF) and draw on data and analysis from our external data provider, S&P Global Sustainable1.

For corporate equity and fixed income instruments within our ACS funds, we conduct quarterly monitoring of the portfolio, including calculation of key climate metrics such as carbon intensity and fossil fuel exposure. This enables us to identify key contributors to our climate footprint at both a fund and issuer level, and to identify areas of concern, which are addressed as part of our quarterly due diligence meetings with our investment managers and help inform our stewardship and engagement strategy.

The Responsible Investment team may also conduct supplemental research and due diligence as part of our ongoing portfolio monitoring efforts. This allows us to consider qualitative and/or forward-looking factors such as new and emerging regulation affecting certain sectors or holdings, and to respond to external headlines and events. This may also be triggered as part of broader ESG engagement strategy, for example when reviewing voting alerts from our voting and engagement provider EOS, as well as the Local Authority Pension Fund Forum (LAPFF), responding to management actions and shareholder proposals or as part of industry-wide initiatives. For more details on our stewardship and engagement work, please see our 2024 Stewardship Activities and Outcomes report.

Assessing the relative importance of different climate risks is the responsibility of the Responsible Investment team and takes into account a range of both quantitative and qualitative factors. The Board and CEO remain ultimately responsible for making strategic judgements about climate risk and weighing difficult decisions where there is an impact on the strategic direction of the company and/or stakeholders.

Variations by product or strategy

Our approach to monitoring climate risks is consistent across ACS funds. However, data coverage is higher for our equities portfolio versus fixed income and multi-asset funds (see Efforts to improve data quality below), which may have an impact on our ability to effectively monitor climate risks across certain asset classes and more diversified products.

For ACS funds with specific sustainability and/or climate considerations, we track key climate metrics as defined in the legal agreements with our investment managers, as part of our ongoing due diligence and monitoring.

For passive pooled funds held with BlackRock and LGIM, we conduct climate analytics on an annual basis. This is due to the limited control we have over assets in these funds.

For private market funds, we consider climate risk and impact at the pre-investment stage prior to all new drawdowns, as part of our wider ESG review. The Responsible Investment team also monitor key climate metrics provided by our investment managers on an annual basis and attend quarterly monitoring meetings with them to address any potential ESG issues, including on climate. We are actively working on expanding our work in this area.

Efforts to improve data quality

The accuracy of the metrics we use to identify and assess climate risk is dependent upon the quality of the data available. This is an industry-wide issue, which limits our ability to effectively manage climate risk across our funds.

For listed equities and corporate bonds, data quality varies considerably by issuer. Some companies will report audited or externally verified data which aligns to global reporting standards, whilst others will report error-prone or fragmentary data, or may even not report at all, and so metrics must be modelled based on sectorlevel averages and economic intensity data. This is reflected in a lower "PCAF data quality score" for these datapoints. Data is often of better quality for Scope 1 and 2 emissions compared to Scope 3.

The problem is exacerbated for alternative asset classes and for private market funds, particularly real assets, commodities, derivatives and non-listed corporate issues, where data is often inconsistently reported or missing altogether.

At London CIV, we welcome the increase in climate-related disclosures in recent years. As data quality improves across the industry, we are better able to effectively track our exposure to



climate issues, and we hope to see this trend continue. To this end, we have joined S&P Global's Executive Advisory committee to help influence the market and improve disclosure. We also encourage investee companies to improve the quality of their climate-data disclosures in alignment with the TCFD recommendations or the Sustainability Accounting Standards Board ("SASB"). These efforts may be supported by our investment managers or through membership in industry associations such as ClimateAction100+. We also directly engage with a number of our holdings on climaterelated issues and improving climate disclosures- particularly with regard to Scope 3 emissions and/or voluntary TCFD reporting.

Integration into wider risk management processes

London CIV's ESG risk identification methodology is set out in Strategy Section A. This describes how London CIV assesses ESG-related risks, including assessing the likelihood, severity, materiality based on the WEF Global Risk Report, stakeholder views and independent research. This is used to determine the relative significance of climate-related risks in relation to other material ESG themes.

B. Our process for managing climate-related risks

Managing risks associated with climate change is a fundamental part of our corporate and investment strategy. Our approach was established in partnership with Partner Funds who provide ongoing feedback through the Sustainability Working Group (previously the Responsible Investment Reference Group, RIRG). Consideration of climate risk has been integrated into all stages of our engagement with investment managers as well as the design, selection, and management of our investment strategies.

At this stage, our focus is on managing the most material transition risks associated with our investments, as measured by metrics like carbon intensity and fossil fuel revenue.

Pre-investment

All investment managers must be able to clearly demonstrate their approach to identifying and mitigating exposure to climate risk and articulate how their investment objectives support the transition to the low carbon economy. This is assessed based on Sub-fund climate policies and the investment manager's set of responses to the London CIV ESG Due Diligence questionnaire. Contractual agreements with external managers also include climate-related clauses such as disclosure in line with the TCFD, and stewardship commitments in line with the UN Principles for Responsible Investment ("PRI"). For certain funds this includes specific climate objectives and metrics (see Table 3).

Ongoing due diligence and monitoring

We conduct quarterly due diligence on our investment managers, where we assess them against a detailed risk management framework. Responsible Investment, including climate is a key factor alongside other factors like strategy and business risk.

We meet with our investment managers on a quarterly basis which gives an opportunity to address any key climate issues identified in our quarterly climate monitoring, as well as any wider concerns. We prioritise funds and securities based on the most material impacts in our portfolio from a carbon intensity and/or stranded asset exposure perspective. As part of our ongoing stewardship efforts, we also challenge managers to provide case studies and examples of investment decisions that were influenced by the integration of climate factors in decision-making.

We also meet with managers on an ad-hoc basis where we have any cause for concern. For example, we met with four of our US-based managers who had made the decision to depart the Climate Action 100+ (CA100+) investor initiative earlier this year, to challenge their rationale, scrutinise their internal engagement efforts, and lay down our expectations on climate.

Variation by products or strategy

Our approach is consistent across our ACS funds. For private market funds, our efforts are more focussed on the pre-investment stage, when we may veto potential investments due to climate or wider ESG and reputational concerns.

Engagement

A critical component of our climate risk management strategy is engagement. We support the UN PRI Active Ownership 2.0 framework for ambitious stewardship. Our active ownership strategy uses investor stewardship tools to drive long-term outcomes. Engagement targets changes at individual issuer levels and within broader market and systemic contexts.

Our Voting Guidelines outline our climate change management expectations and voting strategy. Our stewardship services provider is Hermes EOS who conduct votes on our behalf, subject to review and approval from our Responsible Investment team.

We conduct engagement primarily through our stewardship services provider Hermes EOS and our investment managers. Consistent themes include emissions reduction, energy transition plans, scope 3 emissions reporting, interim target setting and transition financing. We also engage directly with some of our most material holdings in terms of emissions intensity.

Additionally, we recognise that policy advocacy and collaborative engagement are essential to bring about the industry-wide change needed to meet climate goals. We are part of a 27-member investor group engaging with Royal Dutch Shell on its energy transition strategy, led by Follow This, and have actively engaged in other investor initiatives led by ShareAction and ClientEarth. London CIV is also the chair of the Responsible Investment LGPS Cross Pool forum, where policy advocacy and market engagement is collated across the pools.

For more details see our Stewardship Policy, Voting Guidelines and Stewardship Activities and Outcomes report, here.



Case Study



Royal Dutch Shell-London CIV's Climate Change Escalation

Background:

Royal Dutch Shell Plc is the second-largest investor-owned oil and gas supermajor in the world, engaging in integrated upstream and downstream activities from production and refining through to power generation and distribution. As of 31st December 2023, their total carbon footprint stood at at 1.18bn tonnes of CO,e and was identified as a key contributor to London CIV's emissions.

Our actions

We have been engaging with Shell on climate-related issues since 2021. At their 2022 AGM, we voted 'Against' their proposed Energy Transition resolution due to concerns about inadequate key disclosures and misalignment with a 1.5°C target, and in favour of a shareholder resolution demanding that Shell set Paris-aligned targets for all emissions. We later wrote to the company inquiring whether the Board intended to change course to reduce its impact on the climate. Regrettably, no response was received.

In 2023, we escalated our concerns by:

- Publicly endorsing ClientEarth's groundbreaking lawsuit against Shell's board of directors for their mishandling of climaterelated risks, emphasising our shared concerns on their energy transition strategy and the Board not taking responsibility
- Voting 'Against' the reappointment of the Chair and six directors on climate grounds and once again opposing their Energy Transition resolution due to continued misalignment with a 1.5°C target.
- Issuing a press statement in response to Shell's recent lawsuit against Greenpeace, highlighting the multifaceted risks posed by climate change and the need for companies to address these.
- Joining a group of investors in co-filing a resolution led by Follow This, advocating that Shell set medium-term Scope 3 emissions reduction targets in line with the goals of the Paris Agreement.

Outcomes:

- 20% of shareholders supported the shareholder proposal in 2023, and 19% supported a similar proposal this year. Whilst this was not enough to carry the vote, it represents a significant proportion of investors expressing concerns about Shell's management of climate risks.
- ClientEarth's lawsuit was dismissed by the UK High Court of England and Wales and the Court of Appeal refused to see the case.
- In December 2023, our investment manager divested Shell from the LCIV Global Equity Fund due to a loss of confidence in the company's green energy growth trajectory. However, a position in Shell remains within the LCIV Real Return Fund.

Next Steps:

We will continue to engage with Shell as part of the collaborative engagement efforts with other investors, alongside our investment manager and EOS.

C. Our processes for identifying, assessing and managing climate-related risks and integrating them into our overall risk management framework

Investment beliefs

Climate change considerations are embedded within London CIV's Investment Beliefs – the established set of principles which underpin the way we invest. Effective management of climate risks forms the basis of Principle 3c, and is considered alongside our wider duty of care, our commitment to responsible investing, and sound risk management.

Investment guidelines

For a number of our products, climate change considerations are included in our agreements with our investment managers. For further information, please refer to Strategy Section B.

London CIV's Enterprise Risk Management Framework

The identification of climate-related risks is also embedded into our broader enterprise-wide risk management framework. The London CIV Risk Management Framework ("RMF") is used to identify threats to London CIV and outlines the processes for mitigating those risks. The RMF establishes the three lines of defence risk management model, which is summarised as: (1) risk and control ownership; (2) oversight, support and challenge; and (3) oversight from the Depositary and assurance from corporate and fund auditors. The Responsible Investment team owns the processes established to identify and manage climate risk and is a first line of defence function. The second and third lines of defences carry out independent oversight of first line risk and controls and report directly to senior management.

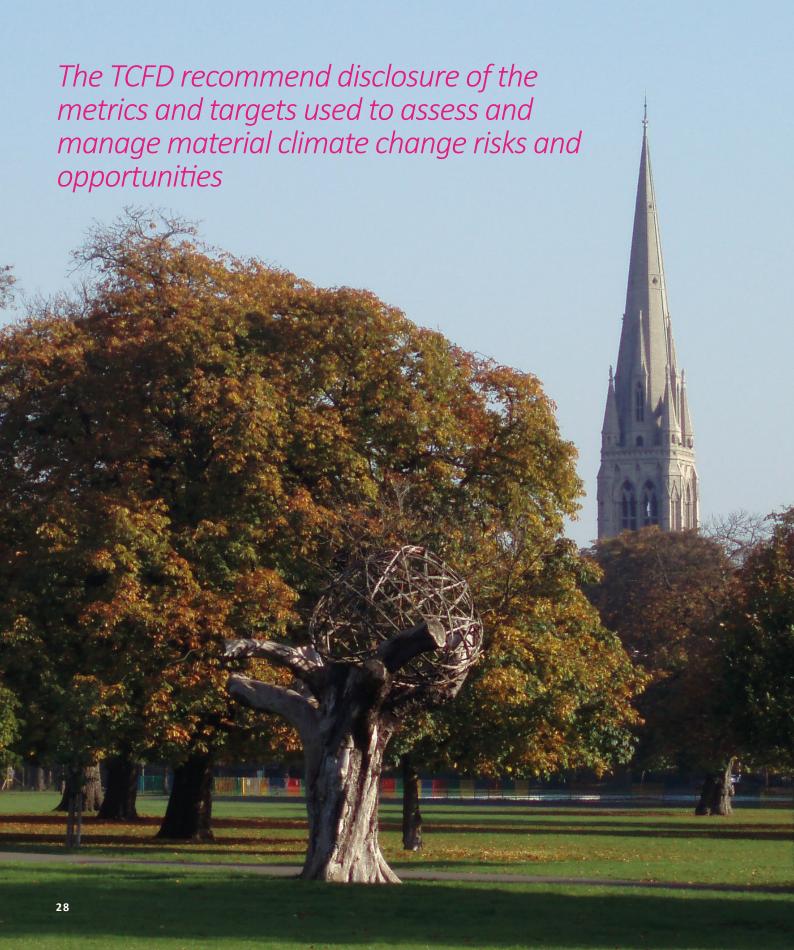
Investment due diligence and monitoring

As discussed in Strategy Section B, climate change considerations are embedded in our investment manager due diligence and monitoring processes, including quarterly reviews.

Reporting and disclosure

We report on key climate metrics (carbon intensity and fossil fuel exposure) and top contributors for each fund, alongside performance figures and other information in our quarterly reporting to our Partner Funds. We also produce detailed climate change reports to Partner Funds free of charge, covering both pooled and off-pooled holdings.

Metrics and targets





A & B. The metrics we use to assess climate-related risks and opportunities in line with its strategy and risk management process, including Scope 1, 2 and 3 GHG emissions and related risks

We use a number of different metrics to assess climate-related risks and opportunities. For further details, please refer to Appendix 3.

All metrics for ACS funds are calculated using data from S&P Global Sustainable1and the Science Based Targets institute (SBTi). For more details on the calculation methodology and limitations associated with each of these metrics please see Appendix 3.

Data coverage and quality

Data coverage and quality vary based on the metric / dataset used, and by asset class.

The graph below shows the underlying sources of the Scope 1 and 2 emissions data for our ACS portfolio by AUM. 66% of coverage is based on emissions or energy use data directly reported to CDP or in a company's annual / CSR report (PCAF data quality score 2). A further ~9% of AUM is modelled based on revenue or other financial indicators and sector averages (PCAF data quality score 4).

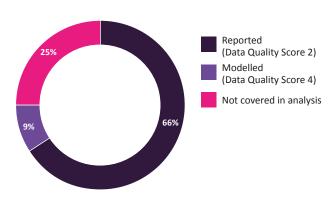
This leaves approximately 25% of AUM which is not currently covered in our analysis – this may be due to the asset class (e.g. sovereign exposure, derivatives), missing data, our inability to match the ISIN to the issuer, or other data quality issues.

For information on fund-level data coverage, please refer to Appendix 1.

As data coverage and quality improves across the industry, we expect to see some fluctuations in the metrics we report. Overall coverage has increased from 66% AUM in 2022 to 75% in 2023. This may mean that our emissions and intensity may increase in the

Data coverage and quality also vary by fund. Funds which have <40% coverage are LCIV Alternative Credit Fund, LCIV Absolute Return Fund, LCIV MAC Fund and LCIV Global Return Fund. It is important to note these limitations when interpreting the metrics for these funds.

Figure 13: Underlying data sources for LCIV ACS funds, Scope 1 & 2 emissions



Note: Data quality scores are assigned on a scale of 1-5, 1 being best quality, following methodology from PCAF (Partnership for Carbon Accounting Financials). Where information on data quality (e.g. audit status) is unknown, we have been conservative in our estimates.



Metrics and targets continued

Carbon intensity

We use several metrics to track carbon intensity over time across our funds, including carbon to revenue, carbon to value invested and weighted average carbon intensity. This enables us to monitor overall progress towards our decarbonisation targets, monitor the climate objectives of the funds which have sustainability commitments, and to prioritise funds and/or assets of concern.

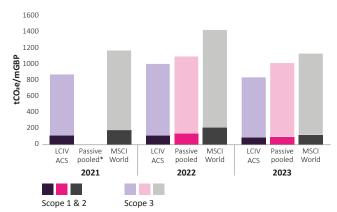
The graph below shows the weighted average carbon intensity (WACI) over time for LCIV ACS funds and passive pooled funds, compared to the MSCI World benchmark.

Key insights

- Both LCIV ACS and passive pooled funds have consistently had a lower carbon intensity than the MSCI World. In 2023, LCIV ACS were 24% lower when considering Scope 1 and 2 emissions, and 26% lower across Scopes 1, 2 and 3.
- For Scope 1 and 2 emissions, the WACI of our ACS funds has continually reduced every year since 2020. This is driven by two factors: i) improved performance across many of our most carbon intensive funds, including LCIV Global Bond Fund, LCIV Diversified Growth Fund, LCIV Real Return Fund and LCIV Global Total Return Fund; and ii) the tilting of our portfolio towards more low carbon products, most notably LCIV Global Alpha Growth Paris Aligned Fund, but also LCIV Passive Equity Progressive Passive Aligned Fund and LCIV Global Equity Focus Fund (which does not have a specific climate objective but has a low carbon intensity).
- For Scope 3 emissions, there has been some fluctuation in the WACI – the intensity for ACS has fallen by 14% in 2023; however, Scope 3 data quality remains poor across the industry.
- We calculated the footprint of passive pooled funds for the first time in 2022. Performance has improved by 30% for Scope 1 and 2, and 7% for Scopes 1, 2 and 3. London CIV has no control over these funds and therefore no direct influence on the WACI.

For fund level analysis, see Appendix 1.1.1.

Figure 14: Weighted Average Carbon Intensity



* Not calculated in 2021

Absolute emissions

Because of the nature of our business as an LGPS pool, our Net Zero targets and monitoring is conducted on an intensity basis. However, we also monitor our absolute carbon footprint as a measure of our real-world impact on the global carbon budget.

The graph below depicts the absolute carbon emissions of our ACS funds over time.

This has increased slightly in 2023 by ~9% across Scope 1, 2 and 3. However, in this period AUM has increased by ~14% reflecting the reduction in carbon intensity achieved in 2023.

For fund-level analysis, see Appendix 1.1.2.

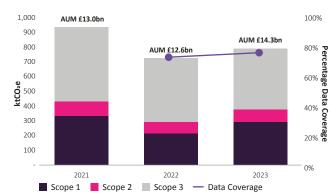
For our private market funds, we collect data on emissions and avoided emissions from our investment managers where available. These are provided in Appendix 2.

Operational emissions

This year we have also calculated the footprint of our own operations, covering Scope 1, 2 and material Scope 3 categories (excluding Category 15). The total footprint is estimated to be <25 tonnes CO₂e, which comprises <0.00001% of the footprint from our ACS funds alone. We intend to fully offset this, once any potential emissions reduction opportunities have been explored, and are in the process of obtaining certification from the British Standards Institute (BSI) to become a fully carbon neutral organisation.

Figure 15: Absolute Carbon Emissions

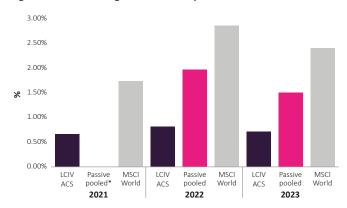
LCIV ACS funds (listed equities and fixed income instruments)



Fossil fuel exposure

We monitor revenue-weighed fossil fuel exposure across our ACS funds, as a measure of exposure to stranded asset risk. Since 2021 fossil fuel revenues have consistently made up <1% of our AUM. Exposure fell in 2022 by a further 11.7% to 0.71%. We are consistently outperforming both passive pooled funds held with BlackRock and LGIM as well as the MSCI World.

Figure 16: Revenue-weighed fossil fuel exposure



^{*} Not calculated in 2021

Metrics and targets continued

Net Zero alignment

The primary measure we use to measure progress towards our Net Zero by 2040 commitment is carbon to value intensity. This is further discussed in Section C on targets.

The Implied Temperature Rating of our portfolio is 2-3°C. This is roughly in line with both passive pooled funds and the MSCI World, but not yet aligned with the well-below 2°C commitment of the Paris Agreement, or the 1.5°C required to meet Net Zero. We aim to address this gap through our Net Zero action plan which will be published later this year.

We also monitor the proportion of our assets who have set Science-Based Targets, as the gold standard in emissions reduction targets. Approximately 26% of our AUM have set a Net Zero target, and 38% have set short-term reduction targets. This does not capture assets who have only committed to setting science-based targets but not actually set them at this stage; nor does it cover any assets who have made commitments which have not been independently verified by the SBTi.

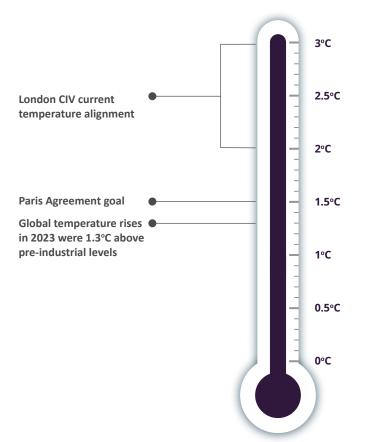
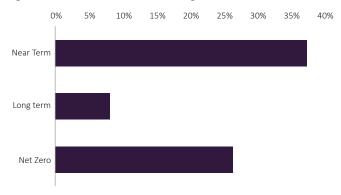


Figure 17: % AUM with Science-based Targets and Net Zero commitments



For fund-level analysis, see Appendix 1.1.3.



C. Our climate-related targets and performance

Targets

The table below shows the decarbonisation targets we have set for London CIV.

Table 7: London CIV decarbonisation targets, ACS funds

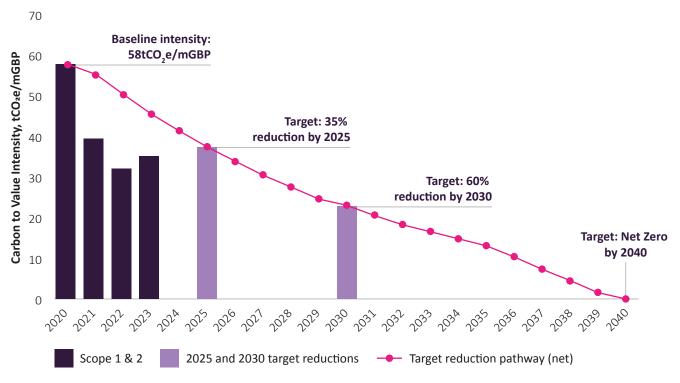
			Net emissions intensity, tCO ₂ e/mGBP	
Target	Year	Reduction in emissions intensity*	Scope 1 & 2	Scopes 1, 2 &3
Baseline	2020	-	58	335
Short-term	2025	35%	38	218
Medium-term	2035	60%	23	134
Net Zero	2040	Net Zero	0	0

Emissions intensity is measured as the carbon to value intensity, and these targets are net of any investments in carbon removals technologies. Currently, the scope is limited to funds within our ACS portfolio; however, we are working on expanding our Net Zero commitment to private market and pooled funds where possible.

Progress to date

The diagram below illustrates the target Scope 1 and 2 emissions reduction pathway for our ACS funds, as well as progress to date.

Figure 18: Net Zero: Target reduction pathway and performance to date, Scope 1 & 2 emissions



For Scope 1 and 2 emissions our current emissions intensity is 35tCO₂e/mGBP, a reduction of 40% since the 2020 baseline. This already exceeds our 35% reduction target by 2025, and our focus over the next year will be on continuing to maintain early and rapid progress.

The picture is slightly different when considering Scope 1, 2 and 3 emissions, where our intensity has risen by 4.6% since the 2020 baseline. Although this may look like our footprint has increased, it is likely due to improvements in data quality and coverage compared to when we first calculated our baseline.

Baseline intensity: 500 335tCO₂e/mGBP 450 Carbon to Value Intensity, tCO2e/mGBP 400 350 300 Target: 35% 250 reduction by 2025 200 Target: 60% reduction by 2030 150 **Target: Net Zero** 100 by 2040 50 2012 2013 2014 2015 2016 2011 2018 2018 2020 2022 2021

Figure 19: Net Zero: Target reduction pathway and performance to date, Scope 1, 2 & 3 emissions

Next steps

We are currently in the process of refreshing our Climate Change policy and Net Zero strategy, which will outline key areas of focus for the next year, including our strategy for meeting our decarbonisation targets. This is likely to include:

- Enhancing the climate-related elements of our manager monitoring processes
- Expanding our stewardship and engagement on climate, and taking a more data-driven approach

Scope 1 & 2 Scope 3 — Target reduction pathway (net)

- Working with data providers and other industry players to enhance data quality and coverage, particularly around Scope 3 emissions
- Improving our work on private markets, initially focussing on disclosure and due diligence processes
- Setting targets for passive pooled funds held with BlackRock and LGIM.

Appendix 1: ACS funds

1.1.1 Key metrics: Carbon intensity and fossil fuel exposure

	Data coverage			Weighted Average Carbon Intensity (WACI), tCO ₂ e/mGBP revenue			
Fund	(% AUM)	Scopes 1 & 2	Scopes 1, 2 & 3 (First-Tier)	Scopes 1, 2 & 3	fuel exposure, %		
LCIV Absolute Return Fund	16%	254	302	653	0.32%		
LCIV Alternative Credit Fund	12%	240	260	2,702	2.74%		
LCIV Diversified Growth Fund	58%	192	239	1,698	2.14%		
LCIV Emerging Market Equity Fund	96%	66	110	481	0.00%		
LCIV Global Alpha Growth Fund	99%	185	237	897	0.65%		
LCIV Global Alpha Growth Paris Aligned Fund	99%	68	107	796	0.00%		
LCIV Global Bond Fund	54%	160	190	967	1.13%		
LCIV Global Equity Focus Fund	99%	18	36	125	0.00%		
LCIV Global Equity Fund	96%	60	105	1,784	0.00%		
LCIV Global Equity Quality Fund	98%	26	50	475	0.00%		
LCIV Global Total Return Fund	35%	109	159	732	1.98%		
LCIV Long Duration Buy and Maintain Credit Fund	49%	65	99	635	1.52%		
LCIV MAC Fund	22%	230	262	2,616	4.44%		
LCIV Passive Equity Progressive Paris Aligned Fund	99%	61	99	627	0.09%		
LCIV Real Return Fund	50%	121	161	1,303	2.80%		
LCIV Short Duration Buy and Maintain Credit Fund	46%	39	77	527	0.91%		
LCIV Sustainable Equity Exclusion Fund	99%	76	100	537	0.00%		
LCIV Sustainable Equity Fund	99%	80	114	861	2.51%		

1.1.2 Key metrics: Absolute emissions

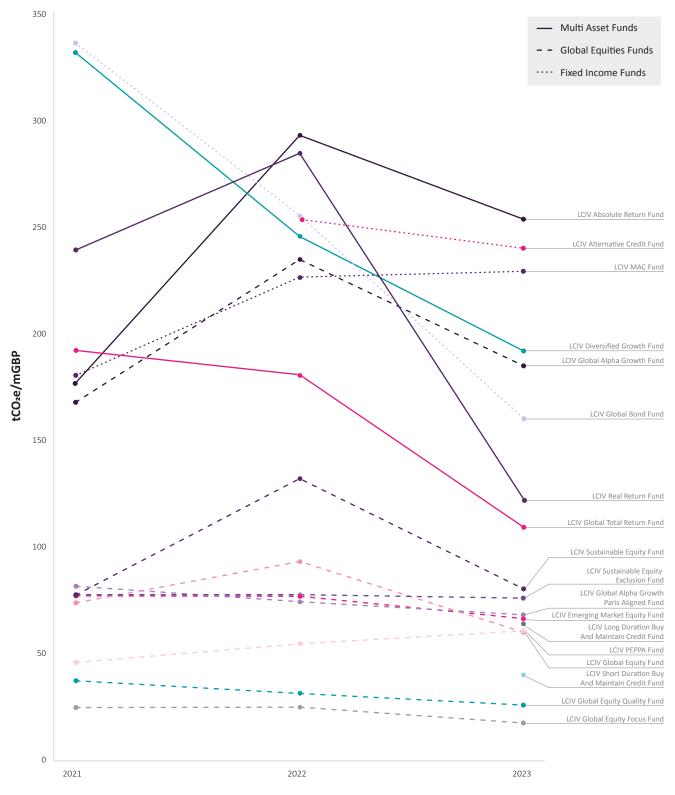
	Data coverage	Ak	osolute emissions, ktCO ₂	e
Fund	(% AUM)	Scopes 1 & 2	Scope 3	Total
LCIV Absolute Return Fund	16%	11,546	10,278	21,824
LCIV Alternative Credit Fund	12%	5,449	1,879	7,328
LCIV Diversified Growth Fund	58%	33,865	19,243	53,108
LCIV Emerging Market Equity Fund	96%	12,102	22,917	35,018
LCIV Global Alpha Growth Fund	99%	91,378	60,572	151,950
LCIV Global Alpha Growth Paris Aligned Fund	99%	67,771	83,574	151,345
LCIV Global Bond Fund	54%	34,013	16,109	50,122
LCIV Global Equity Focus Fund	99%	8,758	36,132	44,890
LCIV Global Equity Fund	96%	10,979	20,872	31,851
LCIV Global Equity Quality Fund	98%	2,390	8,636	11,026
LCIV Global Total Return Fund	35%	1,688	2,259	3,947
LCIV Long Duration Buy and Maintain Credit Fund	49%	3,309	3,285	6,594
LCIV MAC Fund	22%	26,780	22,965	49,745
LCIV Passive Equity Progressive Paris Aligned Fund	99%	17,206	30,996	48,202
LCIV Real Return Fund	50%	3,360	3,551	6,912
LCIV Short Duration Buy and Maintain Credit Fund	46%	963	1,967	2,930
LCIV Sustainable Equity Exclusion Fund	99%	17,790	17,399	35,189
LCIV Sustainable Equity Fund	99%	32,123	46,887	79,010



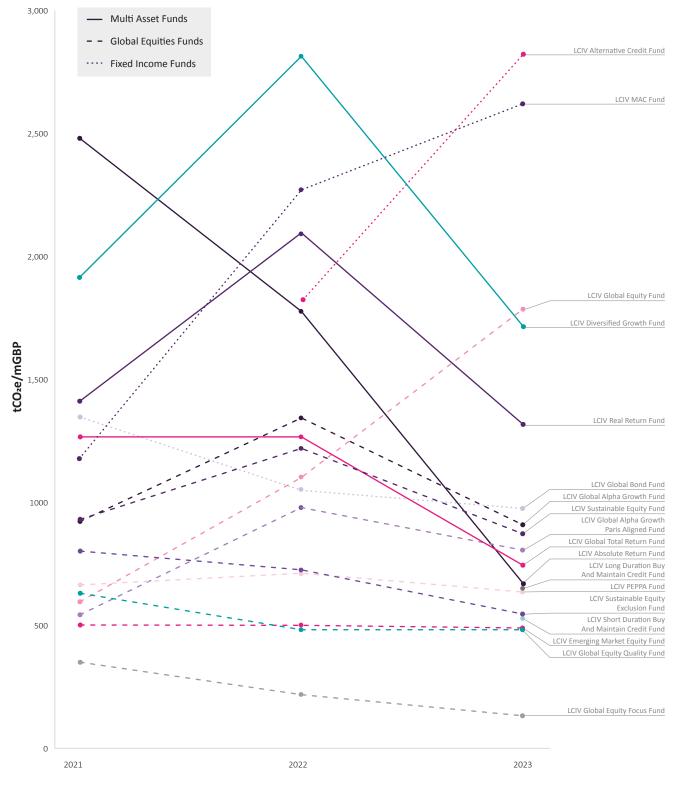
1.1.3 Key metrics: Net Zero alignment

	Data coverage	Sc	Implied Temperature		
Fund	(% AUM)	Near-term	Long-term	Net Zero	Rating (ITR)
LCIV Absolute Return Fund	16%	25%	3%	29%	>3°C
LCIV Alternative Credit Fund	12%	22%	5%	14%	>3°C
LCIV Diversified Growth Fund	58%	25%	3%	29%	<2°C
LCIV Emerging Market Equity Fund	96%	22%	5%	14%	<3°C
LCIV Global Alpha Growth Fund	99%	28%	9%	22%	>3°C
LCIV Global Alpha Growth Paris Aligned Fund	99%	19%	2%	15%	>3°C
LCIV Global Bond Fund	54%	29%	5%	20%	<2°C
LCIV Global Equity Focus Fund	99%	32%	6%	23%	<3°C
LCIV Global Equity Fund	96%	23%	6%	16%	<3°C
LCIV Global Equity Quality Fund	98%	46%	21%	41%	<1.75°C
LCIV Global Total Return Fund	35%	48%	11%	26%	>3°C
LCIV Long Duration Buy and Maintain Credit Fund	49%	45%	9%	29%	<1.75°C
LCIV MAC Fund	22%	47%	12%	34%	>3°C
LCIV Passive Equity Progressive Paris Aligned Fund	99%	57%	14%	51%	<1.75°C
LCIV Real Return Fund	50%	25%	5%	18%	>3°C
LCIV Short Duration Buy and Maintain Credit Fund	46%	47%	9%	27%	<2°C
LCIV Sustainable Equity Exclusion Fund	99%	31%	7%	19%	<1.75°C
LCIV Sustainable Equity Fund	99%	43%	17%	49%	<3°C

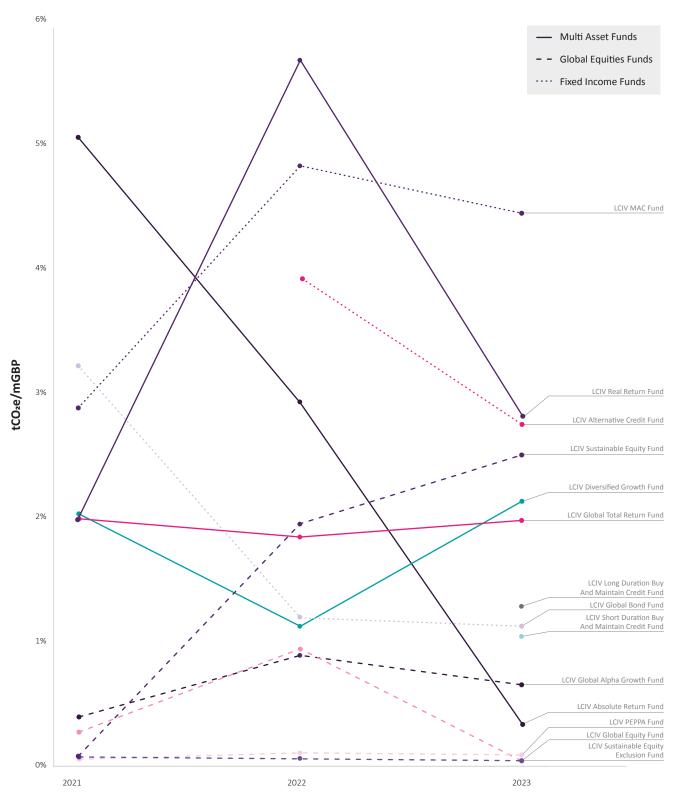
1.2.1 Historical: Weighted Average Carbon Intensity: Scopes 1 & 2



1.2.2 Historical: Weighted Average Carbon Intensity: Scopes 1, 2 & 3



1.2.3 Historical: Revenue-weighted fossil fuel exposure



1.3.1 Scenario analysis: Carbon earnings at risk

	Unpriced carbon costs as % EBITDA in 2050				
Fund	STEPs scenario	APS scenario	NZE scenario	Data coverage	
LCIV Absolute Return Fund	2.9%	10.3%	10.3%	15%	
LCIV Alternative Credit Fund	1.5%	7.5%	7.5%	12%	
LCIV Diversified Growth Fund	2.5%	12.5%	12.5%	51%	
LCIV Emerging Market Equity Fund	1.2%	4.2%	4.2%	95%	
LCIV Global Alpha Growth Fund	4.1%	14.5%	14.5%	88%	
LCIV Global Alpha Growth Paris Aligned Fund	1.5%	5.5%	5.5%	87%	
LCIV Global Bond Fund	2.4%	9.6%	9.6%	52%	
LCIV Global Equity Focus Fund	0.6%	2.0%	2.0%	99%	
LCIV Global Equity Fund	0.9%	3.8%	3.8%	96%	
LCIV Global Equity Quality Fund	0.3%	1.1%	1.1%	98%	
LCIV Global Total Return Fund	1.8%	7.2%	7.2%	35%	
LCIV MAC Fund	3.0%	12.2%	12.2%	20%	
LCIV Passive Equity Progressive Paris Aligned Fund	1.0%	4.0%	4.0%	98%	
LCIV Real Return Fund	1.8%	6.6%	6.6%	48%	
LCIV Sustainable Equity Exclusion Fund	1.4%	5.3%	5.3%	99%	
LCIV Sustainable Equity Fund	1.4%	4.9%	4.9%	99%	
LCIV Long Duration Buy and Maintain Credit Fund	0.6%	5.1%	5.1%	49%	
LCIV Short Duration Buy and Maintain Credit Fund	0.4%	3.2%	3.2%	46%	

1.3.2 Scenario analysis: Physical risks

	Financial impacts as a % asset value in 2050				
Fund	SSP1-2.6	SSP2-4.5	SSP3-7.0	SSP5-8.5	Data coverage
LCIV Absolute Return Fund	2.4%	2.6%	2.8%	3.7%	15%
LCIV Alternative Credit Fund	3.4%	3.7%	4.0%	4.3%	12%
LCIV Diversified Growth Fund	2.8%	3.0%	3.2%	3.6%	56%
LCIV Emerging Market Equity Fund	2.6%	2.8%	2.9%	3.5%	94%
LCIV Global Alpha Growth Fund	2.6%	2.9%	3.1%	3.5%	94%
LCIV Global Alpha Growth Paris Aligned Fund	2.7%	2.9%	3.2%	3.7%	94%
LCIV Global Bond Fund	3.0%	3.2%	3.5%	4.0%	53%
LCIV Global Equity Focus Fund	2.5%	2.8%	3.1%	3.5%	99%
LCIV Global Equity Fund	2.7%	2.9%	3.2%	3.6%	96%
LCIV Global Equity Quality Fund	2.7%	3.0%	3.2%	3.6%	98%
LCIV Global Total Return Fund	2.6%	2.9%	3.2%	3.6%	35%
LCIV MAC Fund	3.0%	3.3%	3.5%	3.9%	21%
LCIV Passive Equity Progressive Paris Aligned Fund	2.9%	3.1%	3.4%	3.8%	99%
LCIV Real Return Fund	2.2%	2.5%	2.7%	3.1%	50%
LCIV Sustainable Equity Exclusion Fund	2.5%	2.8%	3.0%	3.4%	99%
LCIV Sustainable Equity Fund	2.4%	2.7%	3.0%	3.3%	99%
LCIV Long Duration Buy and Maintain Credit Fund	3.3%	3.5%	3.8%	4.2%	49%
LCIV Short Duration Buy and Maintain Credit Fund	3.3%	3.6%	3.9%	4.3%	46%

Appendix 2: Private market funds

We have collated the following data for our private market funds from our investment managers. As part of our climate change action plan, we are looking at ways in which we can improve our work in this space. Please note, due to data lags some of this data is provided for 2022.

				Climate metrics As reported by investment managers				
	Investment Manager	Investments	SFDR Classification	GHG emissions (tCO ₂ e)	Avoided emissions (tCO ₂ e)	Other (if emissions data unavailable)	Data year	
		Arcus European Infrastructure Fund II	Article 8	76,811	Not reported	NA	2022	
		Basalt Infrastructure Fund III	N/A	129,188	Not reported	NA	2022	
		Brookfield Global Transition Fund	Article 9	881,697	34,795	NA	2022	
LCIV Infrastructure	Stepstone	Capital Dynamics Clean Energy Infrastructure Fund VIII	Article 9	82 (Scope 1&2 only)	32,590	NA	2022	
Fund	Stepstone	Equitix Fund VI	Article 8	438,472	Not reported	NA	2022	
		European Diversified Infrastructure Fund III	Article 8	356,533	Not reported	NA	2022	
		Macquarie GIG Renewable Energy Fund II	Article 8	6,694	2,121	NA	2022	
		Meridiam Infrastructure North America Fund II	N/A	129,110	Not reported	NA	2022	
	BlackRock	Global Renewable Power Fund III	Article 9	159,760	3,844,878 (Lifetime)	NA	2023	
	BIRCKNOCK	Renewable Income UK Fund	N/A	Not reported	231,372	NA	2023	
LCIV Renewable Infrastructure Fund	Quinbrook	Quinbrook Renewables Impact Fund	N/A	242,012	156,358	NA	2023	
	Stonepeak	Stonepeak Global Renewables Fund	Article 8	2,268,303	636,694	NA	2023	
	Foresight	Foresight Energy Infrastructure Partners Fund	Article 9	53,984	80,767	NA	2023	
		DOOR S.L.P.	N/A	127	NA	NA	2023	
The Level of Freed	1001	Yoo Capital Fund II	N/A	74	NA	NA	2022	
The London Fund	LPPI	Edge London Bridge	N/A	Not reported	NA	NA	N/A	
		MEIF 7 Virtus Holdings	N/A	2,232	NA	NA	2023	
LCIV UK Housing	CBRE	CBRE UK Affordable Housing Fund	Article 9	1,773	NA	NA	2023	
Fund	Octopus	Octopus Affordable Housing Fund	Article 9	Not reported	NA	NA	N/A	
LCIV Real Estate Long Income Fund	Aviva	LCIV Real Estate Long Income Fund	N/A	1,552	NA	WACI:15 tCO ₂ e/mGBP Warming Potential: 2.8°C	2022	
	Churchill	Churchill Middle Market Senior Loan Fund IV	N/A	10,895		WACI: 260 tCO ² e/mUSD	2022	
LCIV Private Debt Fund		Pemberton Mid-Market Debt Fund III	Article 6	92,908	NA	NA	2023	
	Pemberton	Pemberton Mid-Market Debt Fund IV	Article 8	13,041	NA	NA	2023	

Appendix 3: Technical methodology

Metric definitions

The following metrics are used throughout this report:

Metric	Definition	Calculation	Units	Use	Link
Weighted Average Carbon Intensity (WACI)	A measure of carbon emissions normalised by revenue and weighted by holding value	$= \sum_{i}^{n} \left[\frac{Emissions \ issuer_{i}}{Revenues \ issuer_{i}} * weight_{i} \right]$	tCO ₂ e / mGBP revenue	To measure exposure to carbon-intensive assets	
Carbon to Value (C/V) intensity	A measure of carbon emissions normalised by enterprise value	$= \frac{\sum_{i}^{n} \left[\frac{Value \ of \ Investment_{i}}{EVIC_{i}} * Emissions \ issuer_{i} \right]}{\sum_{i}^{n} [Total \ fund \ value_{i}]}$	tCO ₂ e / mGBP holdings	To compare the carbon intensity of different funds	<u>PCAF</u>
Absolute emissions	The total carbon emissions produced by a company / fund	$= \sum_{i}^{n} \left[\frac{v_{alue\ of\ Investment_{l}}}{E_{VIC_{l}}} * Emissions\ issuer_{i} \right] \$$	ktCO ₂ e	To understand the real- world climate impact of investments	
Revenue- weighted fossil fuel exposure	The proportion of underlying asset revenues derived from fossil fuel extraction and power generation	$= \sum_{i}^{n} \left[\frac{Fossil\ Fuel\ revenues\ issuer_{i}}{Total\ Revenues\ issuer_{i}} * weight_{i} \right]$	%	To measure risks associated with exposure to fossil fuels	-
Implied Temperature Rating (ITR)	The temperature scenario which most closely aligns with a company's current and projected future carbon budget	N/A	°C	To give an indication of how aligned a fund is to a particular global temperature rise (1.75°C, 2°C, or 3°C)	<u>S&P</u>
Data quality score	A measure of the quality of data used to calculate climate metrics. 1 indicates highest quality data and 5 is worst	N/A	N/A	To track the quality of emissions data used in analysis	<u>PCAF</u>
Unpriced carbon costs as % of EBITDA	A measure of the impact of future carbon prices on earnings	$= \sum_{i}^{n} \left[\frac{Carbon footprint_{i} \times Risk premium_{i}}{EBITDA_{i}} \right] * Weight_{i}$	%	To measure exposure to transition risks associated with carbon pricing	
Proportion of AUM with >10% EBITDA at risk	The proportion of assets for which >10% of EBITDA is at risk from carbon pricing mechanisms in a particular year and scenario	N/A	%	To identify assets with high vulnerability to transition climate risks	<u>S&P</u>
% asset values at risk	A measure of the impact of future climate hazards on asset values	$= \sum_{i}^{n} \left[\frac{Financial\ impact_{i}}{Asset\ value_{i}} \right] * Weight_{i}$	%	To measure exposure to physical risks associated with acute and chronic climate hazards	<u>S&P</u>
% AUM with >5% asset value at risk in 2050	The proportion of assets for which >10% of asset value is at risk from physical climate hazards in a particular year and scenario	N/A	%	To identify assets with high vulnerability to physical climate risks	

Emissions scopes

We report some metrics against multiple emission scopes:

- **Scope 1 & 2:** Emissions generated from sources owned or controlled by a company (Scope 1), plus indirect emissions from purchased electricity, heat and steam (Scope 2).
- Scopes 1, 2 and 3 (First-Tier): Covers Scope 1 and 2 emissions, plus emissions from the first tier of a company's supply chain.
- **Scopes 1, 2 and 3:** Covers Scope 1 and 2 emissions, plus emissions generated through a company's upstream and downstream value chain, where material.



Methodology notes and limitations

Climate metrics

All metrics have been calculated in accordance with The Global GHG Accounting and Reporting Standard for the Financial Industry from the Partnership for Carbon Accounting Financials (PCAF). Analysis covers listed equities and fixed income assets in our LCIV ACS portfolio and passive pooled funds held with BlackRock and LGIM. Data is provided by S&P Global Sustainable1; whilst we have conducted due diligence to understand their processes and controls, we are reliant upon their underlying data reliability and modelling techniques. Metrics cover the proportion of the fund for which data was available only, which may not be representative of the whole fund.

Scenario analysis

For both physical and transition risks, corporate financial impacts were provided by S&P Global Sustainable1 in accordance with their proprietary methodologies; whilst we have conducted due diligence to understand their processes and controls, we are reliant upon their underlying data reliability and modelling techniques. There is considerable modelling uncertainty linked to climate scenario analysis, and the results should be considered exploratory and interpreted with caution. Scenarios are not forecasts or predictions. This methodology is exploratory and subject to change. The analysis is based on a point-in-time snapshot of the portfolio as of 31st December 2023, which is not necessarily reflective of the portfolio construction at any point in the future. In particular, it does not account for any management actions taken by London CIV, our investment managers or the underlying assets. Analysis covers listed equities and fixed income assets in our LCIV ACS portfolio, and considers direct operations only. Impacts from physical risks are highly location-specific. The spatial resolution varies by climate hazard but in general is 25km x 25km or lower. Metrics cover the proportion of the fund for which data was available only which may not be representative of the whole fund.

Data coverage

Data coverage varies across our funds, with the most significant factors being asset class mix, geography, sector and company size. Due to the complex legal and financial structures of businesses, it is not always possible to match up individual securities to the corporate level at which climate data is reported. This is reflected in the fact that the coverage of our equities funds is much higher than that of more diversified portfolios. Where data is only available for a small proportion of a fund, it may not be representative of the remaining data. We therefore do not "gap-fill" missing data which may result in erroneous conclusions; however, variations in data coverage should be considered when comparing absolute values.

Additional metrics used internally to track progress:

Metric	Definition	Calculation	
	Carbon to value (C/V)	Listed equities and corporate bonds within our ACS funds and	
Carbon intensity	Carbon to revenue (C/R)	passive pooled funds held with BlackRock and LGIM	
	Weighted Average Carbon Intensity (WACI)	Private market funds where reported by investment managers	
Absolute carbon emissions	Carbon footprint	Listed equities and corporate bonds within our ACS funds	
Absolute carbon emissions	Avoided emissions (renewable infrastructure only)	Private market funds where reported by investment managers	
	Fossil fuel exposure (revenue-weighted and VoH)		
Exposure to climate risks	Future emissions	Listed equities and corporate bonds within our ACS funds	
	CapEx by reserve type		
	Unpriced carbon costs as a % of EBITDA		
	Adjusted EBITDA margin		
Scenario analysis	% AUM with >10% EBITDA at risk	Listed equities and corporate bonds within our ACS funds	
	% Climate Value at Risk		
	• % AUM with >5% asset value at risk		
Net Zero alignment	The temperature scenario which most closely aligns with	Listed equities and corporate bonds within our ACS funds	
Net zero angillient	a company's current and projected future carbon budget	Esteu equities and corporate bonds within our Acs runus	



ACS	Authorised Contractual Scheme
AGM	Annual General Meeting
AUM	Assets Under Management
CA100+	Climate Action 100+
BSI	British Standards Institution
СарЕх	Capital Expenditure
CARCO	Compliance Audit and Risk Committee
CDP	CDP, formerly Carbon Disclosure Project
CEO	Chief Executive Officer
CIO	Chief Investment Officer
CSO	Chief Sustainability Officer
CSR	Corporate Social Responsibility
CTWG	Cost Transparency Working Group
EOS	EOS at Federated Hermes
ESG	Environment, social and governance
ЕхСо	Executive Committee
FCA	Financial Conduct Authority
FRC	Financial Reporting Council
FSB	Financial Stability Board
GHG	Greenhouse gas
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
EIC	Executive Investment Committee
ЕхСо	Executive Committee
ICO	Investment and Customer Outcomes Committee
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
ISIN	International Securities Identification Number
LAPFF	Local Authority Pension Fund Forum
LGPS	Local Government Pension Scheme
LPPI	Local Pensions Partnership Investments
mGBP	Million Great British Pounds
NGFS	Network for Greening the Financial System
NZIF	Net Zero Investment Framework

OECD	Organisation for Economic Co-operation and Development
ОрЕх	Operating Expenditure
RI	Responsible Investment
RMF	Risk Management Framework
PAAO	Paris Aligned Asset Owners
PCAF	Partnership for Carbon Accounting Financials
SASB	Sustainability Accounting Standards Board
SWG	Sustainability Working Group
TCFD	The Task Force on Climate-related Financial Disclosures
tCO ₂ e	Tonnes of carbon dioxide equivalent.
TNFD	The Taskforce on Nature-related Financial Disclosures
UN PRI	United Nations Principles for Responsible Investment
UN SDGs	United Nations Sustainable Development Goals
WACI	Weighted Average Carbon Intensity
WEF	World Economic Forum



Getting in touch with the team

If you have any questions or comments about this report please email Jacqueline Amy Jackson, Chief Sustainability Officer (CSO) at RI@LondonCIV.org.uk

London CIV Fourth Floor, 22 Lavington Street SE1 ONZ

Important information

This TCFD entity report has been issued by London LGPS CIV Limited ('London CIV'), which is authorised and regulated by the Financial Conduct Authority number 710618. This material is for limited distribution and is issued to its recipients directly by London CIV. No other person should rely upon the information contained within it.

This document is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution would be unlawful under the laws governing the offer of units in the collective investment undertakings. Any distribution, by whatever means, of this document and related material to persons who are not eligible under the relevant laws governing the offer of units in collective investment undertakings is strictly prohibited.

This document has been produced by London CIV using data from S&P Global Sustainable1and other sources, and internal proprietary analysis. Although this report may incorporate data provided by London CIV's delegated investment manager(s), London CIV chooses to conduct independent analysis to provide consistency across our funds. The investment manager(s) may independently track climate metrics and/or conduct scenario analysis on their investment strategy, which may or may not be disclosed in their separate TCFD product report. This analysis is independent from our own analysis and therefore the data sources, metrics, methodology and conclusions may differ significantly from those presented here.

Any research or information in this document has been undertaken and may have been acted on by London CIV for its own purposes. The result of such research and information are being made available only incidentally. The data used may be derived from various sources, and assumed to be correct and reliable, but it has not been independently verified; its accuracy and completeness is not guaranteed, and no liability is assumed for any direct or consequential losses arising from its use. The views expressed do not constitute investment or any other advice and are subject to change and no assurances are made as to their accuracy.

Past performance is not a guide to future performance. The value of investments and the income from them may go down as well as up and you may not get back the amount you invested. Changes in the rates of exchange between currencies may cause the value of investments to diminish or increase. Fluctuation may be particularly marked in the case of a higher volatility fund and the value of an investment may fall suddenly and substantially. The level and basis of taxation may change from time to time.

Subject to the express requirements of any other agreement, we will not provide notice of any changes to our personnel, structure, policies, process, objectives or, without limitation, any other matter contained in this document.

No part of this material may be produced, reproduced, stored in a retrieval system, published on any websites or transmitted in any form or by any means, electronic, mechanical, recording or otherwise, without the prior written consent of London LGPS CIV.

London LGPS CIV Limited is a private limited company, registered in England and Wales, registered number 9136445 and registered office Fourth Floor, 22 Lavington Steet, London, SE1 ONZ. London CIV is the trading name of London LGPS CIV Limited.

Compliance code – 2024201