LPFA INVESTOR CLIMATE ACTION PLAN 2022

LPFA
YOUR PENSION
OUR WORLD

This is our plan to reduce our greenhouse gas (GHG) emissions to net zero by 2050.

London Pensions Fund Authority (LPFA) are committed to managing the risks posed by climate change. It's part of our duty to protect the LPFA Pension Fund (the Fund) in the interests of our members and employers.

We will ensure that the GHG emissions from all assets in the Fund will be net zero by 2050. This means that, on average, the organisations we invest in will be responsible for GHG emissions that are as close to zero as possible and will have arrangements in place for any remaining emissions to be re-absorbed from the atmosphere.

In this plan, we set targets for our equity investments, which are around half of our assets. In 2023, we will update this document to outline how we will address other parts of our portfolio.

The first section of this document summarises our plan and targets. The second section provides more detailed technical information on our approach to achieving net zero.

Please contact us with any questions that you might have.

Robert Branagh | CEO, LPFA
communications@lpfa.org.uk

ABOUT LPFA AND OUR PARTNERS

We are a
£7.6 bn
pension fund

With
93,000
members
(as of 31 March 2022)

Our main purpose is to ensure that our members are paid their pensions when they retire and to manage the costs of pension provision for employers in our Fund.

Our members work – or have worked – for organisations that make up so much of London's cultural, educational, and administrative life – from schools to museums, from arts centres to government bodies and from universities to housing associations.

LPFA set the direction of the Fund and are ultimately responsible for running it. Our **asset manager**, **Local Pensions Partnership Investments (LPPI)** invest the Fund's assets on our behalf. As well as being our asset manager, LPPI are the asset manager for two other Local Government Pension Scheme (LGPS) Funds. We invest in LPPI's range of pooled funds together with those two other LGPS Funds. LPPI has also made its own net zero **commitment**.

A SUMMARY OF OUR CLIMATE ACTION PLAN

WHAT IS NET ZERO?

At the moment, human activity emits far more GHG each year than the earth is capable of absorbing. This means that the level of GHG in the atmosphere is increasing over time, leading to climate change.

The world will be net zero when the amount of GHGs emitted each year is as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere.

Our Fund will be net zero when our assets are responsible for emitting no more GHGs than they are responsible for re-absorbing from the atmosphere each year.

Our organisation will be net zero when our operational activity is responsible for emitting no more GHGs than it is responsible for re-absorbing from the atmosphere each year.

WHY ARE WE GOING NET ZERO?

Climate change poses a risk to life, businesses, homes, and livelihoods. Failure to prevent the worst effects of climate change could have a catastrophic impact on society, businesses, our assets and on our ability to pay pensions. We are making our net zero commitment as part of the global efforts to reduce GHG emissions. We anticipate that this will contribute to reducing the risks of climate change both to the Fund and to the world.

The transition to a net zero global economy also presents us with investment opportunities. Our commitment to increasing our investment in companies working on **climate solutions** is part of our wider obligation to deliver the **investment returns** we need to pay pensions and keep employer contributions reasonable.

HOW WILL WE GET TO NET ZERO?

We are not simply lowering the GHG emissions of our fund by buying companies that are already net zero.

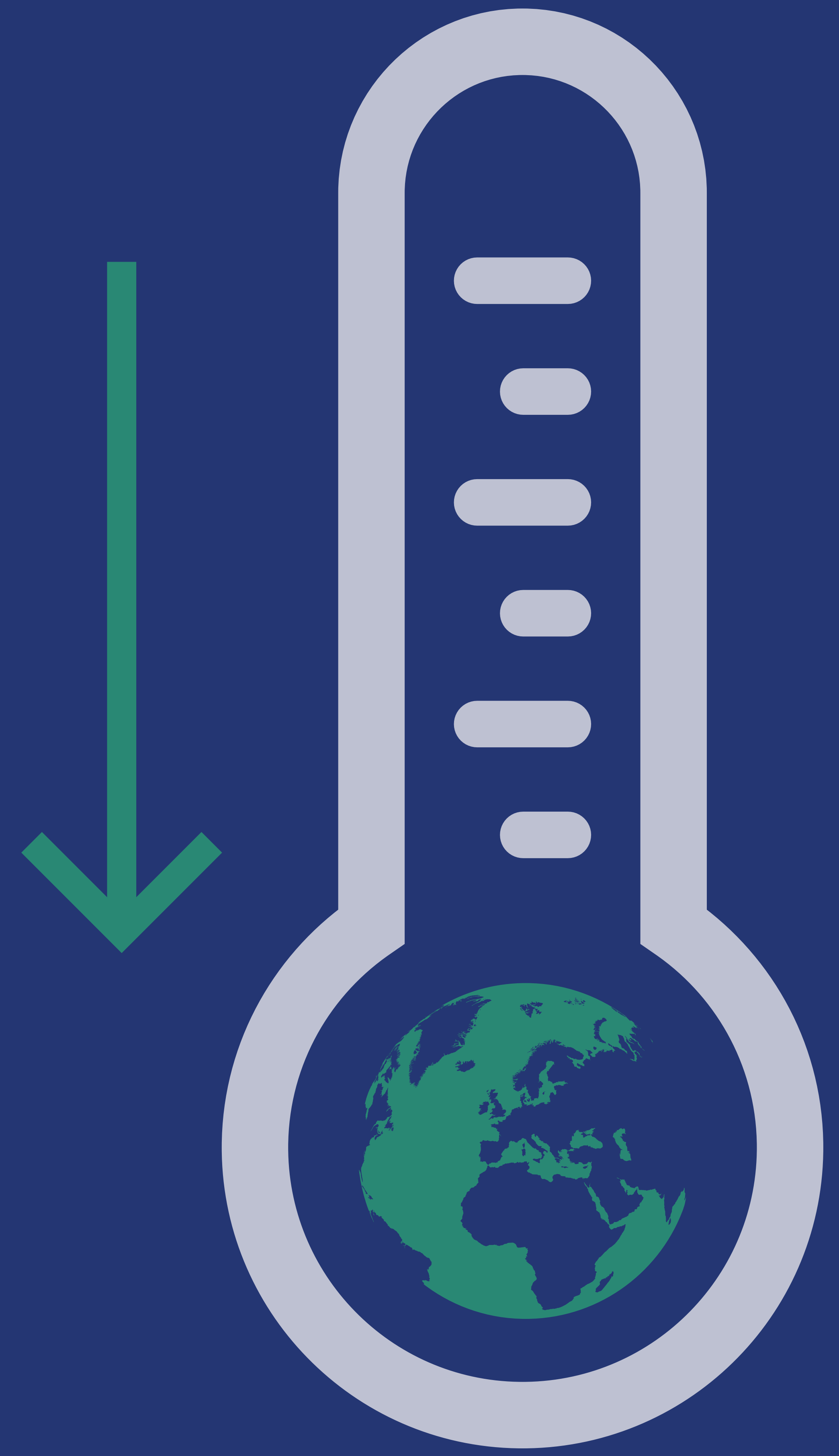
Instead, we want to do our part to ensure that the global economy as a whole achieves net zero emissions. We will do this while still delivering our funding strategy, ensuring we achieve the investment returns we need to pay pensions.

We aim to ensure that companies **align** with net zero by putting in place ambitious, credible net zero targets of their own and then sticking to them. The main way we can do this is by investing in companies that are leading the way towards net zero alignment and **engaging** with companies that are not yet aligned to get them to change. Most of the time this is done as part of broader initiatives that bring together large numbers of **asset owners** that share our goals.

To help us achieve our net zero goal, we are using the Net Zero Investment Framework (NZIF) published by the Paris Aligned Investment Initiative (PAII). We signed up to the PAII's net zero commitment for asset owners in September 2021 and this Climate Action Plan is the first step towards achieving our ambition.

WHAT ABOUT OUR OPERATIONAL EMISSIONS?

As well as setting targets for our investments, we have also set a target to reduce the GHG emissions from our day-to-day activities. This includes the emissions from our office building and our travel. We are also working with our suppliers to ensure they are doing all they can to reduce their own emissions. This includes our administrators, Local Pensions Partnership Administration (LPPA), who carry out operational activity, including providing information to members, managing their personal details and paying pensions.



WHAT GOALS HAVE WE SET?

We have set six goals in three areas: Portfolio, Assets and Operations. We will track progress against each one.

These goals are set out in the following pages.

Our initial goals relate to listed equities (shares in companies that are publicly traded). These represent around half of the total Fund. We have chosen to focus on this asset class because this is the largest part of our portfolio. Listed companies also generally publish more comprehensive data about their GHG emissions than is available for other asset classes. We are working to set targets for our other asset classes as quickly as possible.

PORTFOLIO GOALS

These are “top down” goals that look at our assets as a whole.

WHAT IS THE INTENTION OF THE GOAL?	WHAT IS OUR GOAL?	WHY HAVE WE SET IT?
The portfolio emissions reduction goal (monitoring reductions in financed emissions)	By 2030, we aim to reduce **Scope 1 and 2** portfolio-level emissions intensity to 13 **tCO2e/£m** invested. This represents a 75% reduction relative to the portfolio emissions in 2019 which is our baseline.	This goal is the commitment to decrease our **carbon footprint** by 2030.
The implied temperature rise goal (maintaining a portfolio that is consistent with the Paris Agreement)	We will measure the temperature rise implied by the assets in our portfolio. We will aim for this **implied temperature rise** to be consistent with the **Paris Agreement** to keep global temperature rises well below 2°C by the end of the century.	This is a measure of the real-world implications of our progress and the desired outcome from our alignment and engagement goals, outlined later. By ensuring that the companies we invest in are aligned to net zero, regardless of their current emissions, we expect our implied temperature rise to be consistent with the Paris Agreement.
The climate solutions goal (investing in assets that help the global economy achieve net zero)	We will increase our investment in the **climate solutions** required to meet net zero by 2050 or sooner. We have not set a goal for the percentage of assets to be invested in climate solutions at this stage because of the lack of available data. We expect to set a percentage goal for investment in climate solutions during 2023.	This is the commitment to help provide finance to industries and companies that will help deliver the emissions reductions the world needs.

ASSET CLASS GOALS

These are “bottom up” goals that look at each asset class separately.

WHAT IS THE INTENTION OF THE GOAL?	WHAT IS OUR GOAL?	WHY HAVE WE SET IT?
The alignment goal (investing in companies that are aligned to net zero)	We aim to ensure that by 2025 at least 32% (by value) of our listed equities investments in **material sectors** meet the criteria to be considered aligning to net zero (as a minimum) as defined by the NZIF. We aim for this proportion to rise to 55% by 2030. By 2040, we aim to ensure that all of our listed equities investments in material sectors meet the criteria to be considered aligned to net zero (as a minimum) as defined by the NZIF.	This is the commitment that LPFA will achieve a portfolio aligned with net zero by ensuring that, over time, all companies in the portfolio come to be aligned to net zero.
The engagement goal (applying pressure to put net zero plans in place)	Starting immediately, we will ensure that at least 70% of **financed emissions** in material sectors resulting from our listed equities **exposure** are either assessed as net zero, aligned with a net zero **pathway**, or the subject of **direct** or **collective engagement** and **stewardship actions**. By 2030, we will ensure that at least 90% of financed emissions in material sectors resulting from our listed equities exposure meet these standards.	This is the commitment that LPFA will engage with material companies to ensure that they become aligned with net zero.

OPERATIONAL GOAL

This goal covers our emissions as an organisation, separately from our investment portfolio.

WHAT IS THE INTENTION OF THE GOAL?	WHAT IS OUR GOAL?	WHY HAVE WE SET IT?
The operational emissions reduction goal (reducing the emissions from running the Fund)	By 2030, we aim to reduce the Scope 1 and 2 GHG emissions by 50% per full time employee, relative to our GHG emissions in 2022-2023.	This is our commitment to hold ourselves to the same standard as the companies we invest in. We will achieve this through changes to our office environment and how and when we travel.

OUR SIX NET ZERO GOALS

1 PORTFOLIO EMISSIONS REDUCTION GOAL

Reduce emissions by

75%

by 2030

2 IMPLIED TEMPERATURE RISE GOAL

Maintain an implied temperature rise that is consistent with the Paris Agreement

3 CLIMATE SOLUTIONS GOAL

Increase investment in climate solutions. Set a percentage target in 2023

4 ALIGNMENT GOAL

At least

32%

of material sector investments aligning to net zero by 2025

5 ENGAGEMENT GOAL

At least

70%

of financed emissions aligned with net zero or subject to engagement, starting immediately

6 OPERATIONAL EMISSIONS REDUCTION GOAL

Reduce GHG emissions per full time employee by

50%

by 2030

OUR PLAN IN DETAIL

GOVERNANCE AND STRATEGY

Why are we publishing this Climate Action Plan?

LPFA's primary objective is to ensure that over the long term, the Fund will have sufficient assets to meet all pension liabilities as they fall due.

Our very long-term outlook means that the Fund is exposed to societal and systemic risks, including climate change. Climate change poses a long-term and material financial risk to LPFA's long-term financial viability. The global transition to net zero also presents investment opportunities for the Fund.

To address these risks and opportunities, we have committed to the goal of achieving net zero portfolio emissions by 2050. The LPFA signed the PAII Asset Owner Net Zero Commitment on 20 September 2021. Our commitment is set out in full at Annex 1.

What is LPFA's role?

We are the owner of the assets held in the Fund and we set its strategic direction. Investment decision-making is delegated to our asset manager, LPPI. LPPI has delegated authority for investment implementation, including the selection of individual assets and asset managers in which the Fund is invested. LPPI also carries out engagement with individual companies (including through voting on shareholder resolutions).

The role of the LPFA is to set policies to guide LPPI and to oversee the way they select companies in which to invest and how they engage with companies that we own. This will be our major focus as we seek to achieve our net zero commitment. LPPI has also signed the PAII Asset Manager Net Zero Commitment, reflecting our close alignment and partnership in achieving our net zero ambitions.

Our commitment is also about using our influence as an asset owner to drive a reduction in real-world emissions more broadly. Like many other investors, in preparing our Climate Action Plan we have drawn on the Paris Aligned Investment Initiative's (PAII) Net Zero Investment Framework (NZIF). This helps to ensure that we are acting as part of a broad coalition of investors to maximise our influence.

What assets are covered by this Climate Action Plan?

This first iteration of our Climate Action Plan covers our investments in listed equities, which represents around 50% of our total assets. We have chosen to focus on listed equities because this is the area with the highest quality of data available and represents the largest asset class in our portfolio. In addition, we expect LPPI's actions across our whole portfolio to be consistent with our net zero commitment. In particular, we expect robust engagement in respect of those asset classes where LPPI has a greater ability to influence outcomes, for example, by direct investments in infrastructure and real estate.

We will include more asset classes within future editions of our Climate Action Plan as the availability of data increases, methodologies become more widely accepted, and more asset classes are included in the NZIF.

How will we review and monitor this plan and report on our progress?

We will review progress against this Climate Action Plan annually. The first such review is expected to take place before end of 2023.

We will also consider adding more asset classes when we review the Climate Action Plan. The first review of the goals set out in this Climate Action Plan is expected to take place in 2025 and every three years thereafter.

We will publish on our website and on our social media channels, an annual report on progress against our targets and objectives, drawing on the reporting expectations in the NZIF.

GOALS AND OBJECTIVES

This section explains the targets that we have set for ourselves. In summary, we have set six goals across three areas:

Portfolio goals:

1. **THE PORTFOLIO EMISSIONS REDUCTION GOAL**
   (Monitoring reductions in financed emissions)
2. **THE IMPLIED TEMPERATURE RISE GOAL**
   (Maintaining a portfolio that is consistent with the Paris Agreement)
3. **THE CLIMATE SOLUTIONS GOAL**
   (Investing in assets that help the global economy achieve net zero)

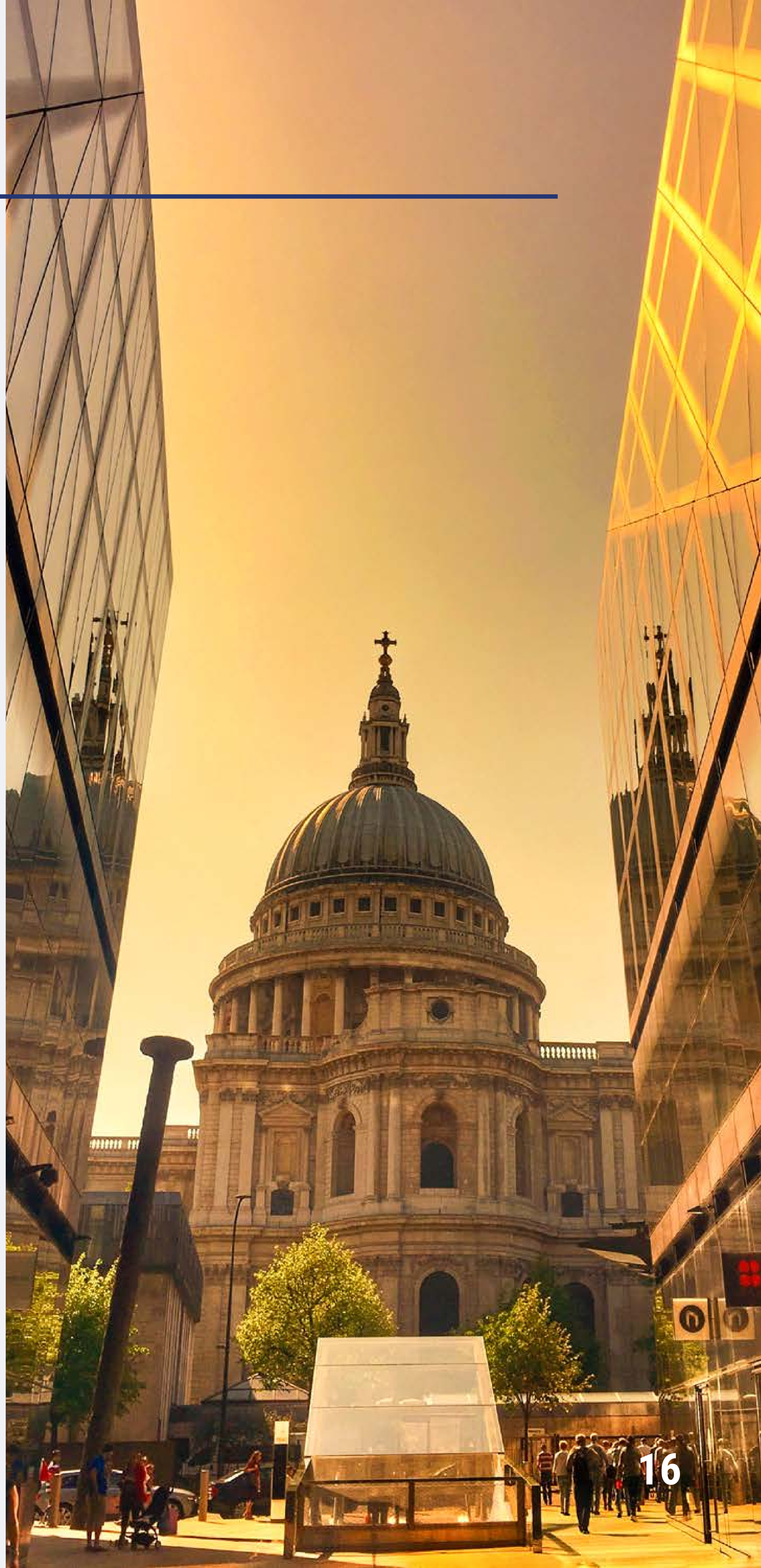
Asset class goals:

4. **THE ALIGNMENT GOAL**
   (Investing in companies that are aligned to net zero)
5. **THE ENGAGEMENT GOAL**
   (Applying pressure to put net zero plans in place)

Operational goals:

6. **THE OPERATIONAL EMISSIONS REDUCTION GOAL**
   (Reducing the emissions from running the Fund)

Taken together, these targets and objectives are intended to contribute to reducing overall real-world emissions and not just a lower footprint for LPFA's investment portfolio.



PORTFOLIO GOALS

The portfolio level goals consider our whole Fund in aggregate. Initially, this covers our investments in listed equities only because the data quality is highest in this area. The portfolio level goals will be reviewed and updated as necessary as we consider more asset classes over time.

1 THE PORTFOLIO EMISSIONS REDUCTION GOAL
(MONITORING REDUCTIONS IN FINANCED EMISSIONS)

By 2030, we aim to reduce Scope 1 and 2 portfolio-level emissions intensity to 13 tCO2e/£m invested. This represents a 75% reduction relative to the portfolio emissions in 2019.

Reduce emissions by

75%

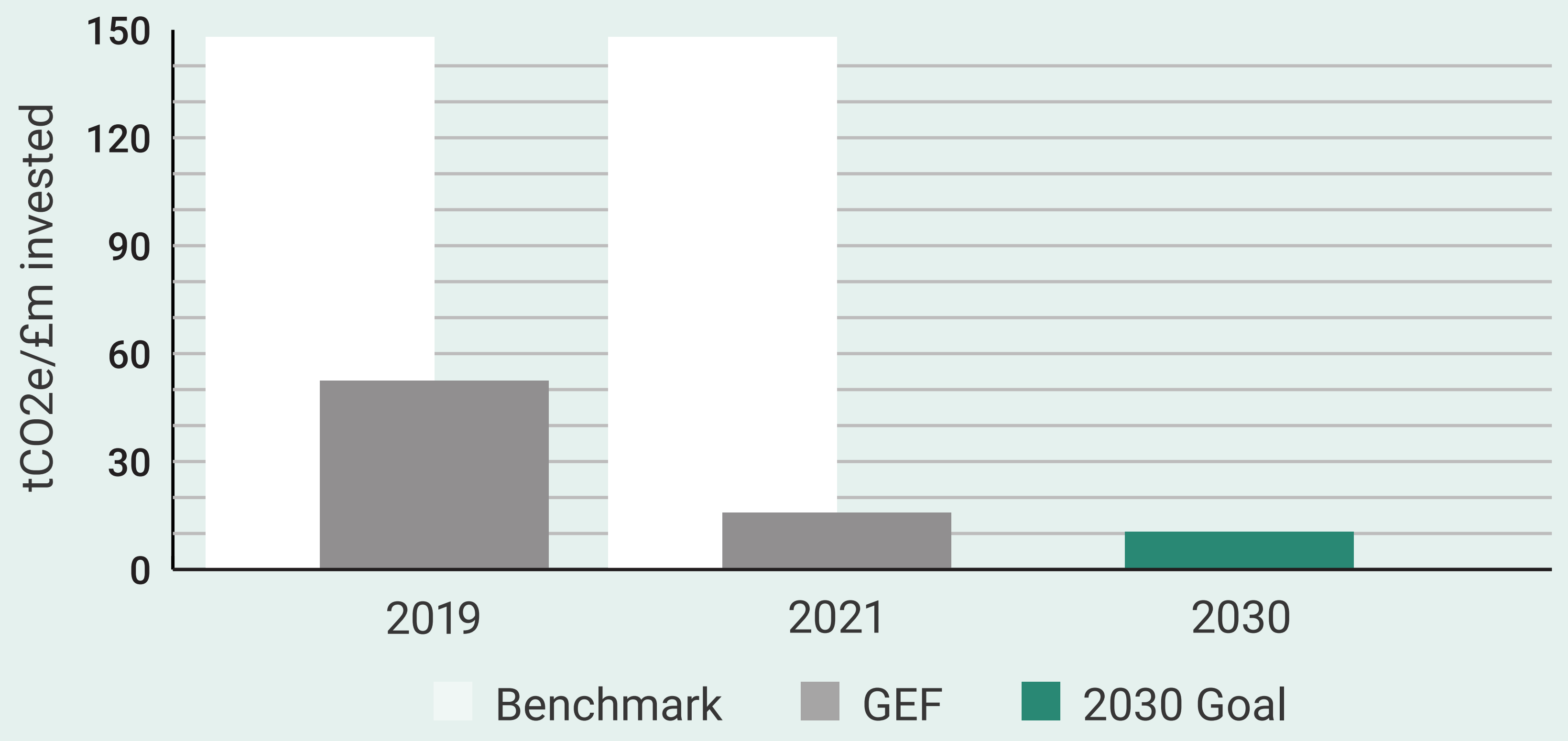
by 2030

Our listed equity investments are held through the LPPI **Global Equities Fund (GEF)**. The GEF is actively managed, meaning that the individual companies it holds can change over time depending on LPPI's investment views. Changes in the companies held in the GEF can result in significant changes in carbon footprint – both up and down – from one year to the next. The GEF's carbon footprint should be expected to rise and fall each year on its way to the 2030 goal – it is unlikely to be a steady, predictable, downward trend.

The 2030 goal was set based on analysis of the GEF's current and projected future carbon footprint using the sectoral **decarbonisation** pathways implied by the **One Earth Climate Model**.

We know that our goal of 13 tCO2e/£m by 2030 is an ambitious one. For comparison, in 2021 the GEF's **benchmark** had a carbon footprint of 148 tCO2e/£m.

Carbon footprint



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1 CONTD.

As shown in the previous graph, since 2019, the carbon footprint of our portfolio has reduced. The GEF’s carbon footprint in 2019 was 52.5 tCO2e/£m and had fallen to 16 tCO2e/£m in 2021.

Some of this change reflects efforts by companies to reduce their emissions. However, most of the reduction in carbon footprint is the result of a shift in the companies held in the GEF towards lower-emitting sectors (such as consumer staples and IT). While we are glad to have seen the recent reduction in the GEF’s carbon footprint, we know that it could rise in some years before reducing again as we make progress toward the 2030 goal.

The NZIF aims to avoid an approach to target setting that incentivises investors to take actions that reduce their GHG emissions purely to meet a specific target in a given year. For example, it would be counterproductive to divest from a company where engagement is generating results. For this reason, the portfolio emissions reduction goal is considered as a “reference target” – it is used to keep track of progress but it is not the primary way of making progress towards net zero.

2 THE IMPLIED TEMPERATURE RISE GOAL (MAINTAINING A PORTFOLIO THAT IS CONSISTENT WITH THE PARIS AGREEMENT)

We will measure the temperature rise implied by the assets in our portfolio. We will aim for this implied temperature rise to be consistent with the Paris Agreement to keep global temperature rises well below 2°C by the end of the century.

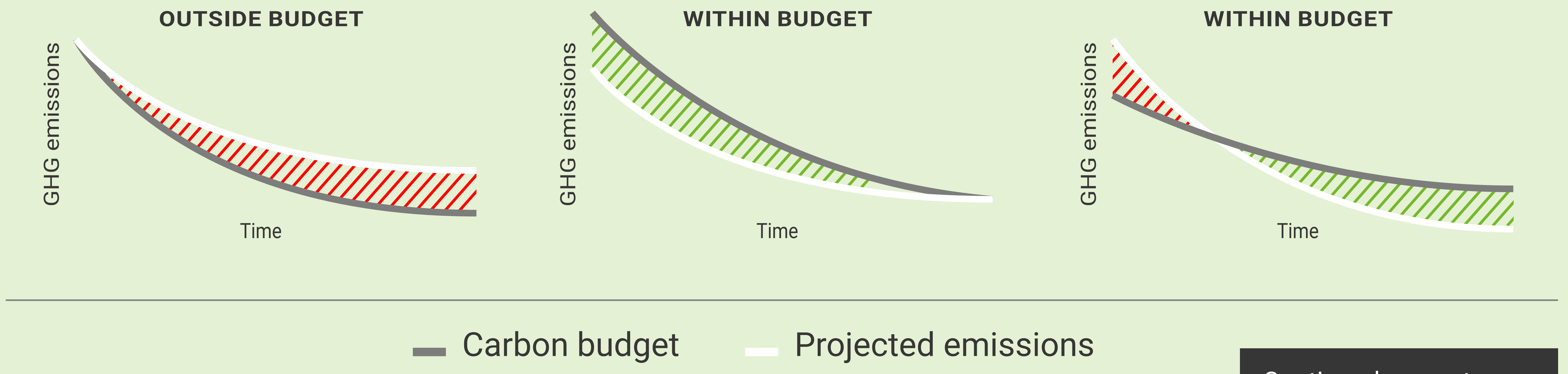
Ensure portfolio assets don't rise above

2°C

Implied temperature rise is a way of estimating the likely carbon footprint of the portfolio in future. In many ways projections such as this are more useful for making decisions than considering historic portfolio emissions.

The implied temperature rise is calculated by estimating a global "carbon budget" – the amount of GHG that humanity can emit and still be likely to meet the goals of the Paris Agreement. This global carbon budget is then allocated to each sector and each company within that sector, allowing us to compare each company's projected future GHG emissions against its carbon budget. Companies with credible, ambitious, net zero plans are better placed to operate within their carbon budgets than those with no plans in place. Examples are provided below.

By comparing each company's estimated future emissions against its budget, it is possible to calculate an "implied temperature rise", which is the answer to the question "how much might global temperatures be likely to rise by the end of the century if all companies and sectors over- or under-shot their carbon budget to the same extent as this company is expected to?".



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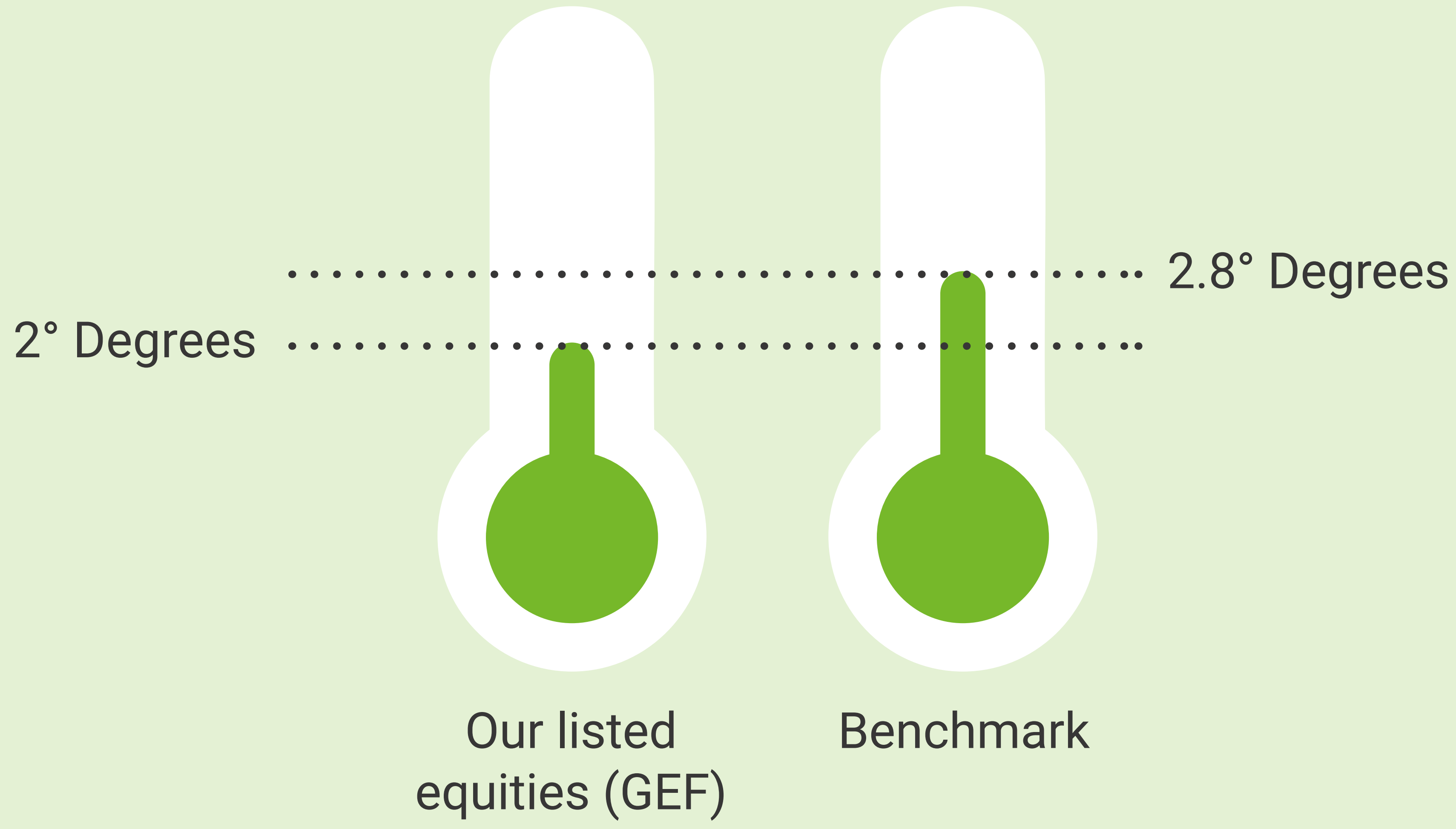
2 CONTD.

In the same way, an implied temperature rise for our portfolio can be calculated by comparing the total projected GHG emissions of all companies in the GEF against their total carbon budget. The GEF had an implied temperature rise of 2°C at 31 December 2021 which is in line with the Paris Agreement. This is well below the implied temperature rise of the GEF's investment benchmark, which was 2.8°C at the same date.



We will monitor the implied temperature rise and also review other potential forward-looking information. Our goal of ensuring that our implied temperature rise remains consistent with the Paris Agreement is a deliberately challenging one. We want the companies in our portfolio to have projected emissions that are within their budgets and we will engage with companies that are operating outside their carbon budget to encourage them to improve.

3 THE CLIMATE SOLUTIONS GOAL (INVESTING IN ASSETS THAT HELP THE GLOBAL ECONOMY ACHIEVE NET ZERO)

We will increase our investment in the climate solutions required to meet net zero by 2050 or sooner. We have not set a goal for the percentage of assets to be invested in climate solutions at this stage because of the lack of available data. We expect to set a percentage goal for investment in climate solutions during 2023.

At 30 June 2022, 3% of our total assets were identified as “green”. Most of this exposure is related to infrastructure investments in renewable energy generation. However, we know that climate solutions has a broader definition than just renewable energy. We also know that in many cases, particularly in listed markets, development of climate solutions is part of companies’ wider commercial activities.

The availability and quality of data about climate solutions has improved in recent years but we require more complete and reliable information to accurately identify how much of LPFA’s assets are invested in companies producing climate solutions. We also need to further understand the relationships between this climate solutions goal and the other goals set out in this document.

During 2023, we will be working to develop our approach in this area and expect to set a goal to invest a percentage of our portfolio in climate solutions.

ASSET CLASS GOALS

The asset class goals consider each asset class separately. The goals are tailored to the specifics of each asset class and so will grow as new asset classes are added. For our two asset class goals, we must assess the extent to which each company in our portfolio is aligned to net zero. The NZIF helps us to categorise companies by setting the criteria opposite.

These criteria set a high standard for companies to be considered net zero or aligned to a net zero pathway, reflecting the fact that significant change is needed in the real world to achieve the Paris Agreement. As a result, a relatively low proportion of companies are currently considered to be aligned to a net zero pathway. The purpose of the asset class goals is to increase the number of companies that are making the real-world changes required to align to net zero.

	Aligned to a net zero pathway	Aligning towards a net zero pathway	Committed to aligning
Ambition: A long-term 2050 goal consistent with achieving global net zero	✓ For higher impact companies		✓
Targets: Short- and medium-term emissions reduction targets set	✓	✓	
Emissions performance: Current emissions intensity performance is in line with targets	✓		
Disclosure: Disclosure of Scope 1, 2, and material Scope 3 emissions	✓	✓	
Decarbonisation Strategy: A quantified plan setting out the measures that will be deployed to deliver on GHG targets	✓ For higher impact companies	PARTIAL	
Capital Allocation Alignment: A clear demonstration that the capital expenditures of the company are consistent with achieving net-zero emissions by 2050	✓ For higher impact companies		

There are also four additional criteria to be incorporated where feasible/as data availability increases. All other companies are considered to be not aligned.

4 THE ALIGNMENT GOAL (INVESTING IN COMPANIES THAT ARE ALIGNED TO NET ZERO)

We aim to ensure that by 2025 at least 32% (by value) of our listed equities investments in material sectors meet the criteria to be considered aligning to net zero (as a minimum) as defined by the NZIF.

We aim for this proportion to rise to 55% by 2030. By 2040, we aim for 100% of our listed equities investments in material sectors meet the criteria to be considered "aligned" to net zero (as a minimum) as defined by the NZIF.

At least

32%

of investments to be aligned to net zero by 2025

At 31 December 2021, our listed equity portfolio included 44 companies operating in material sectors. These 44 companies represented around 9% of our listed equity assets by value. Of our investments in material sector companies, 14% by value were assessed as aligning to net zero, and none were yet assessed as being aligned to net zero.

The target of achieving 32% aligning by 2025 is based on a straight-line increase to 100% aligned by 2040 which is the standard specified by the NZIF.

In practice, we know that actual progress is unlikely to follow this straight line – there will be periods of faster and slower progress. The interim goals for 2025 and 2030 represent approximate milestones on our journey towards full alignment.

We intend to reach these goals by engaging with companies to ensure that they align to net zero (see the engagement goal on the next page). We believe that successful engagement leads to better outcomes than **divestment**, and in most cases is more likely to result in real world emissions reductions. However, we will support selective divestment from companies that do not respond sufficiently to engagement.

5 THE ENGAGEMENT GOAL
(ENGAGING WITH COMPANIES TO PUT NET ZERO PLANS IN PLACE)

Starting immediately, we will ensure that at least 70% of financed emissions in material sectors resulting from our listed equities exposure are either assessed as net zero, aligned with a net zero pathway, or the subject of direct or collective engagement and stewardship actions.

By 2030, we will ensure that at least 90% of financed emissions in material sectors resulting from our listed equities exposure meet these standards.

70%

of financed emissions aligned with net zero or subject to engagement, starting immediately

At 31 December 2021, none of our listed equity holdings in material sector companies were assessed as being net zero or aligned to a net zero pathway. This reflects the reality that at present very few companies globally meet the NZIF standards to be considered aligned to net zero.

We will ensure that our asset manager, LPPI, engages robustly on our behalf with sufficient material sector companies to achieve the engagement goal. At 31 December 2021, material sector companies made up 9% of our listed equity investments by value and 30% of total listed equity financed GHG emissions. This is considerably lower than the GEF's benchmark. In part, this reflects the fact that since December 2021, LPFA has not held any listed equities in extractive fossil fuel companies.

Although our formal target relates only to listed equity investments in material sectors, we require LPPI to focus on companies making the largest contribution to the financed emissions across our entire portfolio, including our listed equity holdings not in material sectors and our holdings in other asset classes.

Our **direct engagement** with these companies, including voting on shareholder resolutions, is carried out by LPPI. LPPI's voting policy and voting guidelines are set out on the LPPI **website**.

9%

of listed equity investments are material sector companies

30%

of total listed equity financed GHG emissions

OPERATIONAL GOAL

This goal covers our emissions as an organisation, separately from our investment portfolio.

6 THE OPERATIONAL EMISSIONS REDUCTION GOAL (REDUCING THE EMISSIONS FROM RUNNING THE PENSION FUND)

By 2030, we aim to reduce the Scope 1 and 2 GHG emissions by 50% per full time employee, relative to our GHG emissions in 2022-2023.

Reduce GHG emissions per employee by

50%

by 2030

We use Planet Mark to calculate our operational emissions from data we provide. This calculation covers pro-rata use of utilities and waste and LPFA's business travel (LPFA colleagues and LPFA's Chair) and paper usage. The April 2021-March 2022 Planet Mark accreditation report can be found on our website. As this data was gathered while the UK was still under lockdown restrictions stemming from the COVID-19 pandemic, we will use the 2022-2023 figure as the starting year for our target, as we expect this will be a more accurate reflection of normal working life. In 2022-2023 the data collected will also be expanded to include all travel for all colleagues on LPFA business. This will include LPFA employees, members of the LPFA Board and members of the Local Pension Board (LPB).

Our main areas of focus are our office, our travel, and our suppliers.

Our office

LPFA sublets 2,607 square feet of office space in London Fire Brigade's 117,584 square foot offices in Union Street, London. Planet Mark estimate that gas and electricity in our office makes up over 90% of our operational emissions. LPFA will collaborate with other tenants, including London Fire Brigade and Greater London Authority, to improve the energy efficiency of the building. If substantial improvements by the landlord are not forthcoming or are not possible in this building, we will plan to move to alternative accommodation.

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6 CONTD.

Our travel

By June 2023, we will publish a policy setting out our approach to business travel for staff, LPFA Board members and LPB members. The policy will aim to reduce our GHG emissions from travel, while maintaining our ability to operate effectively.

Our suppliers

The net zero policies of all suppliers with whom we spend over £10,000 per year are summarised on our **website**. By June 2023, we will set out our procurement policy which will seek to ensure that all suppliers we work with:

1. Have made a net zero commitment, and
2. Have committed to regular annual reporting on the above commitment

Our suppliers' GHG emissions represent "Scope 3" emissions, so fall outside our formal target. However, we will seek to influence suppliers as much as possible as a way of driving real world emissions reductions.

POLICY ADVOCACY AND MARKET ENGAGEMENT

In order to achieve the goals of the Paris Agreement, there must be widespread changes at policy-level and market-level. These changes are likely to be far more influential in the climate transition than the changes LPFA makes to its investment portfolio.

Both individually and through LPPI, LPFA is already a proactive participant in climate policy and regulatory debates.

LPFA and LPPI are committed to continuing to promote progressive climate action and a just transition by policy makers and market participants, and to do so strategically with the goal of net zero by 2050 or sooner in mind.

We will take part in policy and market-level discourse both individually and collaboratively. The LPFA will work with industry groups, including the likes of ShareAction and Make My Money Matter, to publicly support their campaigns that are aligned with our net zero ambitions.

We will support a stakeholder collaboration and engagement programme aimed at sharing the Fund's learnings on net zero with multiple stakeholder groups.

The individual engagements and campaign support that we undertake as part of our Climate Action Plan will be driven by consideration of the likely extent of our influence, the expected importance to the climate transition of the actor being engaged and our investment strategy.

ABBREVIATIONS AND GLOSSARY

The definitions in the glossary are given to make this document easier to understand. Our wording may not be the only definition in use.

Abbreviation	Definition
GEF	See: Global Equities Fund
GHG	See: Greenhouse gas
LPPI	See: Local Pensions Partnership Investments Ltd
NZIF	See: Net Zero Investment Framework
PAII	See: Paris Aligned Investment Initiative

Term	Definition
Aligned, Alignment	A company is considered to be aligned to a net zero pathway if it meets the relevant criteria outlined in the Net Zero Investment Framework. These criteria include having a credible commitment to be net zero by 2050 or sooner, putting in place short- and medium-term targets for GHG emission reduction, and disclosing its emissions.
Asset	Assets are the things that the pension fund owns, which either generate money to pay pensions or can be sold in future to pay pensions. LPFA's assets include cash, shares in companies, loans to companies, and ownership of buildings and infrastructure.
Asset class	An asset class is a grouping of investments that exhibit similar characteristics and are subject to the same laws and regulations. LPFA invests in seven asset classes: cash, credit, fixed income, infrastructure, private equity, public equities, and real estate. More information is available in our **Investment Strategy Statement**.
Asset manager	An organisation responsible for buying and selling assets on behalf of an asset owner.
Asset owner	Asset owners (including LPFA) are institutional investors that are responsible for investing assets to achieve a purpose. In LPFA's case, our purpose is to ensure that over the long-term the Fund will have sufficient assets to meet all pension liabilities as they fall due.
Benchmark	A standard against which investment performance can be assessed. For example, the investment performance of the GEF is measured relative to the **MSCI ACWI index**.

Carbon budget	At a global level, this is an estimate of the maximum amount of GHGs (expressed in CO2 equivalents) that can be emitted by humanity if we are to achieve the Paris Agreement. This global carbon budget is then divided between sectors and companies for comparison against their actual GHG emissions.
Carbon footprint	The amount of GHGs released into the atmosphere as a result of the activities of a particular individual, organisation, or community. See also: tCO2e/£m.
Climate solutions	Activities that deliver a substantial contribution to mitigating climate change. Examples include generating renewable energy, improving energy efficiency, and developing carbon capture technology.
Collective engagement	Groups of asset owners and asset managers working together to apply pressure to companies in an attempt to ensure that they align to a net zero pathway. See also: direct engagement.
Direct engagement	A single asset owner or asset manager applying pressure to companies in an attempt to ensure that they align to a net zero pathway. See also: collective engagement
Divestment	The sale of assets to another party.
Decarbonisation	The process of reducing GHG emissions.

Engagement	In the context of this document, engagement means the process of applying pressure to companies in an attempt to ensure that they align to a net zero pathway. Examples of engagement include sending emails or letters, meeting or speaking with representatives of the company, and voting at Annual General Meetings.
Equities	Equities are shares in the ownership of a company.
Exposure	A term used to describe how much of an investment is held by an asset owner or asset manager.
Financed emissions	The share of GHG emissions that are considered to be paid for using the money provided by an investor.
Global Equities Fund (GEF)	This is an investment vehicle set up by LPPI to invest in public equities worldwide. Further information is available on the LPPI website.
Greenhouse gas (GHG)	Greenhouse gases are gases that are capable of absorbing infrared radiation and thereby trapping heat within the atmosphere. The 1997 Kyoto Protocol defines six gases as GHGs: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride. These gases have different potencies, and to reflect this we express GHG emissions as carbon dioxide equivalents, written as CO_2e. For example, gram for gram methane is able to trap 80 times more heat than carbon dioxide, so one kg of methane emissions would be expressed 80 kg CO_2e.
Investment returns	The income from an asset, plus the change in value of the asset.

Implied temperature rise	Implied temperature rise is a metric that can be calculated for a company or portfolio. It is an attempt to answer the question "how much might global temperatures be likely to rise by 2100 if all companies and sectors over- or under-shot their carbon budget to the same extent as this company is expected to?"
Listed equities	Shares in the ownership of a company that are available to buy and sell on an exchange, such as the London Stock Exchange.
Local Pensions Partnership Investments Ltd (LPPI)	LPPI is an FCA authorised company to which LPFA has delegated all aspects of investment implementation. It was set up by the LPFA and Lancashire County Council for the purpose of achieving economies of scale, greater internal resource, and superior investment opportunities.
Material sectors	These are the economic sectors identified in the NZIF as being most important for the global net zero transition. These are outlined in the NZIF.
Net zero	A state in which GHG emissions are as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere by, for example, oceans and forests.
Net Zero Investment Framework (NZIF)	The Net Zero Investment Framework, published in March 2021 by the Paris Aligned Investment Initiative, provides a common set of recommended actions, metrics and methodologies through which investors can maximise their contribution to achieving global net zero emissions by 2050 or sooner. The NZIF implementation guide is publicly available **here**.

One Earth Climate Model	This is a methodology for estimating decarbonisation pathways for twelve of the sectors of the economy that are most important to the global net zero transition. More information is available **here**.
Paris Agreement	The Paris Agreement on climate change is a 2015 global accord seeking to keep the rise in global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the increase to 1.5°C. As of 2021, the Paris Agreement has been signed by 191 countries, and ratified by 186 countries.
Paris Aligned Investment Initiative (PAII)	The Paris Aligned Investment Initiative is a collaborative investor-led global forum enabling investors to align their portfolios and activities to the goals of the Paris Agreement. It is a collaboration between four regional investor networks across the globe, including the Institutional Investors Group on Climate Change (IIGCC), which represents European investors and of which LPFA is a member. More information is available on the PAII **website**.
Pathway	A future projection of expected or required GHG emissions.
Portfolio	The term used to describe all the assets held by an asset owner.
Scope 1 GHG emissions	An organisation's direct GHG emissions. These might be created as an organisation combusts fossil fuels or uses fuel in transportation.
Scope 2 GHG emissions	An organisation’s emissions associated with the generation of purchased electricity, heating/cooling, or steam for own consumption.

Scope 3 GHG emissions	An organisation’s indirect emissions other than those covered in scope 2. This includes the emissions associated with an organisation's supply chain and its customers.
Stewardship actions	The actions taken by the asset owner and asset manager to supervise assets responsibly. LPFA’s approach to stewardship is set out in our Responsible Investment Policy and Climate Change Policy, which are available on our **website**.
tCO2e/£m	The units of carbon footprint, tonnes (t) of carbon dioxide equivalent (CO2e) per million pounds (£m) of investment. See also: carbon footprint.

ANNEX 1

THE PARIS ALIGNED INVESTMENT INITIATIVE NET ZERO ASSET OWNER COMMITMENT

As asset owners with millions of beneficiaries around the world, we reiterate our full support for the Paris Agreement and strongly urge governments to implement the actions that are needed to achieve the goals of the accord, with utmost urgency.

Recognising the need to address the risks that investors and their beneficiaries face from climate change, investors are taking action, but we acknowledge that there is an urgent need to accelerate the transition towards global net zero greenhouse gas emissions and do our part in helping deliver the goals of the Paris Agreement.

In this context, my institution commits to the following consistent with our fiduciary obligations:

1. Transitioning our investments to achieve net zero portfolio GHG emissions by 2050, or sooner.
2. Implementing this commitment with the aim of achieving real economy emissions reductions and undertaking a comprehensive set of actions available to investors, drawing on the Paris Aligned Investment Initiative's Net Zero Investment Framework.
3. Setting objectives and targets, including an interim target for 2030 or sooner for reducing Scope 1, 2 and 3 emissions associated with our portfolios and setting a target for increasing investment in climate solutions, consistent with a fair share of the 50% global reduction in CO_2 identified as a requirement in the Intergovernmental Panel on Climate Change special report on global warming of 1.5°C.
4. Where offsets are necessary and there are no technologically and/or financially viable alternatives to eliminate emissions, investing in long-term carbon removals.
5. Ensure any direct and collective policy advocacy we undertake supports policy and regulation relevant for achieving global net zero emissions by 2050 or sooner.

6. Implementing a stewardship and engagement strategy, with clear voting policy that is consistent with an objective for all assets in the portfolio to achieve net zero emissions by 2050 or sooner.
7. Engaging with asset managers, credit rating agencies, auditors, stock exchanges, proxy advisers, investment consultants, and data and service providers to ensure that funds, products and services available to investors are consistent with achieving global net zero emissions by 2050 or sooner.
8. Setting a target and reducing our operational (Scope 1 and 2) emissions in line with achieving global net zero emissions by 2050, or sooner.
9. Disclosing objectives and targets, and publishing a clear Investor Climate Action Plan for achieving these goals as soon as possible, no later than one year from making this commitment, and reviewing and updating targets every five years or sooner.
10. Reporting annually on the strategy and actions implemented and progress towards achieving objectives and targets, and in line with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations.

Our institution's commitment recognises that investors across the globe have different opportunities, constraints and starting points for achieving net zero emissions and there are a range of methodologies and approaches available to investors to set targets and implement strategies. In some asset classes or for some investment strategies, agreed net zero methodologies do not yet exist. We will, therefore, work to address these challenges, including through the Paris Aligned Investment Initiative.

Our commitment is based on the expectation that governments and policy makers will deliver on their commitments to achieve the 1.5°C temperature goal of the Paris Agreement, and in the context of fulfilling our fiduciary obligations.