

Roadmap to net zero

London Borough of Brent Pension Fund

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Introduction



- The Pension Fund Committee ("Committee") of the London Borough of Brent Pension Fund ("the Fund") intends to commit to a goal of achieving net-zero carbon emissions across its asset portfolio.
- Before making a specific commitment, the Committee and Officers of the Fund may wish to evaluate the implications of potential goals and target dates in terms of the key actions (or roadmap) that will need to be taken to achieve each goal.
- The roadmap on the next page shows the plan of action for the next 12 months. The topics discussed in this paper are shown below:
 - 1. Strategic context
 - 2. Agree carbon metrics to be monitored
 - 3. Introduce carbon metrics reporting into quarterly performance report
 - 4. Assess feasibility of different net zero target dates
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Short-term roadmap

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Workstream	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023
Education	Training (5 October 2021 meeting) Begin review of RI beliefs/priorities (capturing 'E','S' & 'G')	Training (21 February 2022 meeting) Complete review of RI beliefs/priorities (capturing 'E','S' & 'G')	Training - LCIV to provide overview of ESG funds	Training on TCFD/Stew	ardship Code	
	G)	Define stewardship role and monitoring requirements				
Understanding the baseline	Carbon footprint/ESG reporting including gap analysis, e.g. for private market mandates	Agree carbon metrics to be emissions/fossil fuel exposu reporting				
Evaluating alignment and setting targets	Officer engagement with LCIV regarding net zero target	Develop "strawman" based on 2030, 2040 and 2050 for illustration and to assess feasibility Initial discussions on targets	Agree initial targets, includin private markets if required Define "on track" target line			
Planning and implementation actions	Consider governand implementation	ce options to oversee	Establish manager monitoring programme, e.g. attendance at	Review structure of grow review of RI beliefs	wth allocation following	Update relevant policies, e.g. ISS, RI beliefs
Monitoring and reporting progress	Engage with manag format	ers/LCIV on RI reporting	Introduce carbon metric reporting in quarterly performance reporting			Review reporting – more detail at 31 March each year

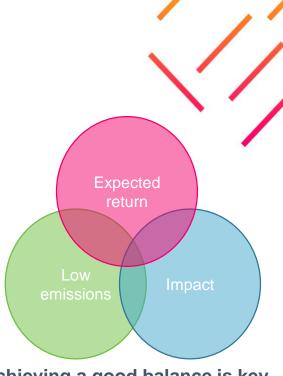
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Introduction



Some key decarbonisation challenges

- The Fund must remain focused on its primary obligation to pay benefits to its members, including consideration of any associated risks
- Decarbonising a portfolio which is invested globally, across many sectors, is more challenging than decarbonising an individual organisation
- Decarbonising whole economies without causing grave damage to individuals prosperity and standard of living will take many years; a balanced approach is required
- Switching to a low carbon portfolio over the short term will not necessarily support the global transition to net zero
- Measuring climate risk effectively remains challenging particularly in private markets
- Effective management of climate change will involve capturing opportunities as well as mitigating risks
- Effective engagement is harder than divestment, but more constructive
- Robust investment solutions are only now becoming available







Sustainable investment can be about more than limiting climate change

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Strategic context

Key points

- Equities are currently the largest contributor to the Fund's carbon emissions
- Consider low carbon alternatives as part of growth assets review
- Carbon intensive legacy investments are being wound down
- And being replaced with more impact-focussed funds offered through LCIV
- Expect 40%+ of Fund's assets to be invested in LCIV funds
- LCIV targeting net zero by 2040 and is a key partner
- Review Fund's existing mandates in the context of net zero target
- Set series of short, medium and long-term targets for carbon emissions
- Engage with managers (including LCIV) on actions to reduce carbon emissions

Two levers: capital allocation supported by ongoing engagement





Strategic context

Current position

Growth assets (c£650m)

- Equities are largest contributor to Fund's carbon emissions
- Invested with LGIM and BlackRock
- BlackRock fund accesses global equity market with c85% reduction in carbon emissions

Income assets (c£300m)

- Multi-asset, infrastructure and private debt funds now invested through LCIV
- Recent investment in property through Fidelity, who are rated highly on RI

Protection assets (c£175m)

• Multi-asset credit fund, gilts and cash

	•	emissions; some offer progressive reductions Allow Capital Dynamics private equity fund to wind down		Fund's
	•	Build up existing investments in LCIV infrastructure and private debt funds Alinda and Capital Dynamics infrastructure funds winding down Increase property investments in highly- rated managers	•	Review manag carbon broade
	•	Review steps being taken by LCIV to reduce	•	Review

Capital allocation

Some funds deliver immediate reduction in

Consider low carbon alternatives to LGIM

funds, possibly through LCIV

- carbon emissions in multi-asset credit fund
 Review alternatives to gilts fund, including
- Review alternatives to gilts fund, including move towards "green gilts"

Monitoring and engagement

 Review steps being taken by LCIV, BlackRock, LGIM to deliver ongoing reductions in carbon emissions and on the Fund's broader ESG priorities

 Review steps being taken by LCIV, property managers to deliver ongoing reductions in carbon emissions and on the Fund's broader ESG priorities

 Review steps being taken by LCIV to deliver ongoing reductions in carbon emissions and on the Fund's broader ESG priorities

Map out expected reduction in carbon emissions as a result of these strategic changes Monitor progress against targets and engage, challenge managers on actions being taken, including LCIV





Framework to support Fund's climate ambitions

We propose adopting the following three-dimensional framework to support Fund's climate ambitions:

Carbon metrics Develop reporting of carbon metrics and monitoring against targets metrics	 Agree metrics and set ambitious targets for each, that supports the net zero target. Monitor progress against these targets Review Fund's investments in relation to these metrics, set appropriate targets and a plan for progress 	
Opportunities Seek investments that support journey to net zero and benefit from transition	 Review Fund's existing mandates in the context of the net zero target. Identify which mandates may be replaced by climate-related investment opportunities (e.g. low carbon/Paris-Aligned equities) to support, and benefit from, the low carbon transition. Consider a target of [10%] of the Fund invested in assets that directly support the transition to a low carbon economy. 	Net zero Achieve Net Zero carbon emissions for the Fund
Engagement Engage with LCIV, managers and other stakeholders to bring change	 Engage with LCIV and managers to challenge actions and encourage best practice, referencing Fund's beliefs and climate ambitions. Consider divestment/reallocation of capital if engagement does not give impact. Engage with LCIV and managers on voting activity on climate-related issues. Agree actions on collaboration and public disclosure of Fund activities to encourage change. 	

Carbon metrics

Key points

- · Committee needs to select carbon metrics to be monitored
- Range of carbon metrics and quality of underlying data likely to evolve over time
- For example, reporting of scope 3 emissions is not widespread currently
- Proposal to Committee:
 - 1. Adopt the metrics being published by LCIV
 - 2. Review and refine metrics as range and quality of data evolves
 - 3. Incorporate forward looking metrics in future
- Asset coverage is very good able to report metrics for 88% of Fund's assets
- Plus coverage is expected to increase over time







Proposed metrics (initial phase)

Metric	Definition	Description	
Carbon Intensity	GHG emissions* (tonnes CO2 equivalent) per m revenue/market value.	Carbon intensity is a measure of how much CO2 is produced by a portfolio of companies relative to the size of their business operations or market value. Total carbon emissions are normalised by total annual revenues or value invested, allowing comparisons to be made across investments of different sizes, time periods and indices.	
Weighted Average Carbon Intensity ("WACI")	Average GHG emissions* per m revenue, weighted by the value of the investment in the portfolio	WACI also measures exposure to carbon-intensive companies but reflects weightings to the individual companies within the fund or index. Again, comparisons can be made across investments of different sizes, time periods and indices.	
% Ties to Fossil Fuels	Percentage of the portfolio invested in companies with an industry tie to fossil fuels, in particular reserve ownership, related revenues and power generation		

*At the moment, GHG emissions usually reflect **Scope 1 and 2** emissions only. **Scope 3** emissions likely to be included in future as quality of data and reporting improves.

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Forward looking metrics

- Proposed metrics are backward looking
- Helpful also to include forward looking metrics in next phase for example:

Forward looking metrics

Aggregated Warming Potential

The security's alignment temperature when referencing a combined approach which takes into account Scopes 1, 2, 3 and "cooling" potential (including emission reduction targets set by the firm). A score of 2°c suggested that the companies current emission and management strategies are aligned with a 2°c climate change scenario.

Estimated Impact of 2°c Scenario

Reflects a company's aggregated downside policy risk exposure according to all emission sources (Scope 1, 2, 3) it is expressed as a percentage of the company's market value. The metric assuming a global 2°C target and uses carbon prices from the AIM CGE model.

Low Carbon Transition Score

Company level score that measures a company's level of alignment to the Low Carbon Transition. Companies with higher Low Carbon Transition score are more aligned with the Low Carbon Transition compared to the companies with lower scores.

Forward looking estimates of carbon emissions For example MSCI provides estimates of emissions in 2030 on the basis of commitments made by individual companies.



Carbon reporting

Initial climate risk analysis as at 31 March 2022

Climate Risk Analysis	5
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Dashboard Strategy/Risk

Performance Managers Background Appendix

As part of the Fund's evolving Responsible Investment agenda and in recognition of climate risk, the Fund is committed to disclosing and monitoring climate metrics within its investment strategy where possible.

As a starting point, the Fund is reporting in line with information produced by its LGP Pool, the London CIV. In time, the Fund will seek to evolve its climate risk monitoring process by monitoring against further metrics.

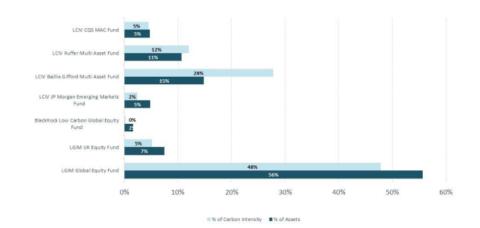
The information covered here captures c80% of the Fund's assets as at 31 March 2022. It excludes investments in property private equity, infrastructure and private debt on account of the current lack of data in these areas.

Despite only representing c.15% of assets shown here, the LCIV Baillie Gifford multi-asset fund is responsible for c.28% of the total carbon intensity. Climate Risk Overview

		Weighted Average Carbon Intensity (tCO2/\$m Sales)	Fossil Fuel exposure (any activity) (%)
	Fund	236.1	6.6%
I	Composite benchmark*	274.9	8.1%
,	Relative to benchmark	-38.8	-1.5%

*Composite benchmark reflects individual mandate benchmarks weighted by proportion invested

Carbon Intensity by Manager



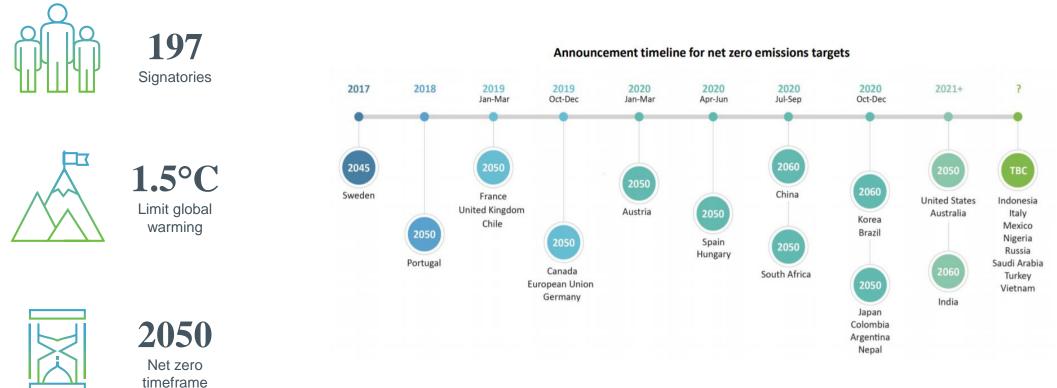




Setting a net zero target date

The Paris Agreement

• The Paris agreement was a legally binding international treaty on climate that is driving policy change.







Example net zero goals and considerations

Timeframe	2030 LCI	/ 2040	2045	2050	2060
Sovereign Pledges	3 - Barbados, Maldives, Mauritania	3 - Sv	veden, Germany, Nepal	50 – incl. US, EU, Japan, UK	7 – incl. China, Kazakhstan
Pension plan examples	South Yorkshire LGPS, the Pensions Regulator (tPR)		port for London Pension Environment Agency, on	TPT, Majority of DB pension schemes that have declared, incl. Tesco, Unilever, HSBC	None
Potential Strategies	Limited universe of asset classes/stocks Intensive use of offsetting	Prome innova	ger engagement and	Wide investment universe, limited exclusions Adoption of climate-driven investment strategies Proactive engagement	Unlimited investment universe Climate-passive investment strategies "Free riding"
Implications Lower financial returns Implications Reduced diversification, increased risk Limited contribution to financing the decarbonisation process Use of scarce offsetting capacity Offsetting costs		term f evolvi May c of clin Short	itially enhanced medium inancial returns from ng markets capture higher proportion nate opportunities -term volatility and ition costs likely higher	Market aligned financial returns Balance progressive reduction in carbon emissions with support for climate solutions providers	Potential for higher short- term and future financial returns from unwanted holdings Potentially higher risk

Source: ClimateWatch

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Setting an appropriate target date

2040

	Proportion of assets (%)
LCIV (on platform)	32%
LCIV (under umbrella)	52%
Non-LCIV	16%

Investing through LCIV provides natural alignment to 2040 with relatively clear visibility as to the strategic repositioning required:

- LCIV platform mandates already seeking to align to 2040
- Non-LCIV platform mandates can be replaced/complemented in time with LCIV equivalents aligned to 2040

2040 is itself a challenging target, ahead of many governments, institutions and corporations.

LCIV relatively cost effective means of delivering on a challenging net-zero target

2030?

2050?

• Pooling directive in place means Fund's investments will likely still need to be via an LGPS pool.

• Fund will need to find alternative method of delivering net-zero at a date other than 2040

• Likely to include the use of:

- Derivatives (climate risk overlay)
- Carbon Offsets

both of which can be complex and costly to implement and manage on an ongoing basis

• Tilts away from engagement - more reliance on divestment

• Could result in missed investment opportunities - is Fund delivering on fiduciary duty?

Divestment reduces real world contribution

A date other than 2040 presents greater challenges

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Actions and interim targets



Portfolio level

- Reduce carbon intensity as measured by WACI by X% by 2025 and by Y% by 2030 versus 2021 base year
- Reduce exposure to fossil fuels by X% by 2025 and by Y% by 2030 versus 2021 base year
- Invest at least X% of the Fund's portfolio in climate solutions (e.g. renewable infrastructure, green bonds, companies with >90% revenues from climate change activities) by 2030

Asset class level

- Review all of the Fund's existing mandates in the context of the net zero target
- In particular, review growth portfolio (equities) later this year to identify climate-focussed alternatives
- An engagement goal to ensure that assets accounting for X% of emissions in material sectors are net zero, aligned to net zero, or are the subject of appropriate engagement action (threshold to increase over time)

Targets to be refined and agreed



Next steps





Developing the Fund's climate ambitions

- Agreed in February:
 - 1. Agree climate metrics set out in this paper
 - 2. Expand climate metrics to include forward looking metrics
 - 3. Consider baseline carbon position
 - 4. Consider preferred net zero target date
- Looking ahead:
 - 1. Set initial targets (short, medium and long-term) consistent with target date
 - 2. Review Responsible Investment beliefs
 - 3. Develop framework to support climate ambitions

Framework will support decisions taken on capital allocation and focus areas for ongoing engagement



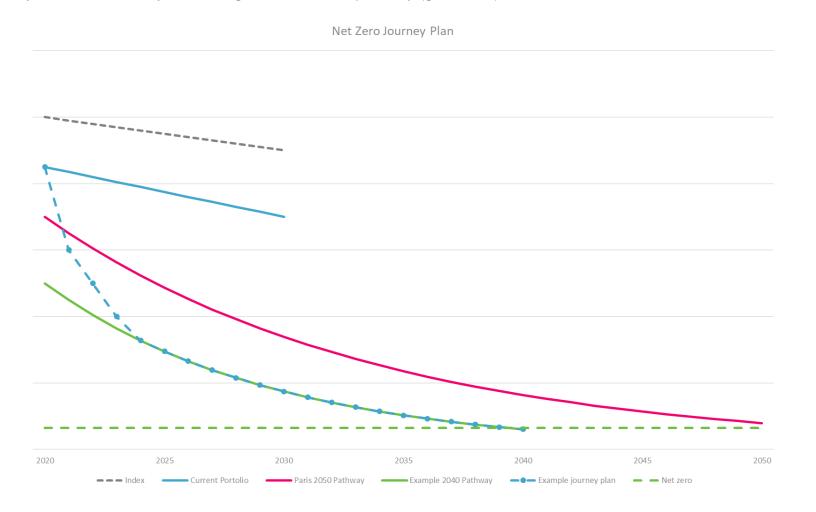


Appendix



Net zero journey plan – illustration only

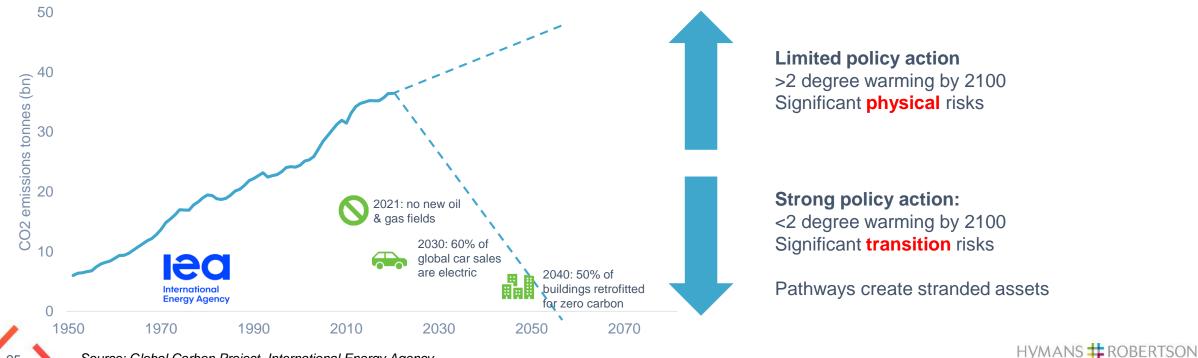
• The following graph sets out an illustrative journey plan for the Fund. The pink line shows the Paris pathway, targeting net zero by 2050 and the green dotted line illustrates the net zero target. For the Fund to achieve its net zero objective by 2040, it would need to reduce portfolio emissions (blue line) significantly over the next 10 years to align with the 2040 pathway (green line).





Net zero and the impact of policy

- "Net zero" means reaching a state of the world where there is a balance between the greenhouse gases human activity discharges into the atmosphere and the emissions that can be safely absorbed by natural processes or which are otherwise removed. Policy pathways towards net zero will determine the nature of the climate risks faced by asset owners.
- As shown in the chart below, carbon emissions have rapidly increased in the last 70 years and the change required to achieve net zero is huge, and is therefore likely to be a key driver of risk and return in future.



Source: Global Carbon Project, International Energy Agency

Key climate risks

Physical risks

- Direct effects from the climate itself.
- E.g. in short-term, damage to property and business disruption due to extreme weather events.
- E.g. in long-term, changing rainfall patterns affecting agricultural yield and local workforce availability.

Transition risks

- Risks associated with the transition to a low carbon economy.
- Could materially reduce value of, or income generated by, assets.
- e.g. "stranded assets" where a company/sector is unable to extract value from an asset due to restrictions on its activities leading to a collapse in its value.

Liability risks

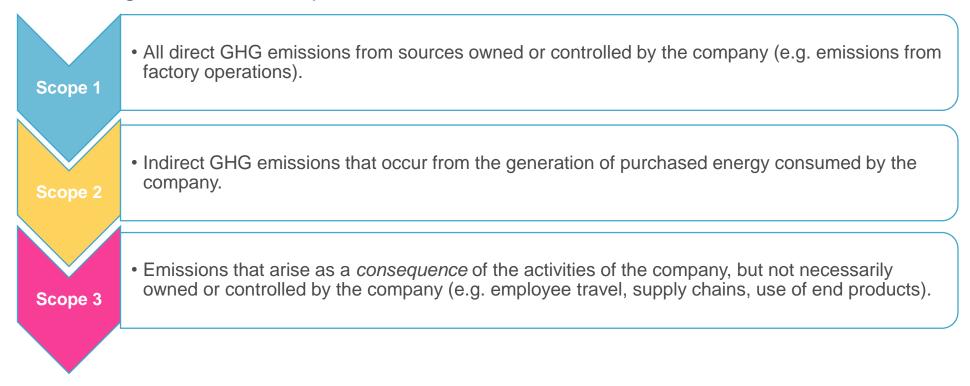
- Where third parties have suffered damage or losses and seek compensation.
- E.g. lawsuits filed against oil companies for historical failure to acknowledge climate risks to its business.

Climate change poses significant risks and could have a material impact on the Fund's investments



What are Scope 1, 2 and 3 Emissions?

• When considering the emissions of a given company, greenhouse gas (GHG) emissions are categorised into 3 scopes:



• Scope 3 emissions are more difficult to measure: there is a risk of double-counting.





Sustainable Development Goals

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• The Sustainable Development Goals are a collection of 17 interlinked global goals designed to "achieve a better and more sustainable future for all". These were set up in 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030.



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