THE ITB PENSION FUNDS **CLIMATE CHANGE REPORT** YEAR ENDING 31 MARCH 2022



INTRODUCTION FROM NEWELL MCGUINESS, CHAIR, THE ITB PENSION FUNDS



C limate change is a real and present issue affecting our lives. I am sure it is a topic of concern for many of the Funds' members, so I am pleased to publish this first annual report which provides detailed information about the Trustees' activities in this area.

The Trustees consider environmental, social and governance factors when taking decisions on the management of the Funds, and this includes consideration of climate change and the impact it could have on the smooth-running of the Funds. Climate change will have significant effects on our society, economy and financial system over the coming years and decades. It is important that we take appropriate steps to protect the Funds from these effects, as far as we can.

CLIMATE CHANGE REPORTING IS A LEGAL REQUIREMENT

Following a change in the law in 2021, the Trustees are required to publish annual climate change reports. This is our first report, and it follows the relevant legislation and guidance, most importantly the disclosures recommended by the Task Force on Climate-Related Financial Disclosures (TCFD).

UNDERSTANDING THE RISKS AND OPPORTUNITIES POSED BY CLIMATE CHANGE

The Trustees have been especially busy over the past year, working to increase our understanding of how climate change might affect the Funds and make sure that we are managing the risks and opportunities, with the aim of achieving better financial outcomes for our members. We have been supported in this by the Funds' advisers, as well as the investment managers who invest the Funds' assets on our behalf. One of the first things we did was to agree a set of Climate Related Risk Beliefs and publish these on the Funds' website www.itb-online.co.uk. The beliefs are the background against which decisions about investment strategy can be made. The Trustees have set out clear roles and responsibilities, so that climate change is considered appropriately whenever decisions about the Funds are taken. We established a Climate Chanae Risk Working Party, under the leadership of a Trustee, to ensure compliance with the new guidance and that the Funds are taking the most appropriate approach to managing climate risks for the circumstances of the Funds.

THE RISKS AND OPPORTUNITIES FACED BY THE FUNDS

The Funds face risks and opportunities from both the physical effects of changes in the climate itself - for example, more frequent storms, rising temperatures and changing rainfall patterns - and from the effects of transitioning to a lower carbon economy to limit the extent of climate change – for example, government policies to restrict or discourage the use of fossil fuels, technological advances in renewable energy, and increased customer demand for "green" products.

We have carried out scenario modelling to understand how the Funds might be affected by these issues. The Funds' Defined Benefit ("DB") sections mostly invest in low-risk assets which should be resilient to climate chanae. Nonetheless, the Trustees have identified that climate change could result in lower investment returns, especially in the Defined Contribution ("DC") Section which invests largely in equity funds, and higher volatility in investment markets. This highlights the importance of appointing investment managers who have the right skills and processes to properly allow for climate change in their decisions.

MANAGING OUR INVESTMENT RISK

To help mitigate the risks posed by climate change, the Trustees switched the global equity allocation in the DC and Additional Voluntary Contribution ("AVC") lifestyle investment strategies to a low carbon equity fund during the year. This fund has lower exposures to companies with high levels of carbon dioxide emissions and may not have any exposure at all to the worst polluting companies (e.g. coal miners). Its investment objective is to reduce carbon emissions exposure by 70% compared to a standard market weighted index benchmark, and over time to reduce the exposure further. The Trustees also decided to take the same action with the equity allocations within the DB investment strategies and this was implemented soon after the year-end.

The Working Party has also assessed the Funds' investment managers' approach to managing climate-related risks and found that they are all taking action to address the potential impact of these risks on our investments, although all have room to improve. This is unsurprising because this is a relatively new and challenging area for most investors. We are encouraging our investment managers to address any weaknesses we identified and are setting ambitious expectations for them to improve. One area of focus in our conversations with the managers is improving the quality of climate-related data for the Funds' assets, to give better visibility of the risks and ensure the managers have the information they need to manage them. We also expect our investment managers to use their influence to encourage the companies they invest in to operate in a way that supports the transition to a low carbon economy.

UNDERSTANDING THE IMPLICATIONS FOR OUR PARTICIPATING EMPLOYERS

The Trustees have also considered how the Funds' participating employers might be impacted by climate-related issues and how this might affect their ability to support the Funds. All entities will be affected to some extent, and the economy will suffer significant damage in the long term if temperatures continue to rise. However, in the shorter term, the participating employers, which are all training providers, are unlikely to be particularly at risk.

METRICS AND A TARGET

The Trustees have agreed metrics to monitor climate related risk and have requested the Funds' investment managers to target by 2030 that at least 75% of listed equity and corporate bond investments have a greenhouse gas emission reduction target

which is accredited by the Science Based Targets initiative ("SBTi"). This will enable the Trustees to assess the extent to which the Funds' equity and corporate bond investments are aligned to the Paris Agreement goal of limiting global average temperature rises to 1.5°C above pre-industrial levels. SBTi is a partnership between the Carbon Disclosure Project (CDP), the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). As at 31 March 2022 the proportion of companies within the Funds' equity and corporate bond investments that have set SBTi targets stands at 30% for the Open Fund DB Section, 25% for the Open Fund DC Section and 36% for the Closed Fund.

The Trustees have only set metrics and a target for the DB sections' listed equity and corporate bond investments as the other investments - government bonds, derivatives and buy-in insurance policies - do not have the relevant data available. The metrics and targets also only relate to the popular DC funds, although 95% of DC funds by value are covered by the metrics and target. The Trustees are making every effort to obtain sufficient data on the assets currently excluded from the metrics and target.

IN SUMMARY

Overall, the Trustees believe that the Funds are relatively well positioned for the risks arising from climate change and to benefit from investment opportunities that the transition to a lower carbon economy might bring. Climate change continues to be a focus for us, and I look forward to providing a further update next year.

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Newell McGuiness, Chair, The ITB Pension Funds

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EXECUTIVE SUMMARY

This report describes the activities and approach taken by the Trustees to understand and reduce the risks to the Funds related to climate change. It also documents the metrics and target set by the Trustees to monitor and reduce exposure to climate-related risks over time. The following points are a summary of the detailed report that follows:

- The Trustees have agreed a set of Climate Related Risk Beliefs and issued a Statement on Governance of Climate Change Risks and Opportunities. These formal statements form part of the governance framework over climate related risk. The beliefs are the background against which decisions about investment strategy can be made.
- A significant amount of training has been undertaken by the Trustees and more detailed training by the Investment Committee and Climate Change Risk Working Party.
- The Trustees have identified risks and opportunities to the Funds arising from physical changes to the climate itself and from steps being taken to limit climate change.
- The Trustees have carried out scenario analysis to consider how these risks and opportunities might affect the funding strategy, investment strategy and the sponsoring employers' covenants.
- The investment managers' ability to protect the Funds' assets from climate change has been assessed and the Trustees are encouraging them to enhance their approach where appropriate.
- During the year the Trustees have invested in a low carbon equity fund in the Open Fund DC Section and decided to do the same for the Open Fund

DB Section and the Closed DB Fund. These low carbon equity funds target reduced carbon emissions exposure compared to a standard global equity fund benchmark.

- The Trustees have updated the Funds' risk management processes to include more explicit consideration of risks related to climate change.
- Initial data on the Funds' assets' exposure to greenhouse gas emissions has been collected to help the Trustees understand and monitor these risks, although we believe better quality and scope of data will develop and be available in the future.
- The Trustees have agreed greenhouse gas emissions and target setting metrics to monitor climate related risk and have set the investment managers a target of 75% of listed equity and corporate bond investments to have set greenhouse gas emissions reduction targets in line with the Science Based Targets initiative (SBTi) by 2030.
- As at 31 March 2022 this proportion stands at 30% for the Open Fund DB Section, 25% for the Open Fund DC Section and 36% for the Closed Fund.
- Metrics and a target have so far only been set as far as the Trustees are able - i.e. for assets for which the relevant data is available which are the DB sections' listed equity and corporate bond investments and the popular DC funds. The other DB investments - government bonds, derivatives and buy-in insurance policies - do not have the relevant data available. 95% of the DC funds by value are covered by the metrics and target. The Trustees are making every effort to obtain sufficient data on the assets currently excluded from the metrics and target.

1. CONTEXT FOR THE REPORT

The ITB Pension Funds is a nonassociated multi-employer pension scheme providing retirement benefits for employees of two Industry Training Boards and five successor bodies. Climate-related risks and opportunities have the potential to impact the Fund's investments, sponsoring employers and funding position. Identifying, assessing and managing them is a strategic priority for the Funds and, therefore, the Funds' Trustees (the "Trustees") have established a dedicated Climate Change Risk Working Party ("Working Party"), which reports to the Investment Committee, and has support from the Trustees' secretariat (the "Funds Office") and the Trustees' external advisers. The Working Party is responsible for carrying out a project to ensure compliance with the requirements of legislation and guidance to act on climate-related risks.

The Trustees' focus on climate change risk mitigation, adaptation to the physical effects of climate change, and the successful transition to a low-carbon economy plays an important role in how investments are managed in all three sections of the Funds - the Open Fund DB Section, the Open Fund DC Section and the Closed Fund. As a result of this activity, the Trustees have switched the DC and AVC lifestyle strategy equity allocation, including the default arrangement, from a broad market value index-based fund to a low carbon-based fund and have decided to do the same for the DB Sections' equity investments.

The Taskforce on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board in 2015 to develop a set of recommendations for climaterelated financial risk disclosures for use by companies, financial institutions and other organisations. The recommendations aim to encourage routine consideration of the effects of climate change in business and investment decisions, helping smooth the transition to a more sustainable, low-carbon economy. This is the Trustees' first statutory climate change report, covering the Funds' activities between 1 April 2021 to 31 March 2022, based on the TCFD's recommendations. This report covers the TCFD's four thematic areas and the eleven recommended disclosures:

- Governance: The Funds' governance around climaterelated risks and opportunities:
 - The Trustees' oversight of climate-related risks and opportunities
 - The Trustees' role in assessing and managing climate-related risks and opportunities
- Strategy: The actual and potential impacts of climaterelated risks and opportunities on the Funds and its investment and funding strategy:
 - Climate-related risks and opportunities the Funds have identified over the short, medium and long term
 - Impact of climate-related risks and opportunities on the Funds strategy
 - Resilience of the Funds' strategy, taking into consideration different climaterelated scenarios, including a 2C or lower scenario
- Risk Management: The processes used by the Funds to identify, assess, and manage climate-related risks:
 - Funds' processes for identifying and assessing climate-related risks
 - Funds' processes for managing climate-related risks
 - How processes for identifying, assessing and managing climate-related risks are integrated into the Funds overall risk management
- Metrics and Targets: The metrics and targets used to assess and manage relevant

climate-related risks and opportunities:

- Metrics used by the Funds to assess the climate-related risks and opportunities in line with its strategy and risk management process
- Scope 1, Scope 2 and Scope
 3 greenhouse gas (GHG)
 emissions and the related risks
 greenhouse gas emissions are
 explained in Appendix 1
- Target used by the Funds to manage climate-related risks and opportunities and performance against targets

2. GOVERNANCE

2.1 THE TRUSTEES' OVERSIGHT OF CLIMATE-RELATED RISKS AND OPPORTUNITIES

The ITB Pension Funds Trustees (the "Trustees") have primary responsibility for ensuring effective governance of climate change risks and opportunities in relation to The ITB Pension Funds (the "Funds").

Climate change is a financially material factor for the Funds, therefore the Trustees have allocated substantial time and resources to the governance of climate-related risks. Climate change represents a systemic risk to society, the economy and the financial system, although the transition to a low-carbon economy also presents opportunities. These risks and opportunities have the potential to impact the Fund's investments, sponsoring employers and funding position. The Trustees have made climate change a strategic priority and consistent with this, climate change featured strongly on the Trustee Board's quarterly meeting agendas throughout the year to 31 March 2022. The Trustee Board has established a dedicated Climate Change Risk Working Party ("Working Party") led by a Trustee, which reports to the Investment Committee each quarter, and has support from the Trustees' secretariat (the "Funds Office")

and the Trustees' external advisers. The Working Party is responsible for carrying out a project to ensure compliance with the requirements of legislation and guidance and to act on mitigating the impact of climaterelated risks and consider any climate-related opportunities that are consistent with the investment objectives and strategy of the Funds.

The Trustees have established a set of Climate Related Risk Beliefs by gathering together opinions from all the Trustees, following a training and discussion session, and distilling these opinions down to a set of cohesive beliefs agreed by all the Trustees. The Trustees' statement on Climate Related Risk Beliefs is available on the Funds' website www.itb-online.co.uk.

2.2 THE TRUSTEES' ROLE IN ASSESSING AND MANAGING CLIMATE-RELATED RISKS AND OPPORTUNITIES

In September 2021, the Trustees agreed a Climate Governance Statement which clearly lays out the roles and responsibilities of the Trustees, the Scheme Actuary, the investment adviser, the covenant adviser, the legal adviser and the investment managers in order to ensure appropriate consideration of the climate-related risks and opportunities relevant to the Funds and so that the Trustees can be confident that their statutory and fiduciary obligations are being met. The Statement on Governance of Climate Change Risks and Opportunities is available on the Funds' website www.itb-online.co.uk and will be reviewed annually by the Trustees to ensure it reflects the latest climate change governance and reporting requirements.

The Trustees have ultimate responsibility for ensuring effective governance of climate change risks and opportunities in relation to the Funds. The detailed work necessary to ensure effective governance is done by the Working Party, which is led by a Trustee with support from the Trustees' advisers and the Funds Office. The Working Party met seven times during the year and reports through the Investment Committee to the Trustee Board.

The Trustees' primary role is to oversee the identification, assessment and management of climate-related risks and opportunities that are relevant to the Funds. The processes the Trustees have established to satisfy themselves that adequate steps are being taken to oversee climaterelated risk and opportunities are set out below.

To ensure, at the very least, the Trustees are compliant with the Climate Change Governance and Reporting Regulations 2021 and related statutory guidance, the Working Party performed a gap analysis to identify areas where changes were necessary for the Funds to become compliant. A project plan was also established in line with the statutory guidance issued by the Pensions Climate Risk Industry Group (PCRIG). As a result, action was taken to enhance the established governance processes.

The Trustees are supported by advisers in incorporating climate change throughout the Funds' activities as appropriate. The Funds' investment adviser leads on climate-related risk training and has advised on scenario analysis, impact on investment strategy, metrics and selection of an appropriate target. The Funds' actuarial adviser leads on climaterelated matters in relation to advice about funding strategy and the covenant adviser has assessed the impact of climate-related risk on the strength of covenant provided by the participating employers. The legal adviser assists the Trustees to identify and interpret the legislation relevant to the Funds. All advisers work collaboratively with the other advisers wherever this is needed to ensure an integrated approach.

The investment advisers attended all climate change Investment Committee agenda items, with the actuarial, legal and covenant advisers also advising the Trustee Board on relevant aspects, to ensure that the Trustees were fully informed in their discussions and decision making in all climaterelated aspects of investment, funding, legal and covenant issues. The Trustees review, discuss and, where appropriate, challenge the information and advice they receive.

The Trustees have assessed the knowledge and understanding of climate related risks of the investment adviser, which summarised its expertise for the Trustees in a comprehensive document. This set out expertise under the headings of climate expertise and commitment, individual consultant climate expertise, tools and software, thought leadership and policy advocacy and assessment of investment managers and engagement with them. The investment advisers were able to demonstrate they are amongst the market leaders in advising on climate relate risk and opportunities. Furthermore, the Trustees have set climate-related risk objectives for the investment adviser, and its performance against these is assessed formally by the Investment Committee as part of a wider annual review, the outcome of which is reported to the Competition and Markets Authority.

The Trustees' Chair is responsible for ensuring that sufficient time is allocated for consideration and discussion of climate matters by the Trustees and by the Investment Committee and that the Working Party meets sufficiently frequently. The Chair allocated time at each of the quarterly Board and Investment Committee meetings to discuss climate change related risks, with additional discussion of proposed climate-related changes to the Funds' risk management documents at the Management Panel meeting in March 2022. The Management Panel is a sub-committee of Trustees that carries out on behalf of the Trustees research, investigation and monitoring of non-investment matters. This time allocation allowed plenty of time for discussion by the Trustees while balancing climate change with other Ð Funds priorities such as the triennial valuation of the Closed Fund and the response to the Covid pandemic.

As climate change is a relatively new area for the Trustees, and one where the external landscape and market practice is evolving rapidly, the Trustees have received comprehensive training in climate related risk and opportunities and regulations from the investment and legal advisers. An initial comprehensive training session for the Working Party and Investment Committee was undertaken in May 2021 by the investment advisers and an equivalent session for the Trustee Board in the Trustees Away Day Seminar in July 2021. This training included an introduction to the relevant legislation, the different types of climate risks and greenhouse gas emission metrics, how climate related risk beliefs could be developed, the impact of climate change on pension funds, TCFD reporting and the governance, investment strategy, scenario analysis, risk management and metrics and target requirements. In August 2021 training was received on the most recent climate outlook and potential impact on pension funds, modelling of the Funds' investments under a range of climate scenarios and actions to consider in light of the modelling results. In November 2021, dashboards were considered showing the climate characteristics of the funds invested in and further training was received on setting metrics. In February 2022, the Trustees received training on setting metrics and a suitable target to improve at least one of the metrics. In addition the legal advisers presented sessions on the Pensions Act 2021 both in January 2021 and in April 2022, which included training on the requirements for Trustee Boards to manage climate related risks. The Funds Office senior management attend meetings of the Working Party, the Investment Committee, Management Panel and the Trustee Board and have, therefore, received all the training provided to the Trustees. The Trustees have an

ongoing commitment to training and training on climate-related risks and opportunities will form a significant component of that in the future.

The Trustees receive an extensive set of reports regularly in relation to climate risks and opportunities. Each guarter the Investment Committee receives reports from the investment managers which include commentary and data on exposure to climate related risks. The Investment Committee reviews, discusses and challenges this information with the investment managers, if necessary. The investment adviser produces annual dashboards for each of the managers' funds which show their greenhouse gas emissions and carbon footprint, the potential emissions from fossil fuel reserves, climate change revenues and the percentage of each fund with SBTi accredited emission reduction targets.

In addition, the Trustees receive a quarterly report on the strength of the covenants of the participating employers which includes an assessment of the impact of climaterelated risk on the participating employers' businesses.

At least annually, the Trustees review and (where appropriate) revise their governance arrangements, investment beliefs and policies in relation to climate change. Typically, once a year, the Investment Committee also reviews reports on the investment managers' climate practices and data on climaterelated metrics.

At least once every three years, the Investment Committee will review the results of the scenario analysis that illustrates how the Funds' assets and liabilities might be affected under various climate change scenarios, along with commentary on the potential impacts for the sponsoring employers and the implications for the resilience of the Funds' funding and investment strategies. It did this for the first time in 2021. The Trustees will in future consider climate-related risks and opportunities whenever there is an actuarial valuation of

the Funds' DB sections, a review of the Funds' investment strategies or an assessment of the sponsoring employers' covenant. As the Trustees do not expect the DB sections' investment strategy will change significantly, currently a three-year cycle for the scenario analysis report is considered appropriate. The DC funds, including the default fund, are reviewed at least every three years to ensure that they remain appropriate for the membership. The climate scenario analysis report for the DC funds will be run at the same time as the DC investment strategy review.

In future, whenever the Trustees review agreements with external advisers or appoint new advisers, they will consider including climate-related objectives and responsibilities in the agreements.

3. STRATEGY

3.1 CLIMATE-RELATED RISKS AND OPPORTUNITIES THE FUNDS HAVE IDENTIFIED OVER THE SHORT, MEDIUM AND LONG TERM

The Trustees have selected the periods to 2024, 2028 and 2045 as suitable short-, medium-, and longterm time horizons for considering the climate-related risks and opportunities faced by the Open Fund DB Section. For the DC Section 2026, 2040 and 2060 have been identified as suitable time horizons. The Trustees have not identified time horizons for the Closed DB Fund as it is fully insured and, therefore, in all climate change scenarios the risks of members not receiving their pensions is very low. The invested assets include a significant allocation to listed equity and corporate bonds and the Trustees will monitor climate related risks for those assets. The Trustees will also engage with the buy-in provider about its exposure to climate related risks and as previously explained, as there is not sufficient data the metrics and target do not apply to buy-in policies.

		Open DB Fund		Open DC Section
TIME PERIOD	RANGE	RATIONALE	RANGE	RATIONALE
Short Term	2 years (to 2024)	Possible risks and opportunities are expected to arise from the transition to a low carbon economy under the Paris Orderly scenario (See table on p12).	4 years (to 2026)	Although older members have a relatively short time until retirement, climate scenario impacts are most prominent for equities. Most DC members are in the default fund, in which the equity allocation reduces towards retirement. A 4-year timeframe reflects when the impacts from climate change may start to be more widely experienced across the DC membership.
Medium Term	6 years (to 2028)	Possible risks and opportunities are expected to arise from the transition to a low carbon economy under the Paris Disorderly scenario (See table on p12). This can also impact insurer pricing and potentially delay the target date for buy-out in 2028.	18 years (to 2040)	With longer time to retirement and higher equity allocation, middle-aged members have larger impacts than older members under a Failed Transition scenario (See table on p12). Members whose equities are invested in low carbon funds will have some compensating protection.
Long Term	g Term 23 years (to 2045) Consistent with the duration of the uninsured liabilities. Given the Trustees aim to fully insure the DB section by 2028 the impact of climate risks over th longer-term is likely to be minimal if the Trustees have achieved their target over the medium term.		38 years (to 2060)	The impact is more significant for younger members, reflecting the longer time horizon to retirement.

The Funds face risks and opportunities from both the physical effects of changes in the climate itself - for example, more frequent storms, rising temperatures and changing rainfall patterns - and from the effects of transitioning to a lower carbon economy to limit the extent of climate change - for example, government policies to restrict or discourage the use of fossil fuels, technological advances in renewable energy, and shifts in consumer demand towards "greener" products.

Many of these climate-related risks and opportunities could affect the value of the Funds' assets. Others could affect the sponsors and their ability to provide financial support to the Funds. Some risks and opportunities may affect the Open Fund DB section's pension liabilities, for example through affecting members' life expectancy or the inflationary increases made to pensions each year. Taken together, and if not sufficiently managed, these risks and opportunities may affect the adequacy of the Open Fund DB section's assets to pay the promised benefits, changing the extent to which the Fund needs

the sponsors' financial support. The Trustees have the Long-Term Funding Objective to fully secure the Open Fund DB section benefits through an insurance company "buy-out" contract by 2028. Climate change could throw this plan off track, or potentially accelerate it. The liabilities in the Closed Fund are fully insured, therefore, the risk to Closed Fund members not receiving their pensions is very low. However, the Trustees will engage with the buy-in insurance provider about its exposure to climate related risks.

The Trustees have considered three main areas of risk to the Funds' financial position:

- Climate change reduces the chance of achieving the longterm funding objective (Open Fund DB Section)
- Climate change diminishes members funds at retirement (DC Section)
- **3.** Climate change weakens the strength of employers' covenant

These areas are considered in turn below. Risks 1 and 2, that apply separately to the Open Fund DB Section and DC Section, are considered together.

3.1.1 Climate change reduces chance of achieving longterm funding objective (Open Fund DB) and Climate change diminishes members funds at retirement (DC Section)

Through climate scenario analysis, the Trustees identified that the physical impacts of the changing climate and the transition to a low carbon economy could both result in lower real investment returns, linked to lower economic growth. Some of these effects may be felt gradually as the economic impacts occur and others may occur more suddenly as investment markets anticipate the impacts and asset prices adjust accordingly, for example a market shock in reaction to a specific weatherrelated disaster or an unexpected international policy development.

Physical impacts are expected to have a negative economic effect, particularly over the medium to long-term. Even if temperature rises are limited to 1.5°C in line with the Paris Agreement, quite significant physical impacts are likely. In higher temperature scenarios, the long-term impacts on the economy could be very severe, although the risks to the Open Fund DB Section should be mitigated by its low-risk investment strategy under which the value of its assets is expected to move broadly in line with the value of its liabilities under all of the potential climate scenarios considered.

Transition risks in particular could cause volatility in investment markets as the economy undergoes a significant shift in the way energy is generated and consumed and financial markets adjust to these changes. The current decade will be critical in determining whether the Paris Agreement goals will be met, and investment market volatility may be heightened over this period as governments introduce policies to achieve the Agreement's decarbonisation and adaptation goals, and investors continually update their assessments of the likelihood of different climate outcomes

All investment portfolios will be affected by physical and transition impacts to some extent due to their economywide nature. However, the extent of the impacts will depend on how the individual assets in the investment portfolio are affected.

In addition to government bonds and buy-in policies, the investment managers appointed by the Trustees invest in the equity and debt of a range of companies, whose products and services each have varying levels of exposure to climaterelated factors. Investments may be made in companies that are highly exposed to the effects of the transition to a low carbon economy, for example those whose business model is reliant on fossil fuels, and do not have good strategies to deal with those effects. One specific risk is that assets become "stranded", i.e. they suffer an unanticipated loss of value before the end of their expected useful economic life.

For example, companies in the coal, oil and gas sectors may find their fossil fuel reserves are less valuable than expected due to falling demand during the low carbon transition, causing them financial difficulties. Similarly, utility companies may lose value if thermal coal power stations are shut down earlier than expected.

There are also opportunities to invest in companies whose products and services enable emissions reductions, improve physical resilience or ensure the more efficient use of resources, or are simply managing the low carbon transition well. These companies also have various levels of exposure to climaterelated physical risks. For example, companies in the food and textile sector are likely to be affected by changing weather patterns' effect on crop yields, and all companies may experience weather-related disruption to their supply chain. The DC equity funds within the lifestyle options, including the default option, have been switched to low carbon funds, where the investment manager 'tilts' the investments relative to market weighted indices towards companies that manage exposure to carbon (e.g. fossil fuels) well compared with the market weighted index. The Trustees have also decided to switch equity allocations within the DB investment strategies to low carbon funds and these changes were implemented soon after the year-end.

The balance of risks and opportunities to the Funds' assets will depend on the specific assets selected by the investment managers, which in turn will depend on the effectiveness of the managers' processes to identify, assess and manage climaterelated risks and opportunities.

For self-select DC members the risks and opportunities also depend on the range of funds the Trustees make available, and which funds the members choose to invest in.

Risks relating to lack of data

There is a risk that the Funds' investment managers do not have adequate data to identify, assess and manage climate factors, both in terms of coverage and quality. Any missing or incomplete data leaves the Trustees without the information they require to properly monitor climate risks the Funds are exposed to.

In relation to carbon emissions, lower quality data is less likely to accurately reflect the company's actual emissions and so may give a misleading impression of the climate risk exposure. If the data available for a company improves and reveals very different emissions figures from those previously used, the price of the company's shares and bonds may change, impacting on the value of the Funds' assets. This repricing could happen quickly and remains a risk while data quality is poor.

The Trustees found that sourcing adequate data was somewhat problematic for the Funds' buy-in insurance policies. The buy-in insurance policy providers are expected to invest their assets in corporate and government debt and private holdings. However, the insurers' emissions calculations largely consider corporate debt only and have excluded government absolute emissions calculations as part of their metrics. This methodology differs from DWP guidance. However, as explained above the Trustees are not proposing to monitor metrics, or a target related to buy-in policies, therefore the quality of data for buy-in policies is not considered critical to the action the Trustees can take in relation to mitigating climate-related risks.

3.1.2 Climate change weakens the strength of employers' covenant

In June 2021, the covenant adviser gave advice covering:

- The participating employers' governance around climaterelated risks and opportunities
- The main climate-related risks faced by the participating employers over the short, medium and long-term
- How the participating employers identify, access the impact and likelihood and mitigate these risks
- The climate-related risks that might affect the participating

employers' viability over the long-term, and

 How the participating employers seek to achieve a resilient business model which is robust to a wide range of potential climate scenarios.

In recognition of the feedback received from the participating employers, the covenant adviser believed it reasonable to conclude that the exposure to climate-related risks across the participating employers does not pose a material risk to the overall strength of the collective covenant. However, it recommended that climate-related risk is monitored on an ongoing basis with annual updates sought from each of the employers.

The adviser concluded that the main climate related risks facing the employers fell into two categories (i) those that impact upon the training industry and therefore impact the employer and (ii) those that directly impact on the employer's operations.

In relation to industry risks, these are considered to be more longterm and will revolve around the impact of Net Zero legislation and future legislation to combat climate change e.g. rising temperatures, etc. Employers will therefore need to ensure that training provision is appropriate to meet industry demands by adapting current training products to meet evolving challenges. This will undoubtedly create new opportunities for employers.

In relation to operations, the adviser identified that employers need to adopt climate friendly processes - e.g. remote working, less face-to-face training leading to reduced travel and hotel usage, etc. It was recognised that the impact of the Covid pandemic had already started this process with all employers having moved to agile working (e.g. working from home). Furthermore, employers are introducing new standards and courses to reflect best practice from an environmental perspective e.g. e-learning. Operational risk is viewed as short to mediumterm and will evolve as employers

develop their processes to better reflect climate related risks.

3.2 IMPACT OF CLIMATE-RELATED RISKS AND OPPORTUNITIES ON THE FUNDS' STRATEGY

The impact of climate-related risks and opportunities on the DB Funds' strategy has been assessed against the background of the integrated risk management approach common to pension schemes and the Trustees' climate related risks beliefs. This approach integrates three elements - funding strategy, investment strategy and strength of covenant. As to funding strategy, both the DB Funds are well funded on prudent bases.

The Open DB Fund's latest triennial valuation as at 31 March 2019 showed the Fund to be 104% funded on a prudent basis which includes a provision for potential costs relating to climate-related risks, whereas the Closed DB Fund's latest triennial valuation as at 31 March 2021 showed the Fund to be 221% funded on a prudent basis. The investment strategy for the Open DB Fund is low risk and the Fund is viewed as being "selfsufficient" - i.e. it is considered that there is only a small risk that the Open Fund would require additional contributions as a result of adverse market circumstances or because of better than assumed mortality experience. The investment strategy of the Closed DB Fund is also low risk and all pensions are insured. The investment strategy for the invested assets aims to achieve low volatility of the assets relative to annuity pricing. The covenant adviser assesses the overall strength of the combined covenants of the Open Fund's participating employers.

Therefore, as regards the DB Sections the impact of climaterelated risks is assessed against this background. The impact of climate-related risks has been fully considered and assessed (see section 3.3 below) and the Trustees believe the DB Sections are well placed to deal with the risks presented. The DC Section of the Funds is a master trust and complies with the regulatory regime as regards master trusts. This includes demonstrating the financial sustainability of the trust and reserving for costs of wind-up, if ever that should be necessary, to protect the benefits of members. The impact of climate-related risks on the DC Section is assessed against this background. The impact of climate-related risks has been fully considered and assessed for the DC Funds (see section 3.3 below) and as a result the Trustees believe that the DC Funds are exposed to potential negative outcomes as a result of climate related-risks in certain scenarios. The Trustees strategy in this regard is to monitor the impact of these risks to ensure action is taken appropriately. The investment strategy of the DC Funds is reviewed periodically, and climate risk scenario analysis will be part of this review in future. The Trustees wish to balance the need for long-term growth of the DC Funds with managing risks, including climate-related risks. At the most recent review the Trustees decided to reallocate the equity allocation in the lifestyle funds, including the default fund, from market weighted indices to low carbon equity funds.

3.3 RESILIENCE OF THE FUNDS' STRATEGY, TAKING INTO CONSIDERATION DIFFERENT CLIMATE-RELATED SCENARIOS

The Trustees assessed the risks and opportunities they had identified using two main tools: climate scenario analysis and climate-related metrics. The first one is covered in this section and the second in section 5.

3.3.1 Climate scenario analysis

Scenario analysis is a tool for examining and evaluating different ways in which the future may unfold. At the August 2021 Investment Committee meeting the Trustees used scenario analysis as at 31 March 2021 to consider how climate change might affect the funding strategy

(11)

and the investment strategy. For information about the modelling approach, see Appendix 2.

The three climate scenarios considered were as follows:

- Failed Transition: Paris Agreement goal to limit temperature rises to well below 2°C not met; only existing climate policies are implemented
- Paris Orderly Transition: temperature rises limited to well below 2°C; rapid and effective

climate action to reduce greenhouse gas emissions, with smooth reaction by financial markets

 Paris Disorderly Transition: same policy, climate and emissions outcomes as the Paris Orderly Transition, but financial markets are initially slow to react and then over-react.

To provide further insight, the Trustees compared the outputs under each scenario to a "climate uninformed base case", that makes no allowance for either changing physical or transition risks in future.

The scenarios' key features are summarised in the table below. The three climate scenarios chosen are intended to be plausible, not "worst case". The Trustees acknowledge that many alternative plausible scenarios exist and that other scenarios could indicate better or worse outcomes for the Funds.

Scenarios	Failed Transition	Paris Orderly Transition	Paris Disorderly Transition			
LOW CARBON POLICIES	Continuation of current low carbon policies and technology trends	Ambitious low carbon policies, high investment in low- carbon technologies and substitution away from fossil fuels to cleaner energy sources and biofuel				
PARIS AGREEMENT Outcome	Paris Agreement goals not met	Paris Agreement goals met				
GLOBAL WARMING	Average global warming is about 2°C by 2050 and 4°C by 2100, compared to pre-industrial levels	Average global warming stab pre-industrial levels	ilises at around 1.5°C above			
PHYSICAL IMPACTS	Severe physical impacts	Moderate physical impacts				
IMPACT ON GDP	Global GDP is significantly lower than the climate- uninformed scenario in 2100. For example, UK GDP in 2100 predicted to be 55% lower than in the climate uninformed scenario	Global GDP is lower than the climate-uninformed scenario in 2100. For example, UK GDP in 2100 predicted to be about 10% lower than in the climate-uninformed scenario				
FINANCIAL MARKET Impacts	, , ,		Abrupt repricing of assets causes financial market volatility in 2025			

Reasons for the Trustees' choice of scenarios

The Trustees acknowledge that many alternative plausible scenarios exist but found these three were a helpful set of scenarios to explore how climate change might affect the Funds in future.

- The Trustees considered the Failed Transition scenario to explore what could happen to the Funds' finances if carbon emissions continue at current levels and this results in significant physical risks from changes in the global climate that disrupt economic activity.
- The Trustees considered the Paris Orderly Transition to see how
- the Funds' finances could play out if the Paris Agreement goals are achieved, meaning that the economy makes a material shift towards low carbon by 2030.
- The Trustees considered the Paris Disorderly Transition to look at the risks and opportunities for the Funds' if the Paris Agreement goals are met, but financial markets are volatile as they

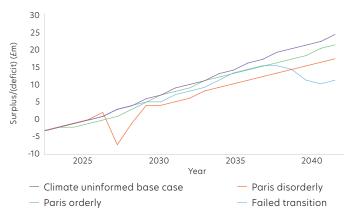
adjust to a low carbon economy.

• To provide further insight, the Trustees also compared the outputs under each scenario to a "climate uninformed base case", that makes no allowance for either changing physical or transition risks in future.

For more information on the modelling approach see Appendix 2.

Potential impacts on the Funds' financial positions under each scenario

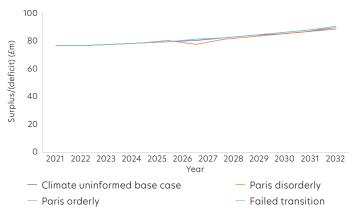
OPEN FUND DB SECTION



The scenario analysis shows that equity and credit spread shock in the mid-2020s under the Paris Disorderly scenario could push the Fund into deficit on the current technical provisions – credit spreads are projected to recover in this scenario with a more permanent rebasing of equity values.

The chart only considers the Fund's finances. When considering whether the Fund will be able to achieve its long-term DB funding target to fully insure the DB section by 2028, the impact of climate risks on insurers is also relevant. In particular, the Trustees considered how climate change risks could affect insurer pricing for securing pension benefits with further buy-ins and ultimately a buy-out insurance policy. A change in insurer pricing levels could have a significant impact on when it will be feasible to secure the remaining uninsured benefits with an insurer. Future insurance pricing is inherently uncertain, so the Trustees will continue to monitor it, especially as they get closer to a possible buy-out transaction.

CLOSED FUND



Whilst the Closed Fund could experience a small shock in the mid-2020s, across the portfolio under the Paris orderly scenario, the majority of the Fund's portfolio is expected to recover in subsequent periods.

OPEN FUND DC SECTION

	MEMBER Aged 25	MEMBER Aged 35	MEMBER Aged 45	MEMBER Aged 55					
	Change relative to climate-uninformed outcome								
CLIMATE- UNINFORMED OUTCOME	0	0	0	0					
PARIS ORDERLY Outcome	-4%	-2%	-1%	-1%					
PARIS Disorderly Outcome	-5%	-3%	-2%	-4%					
FAILED Transition Outcome	-24%	-21%	-16%	-2%					

The failed scenario is the worst outcome for most members (in terms of expected pension pot). A disorderly transition impacts all members but is the worst scenario for members aged over 55.

4. RISK MANAGEMENT

4.1 FUNDS' TOOLS AND PROCESSES FOR IDENTIFYING AND ASSESSING CLIMATE-RELATED RISKS

The Trustees have identified and assessed climaterelated risks and opportunities to the Funds through discussions with its advisers, along with:

- Attending climate change training to understand how climate-related risks might affect pension schemes and their investments in general terms;
- Commissioning scenario analysis which shows how the Funds' assets and liabilities might be affected under a range of different climate scenarios, and advice on the implications of the analysis for the Funds' funding strategy, investment strategy and achieving its investment objective;
- Receiving advice on how the participating employers might be affected by climate-related factors, and the implications for their ability to provide financial support for the Funds;
- Reviewing the investment adviser's assessments of the Funds' current and prospective investment managers' climate practices, including how they incorporate climate-related factors into their investment process and how effectively they manage climate-related risks; and

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 Monitoring a range of climaterelated metrics in relation to the Funds' assets.

In addition, the Trustees expect the investment managers to identify, assess and manage climate-related risks to the Funds' assets on a day-to-day basis. The Investment Committee discusses climate change when it meets investment managers, in order to increase its understanding of the Funds' climate-related risks and test the adequacy of the steps being taken to manage them.

4.2 FUNDS' TOOLS AND PROCESSES FOR MANAGING CLIMATE-RELATED RISKS

Review of investment mandates

If the Investment Committee identifies any concerns with the way one of the investment managers is addressing climaterelated risks and opportunities, it intends to engage with the investment manager – either directly or through the investment adviser – to raise the concerns and seek improvements. If the investment manager does not improve sufficiently, the Trustees will consider switching to a different investment manager.

Equity Funds

The Investment Committee conducted a periodic review of the DC and AVC Funds investment strategy in 2020. As part of this review, the Trustees considered the risks to the investment arrangements arising from climate change.

In order to help address the risks posed by climate change, the Investment Committee switched the global equity allocation in the DC and AVC lifestyle investment strategies to a low carbon equity fund during the year, in order to reduce exposure to companies with high levels of carbon dioxide emissions. Therefore, the lifestyle strategies' allocation to the L&G Global Equity Market Weights 30:70 Index Fund was replaced by the L&G Low Carbon Transition Fund in July 2021. Compared to a standard global equity fund that aims to track a market weighted benchmark, the L&G Low Carbon Transition Fund reduces allocations to companies with high levels of carbon emissions and has slightly higher allocations to companies that pollute less. The worst companies by this measure (e.g. coal miners) may not have any exposure in the fund. The current fund objective is to reduce carbon emissions exposure by 70% compared to a standard global equity fund benchmark, and over time to reduce the exposure further.

In November 2021 the Investment Committee decided to extend the principle of low carbon equity investing to the DB Funds. As a result, soon after the 31 March 2022 year end the entire equity allocation of the Open Fund DB Section was reallocated to the same L&G Low Carbon Transition Fund as invested in by the DC and AVC Funds' lifestyle strategies, and the entire equity allocation of the Closed Fund was reallocated to the BlackRock ACS World Low Carbon Equity Tracker Fund. The benchmark objective of the BlackRock fund is to minimise carbon exposure and exclude companies with exposure to fossil fuels, while achieving a target level of 0.5% tracking error relative to the MSCI World Low Carbon Target Reduced Fossil Fuel Select Index.

Engagement and other stewardship activities

The Trustees expect the Funds' investment managers to engage robustly with investee companies on climate-related (and other) matters. The Trustees generally believe that engaging with companies is more effective at encouraging change than selling the Funds' investments in those companies.

Ideally, investment managers would be engaging with companies to improve the management of climate factors, as well as disclosure of climate-related data. so that the Funds are not exposed to companies that are unprepared for the impacts of climate change or the transition to a low carbon economy. The Trustees also expect the investment managers to increase their influence through engaging in collaboration with other investors and to use policy advocacy to address systemic climate risks. For example, encouraging governments to provide clear policy signals that reduce uncertainty around the low carbon transition and to take stronger action that increases the chance of meeting the Paris Agreement goals and hence reducing the risk that the Funds face significant physical climate risks in the longer term.

The investment adviser assesses investment managers' responsible investment practices and reports its findings to the Investment Committee every two years. The report rates investment managers over their commitment to responsible investment, having senior management accountable for responsible investing, having a distinct and robust ESG investment process and stewardship policies on issues like climate change, fair pay, board responsibilities and diversity. The latest assessment in May 2020 found that one of the investment managers was given the highest rating for responsible investment while the other two were given the second highest rating.

More information on the Trustees' stewardship activities can be found in their Statement of Principles Implementation Statement.

4.3 HOW PROCESSES FOR IDENTIFYING, ASSESSING AND MANAGING CLIMATE-RELATED RISKS ARE INTEGRATED INTO THE FUNDS OVERALL RISK MANAGEMENT

The identification, assessment and management of climate-related risks are integrated into the Funds overall risk management processes. These risks are identified by the Working Party and Investment Committee with the assistance of the investment advisers, covenant advisers and legal advisers and incorporated into the periodic review of the risk register and risk and control framework. Each of the risks, including the climate-related risks, are rated as to potential loss impact and likelihood . There is then an assessment of the effectiveness of preventative and detective risk controls, resulting in an overall residual risk rating. The Funds Office senior management performs quarterly reviews of the risk and control framework, and the Trustees' review and oversight of the risk and controls framework is as follows: the Investment Committee reviews the climate-related risks each year; the Management Panel performs a detailed review of the entire risk and control framework each year and the Trustees also review the framework annually at a higher level. The climate-related risks are fully integrated into this identification, assessment and management process.

5. METRICS AND TARGETS

5.1 METRICS USED BY THE FUNDS TO ASSESS THE CLIMATE-RELATED RISKS AND OPPORTUNITIES IN LINE WITH THE STRATEGY AND RISK MANAGEMENT PROCESS

The investment adviser collected data from the Funds' investment managers for the metrics and presented it to the Investment Committee in November 2021 in a series of dashboards for each fund invested in, along with training on interpretation of each of the metrics. As a result of the discussion at the meeting, the Investment Committee agreed to select, calculate and report on three climate metrics:

- 1. Absolute emissions e.g. tonnes of CO2 (tCO2e)
- Emissions intensity e.g. tonnes of CO2 per £1million invested (tCO2e/£m)
- **3.** A portfolio alignment metric an approved Science Based Targets initiative (SBTi) carbon reduction targets metric. Details of these metrics are as follows:

Metric	Detail
Absolute emissions	This measures a portfolio's total greenhouse gas (GHG) emissions associated with the Funds' assets. It represents the Funds' share of its portfolio companies' emissions if emissions are split between equity and debt investors in proportion to the value of their investment in the company.
Emissions intensity	This is a carbon footprint metric, expressed as the total GHG emissions per £m invested by the scheme (the "carbon footprint"). It is equal to total greenhouse gas emissions divided by the value of the portfolio. As the metric adjusts for the value of the portfolio, it allows emissions exposure of different portfolios to be compared.
Portfolio alignment	This is an emissions reduction target metric, which measures the extent to which the Funds' investments are aligned to the Paris Agreement goal of limiting global average temperature rises to 1.5°C. It is calculated as the proportion of companies with SBTi- accredited targets to reduce their greenhouse gas emissions. The Trustees chose this "binary target" measure because it is the simplest and most robust of the various portfolio alignment metrics available.

The Trustees chose to report these metrics as they are consistent with those which they expect to be required to report under the new legislative requirements.

5.2 SCOPE 1, SCOPE 2 AND SCOPE 3 GREENHOUSE GAS (GHG) EMISSIONS AND THE RELATED RISKS

The metrics for the Funds' investments are shown below, based on the investment fund data available during the financial year to 31 March 2022 - variously 31 July 2021, 31 August 2021 and 30 September 2021.

OPEN FUND – DB SECTION DATA COVERAGE OPEN FUND – DB SECTION Open Fund DB Section asset Asset class Details of missing data allocation 31 March 2022 (% DB assets) or estimations Equities (3%) See Appendix 3 Corporate Credit (9%) Government Calculations are based on Total UK GHG emissions per £ of government bonds and LDI (38%) debt (tons/£m) where Scope 1+2 emissions are calculated on a production basis and Scope 3 emissions are for imports (per DWP guidance). Total UK GHG emissions includes emissions from corporate and household activity as well as government activity. Buy-ins (50%) Buy-in assets are expected to comprise largely public debt (both corporate credit and government) and private holdings. The insurers' emissions calculations largely consider corporate debt only (public & private) and they have excluded aovernment absolute emissions calculations as part of their summarised metrics. This methodology differs to guidance offered by the DWP and calculations for the Fund's other EQUITIES CORPORATE CREDIT gilt-based holdings. Consequently, GOVERNMENT BONDS AND LDI BUY-INS data reported for buy-in assets is not

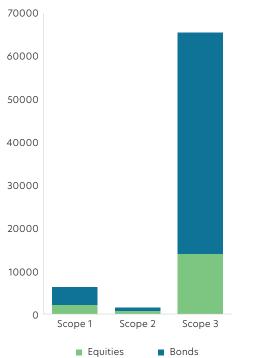
OPEN FUND – DB SECTION METRICS

Manager,	Scope 1 and 2 emissions			Scope 3 emissions			Portfolio	Data	Date of
asset class and valuation (£m)	Coverage (%)	Total GHG emissions (tCO2e)	Carbon footprint (tCO2e/£m)	Coverage (%)	Total GHG emissions (tCO2e)	Carbon footprint (tCO2e/£m)	alignment Proportion with SBTi target (%)	source – See Appendix X	portfolio value and data
Allianz - Global equity (£31m)	99.4	2,174	80	99.4	15,138	556	30.2	MSCI	Value - 31/3/22 Data - 30/9/21
Insight - Corporate credit (£87m)	68.1	3,746	59	66.7	44,245	711	29.9	MSCI	Value - 31/3/22 Data - 30/9/21
Insight - government bonds and LDI (£382m)	N/A	N/A	198	N/A	N/A	136	N/A	N/A	Value - 31/3/22 Data - 30/9/21
PIC – 3 buy- ins (£414m)	N/A	N/A	63	N/A	N/A	238	N/A	N/A	Value - 31/3/22 Data - 31/10/21
Just - buy-in (£88m)	N/A	N/A	57	N/A	N/A	312	N/A	N/A	Value - 31/3/22 Data - 31/10/21

directly comparable with other asset

classes/holdings.

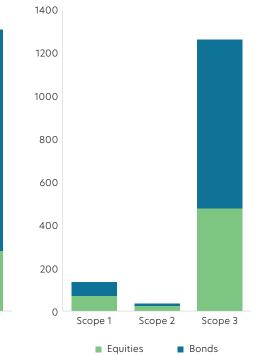
N/A - data not available. The overall impact of the unavailable data is uncertain, and the Funds will continue to work with the investment managers and buy-in providers in future to help make this data available. Certain data ©2022 MSCI ESG Research LLC. Reported by permission. See Appendix 3 for more details.

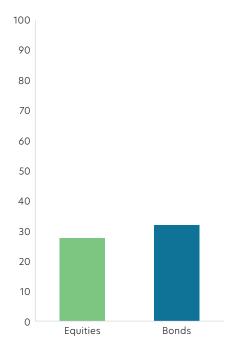


TOTAL GHG EMISSIONS (tCO2e)

CARBON FOOTPRINT (tCO2e/£m)

PROPORTION WITH SBTI TARGETS (%)

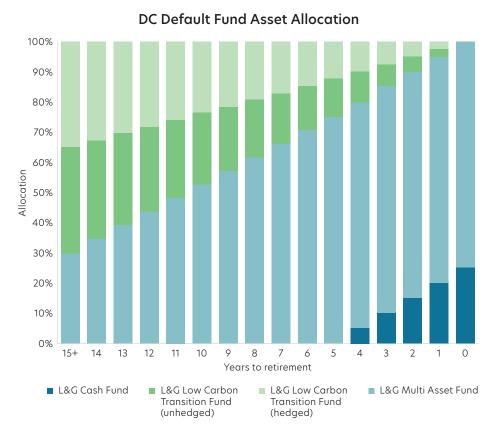




Manager, asset class and valuation (£m)	Scope 1 and 2 emissions coverage	Scope 3 emissions coverage	Emissions targets coverage (SBTi)
Allianz - Equities (31/3/22 - £31m)	Reported Estimated No data	Reported Estimated No data	Yes No or no data
Insight - Corporate credit (31/3/22 - £87m)	 Reported Estimated No data 		Yes No or no data

OPEN FUND – DC SECTION

The majority of DC assets are invested in the default strategy, with the assets allocated depending on members' expected retirement dates, as shown in the chart. As at 31 March 2022 89% of DC assets were invested this way. The other assets are invested in a range of self-select funds. Apart from the Global equity fund which holds 4% of DC assets, the Trustees have not collected metrics for these other assets as it did not feel it was proportionate to do so. This is in line with the guidance issued by the Department for Work and Pensions.



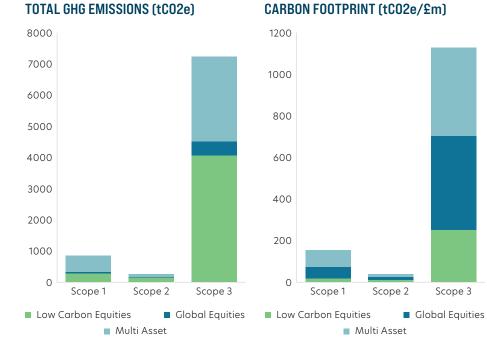
OPEN FUND – DC SECTION DATA COVERAGE

Asset class (% DB assets)	Details of missing data or estimations		
Low carbon equity (47%)	See Appendix 3		
Global equity (4%)			
Multi-asset (44%)			

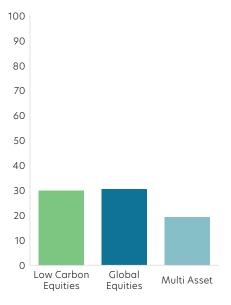
OPEN FUND – DC SECTION METRICS

Manager,	er, Scope 1 and 2 emissions			Sc	Scope 3 emissions			Data	Date of
asset class and valuation (£m)	Coverage (%)	Total GHG emissions (tCO2e)	Carbon footprint (tCO2e/£m)	Coverage (%)	Total GHG emissions (tCO2e)	Carbon footprint (tCO2e/£m)	alignment Proportion with SBTi target (%)	source – See Appendix X	portfolio value and data
L&G - Low carbon equity (£17m)	99.3	405	25	99.2	4,049	249	29.8	MSCI	Value - 31/3/22 Data - 30/9/21
L&G - Global equity (£1m)	97.7	73	71	97.7	461	455	30.3	MSCI	Value - 31/3/22 Data - 30/9/21
L&G - Multi Asset Fund (£15m)	70.4	626	97	70.3	2,727	426	19.2	MSCI	Value - 31/3/22 Data - 30/9/21

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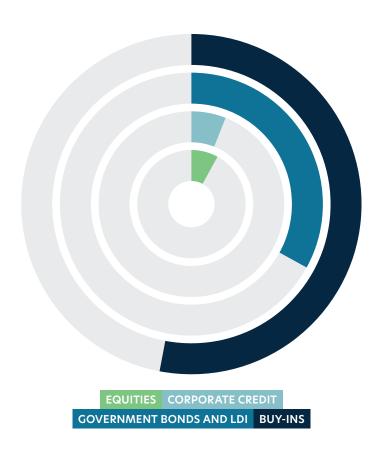
PROPORTION WITH SBTI TARGETS (%)



Manager, asset class and valuation (£m)	Scope 1 and 2 emissions coverage	Scope 3 emissions coverage	Emissions targets coverage (SBTi)
L&G - Low carbon equity (31/3/22 - £17m)		Reported Estimated No data	Yes No or no data
L&G - Global equity (31/3/22 - <i>£</i> 1m)		Reported Estimated No data	Yes No or no data
L&G - Multi Asset (31/3/22 - <i>£</i> 15m)	Reported Estimated No date	Reported Estimated No data	Yes No or no data

CLOSED FUND

Closed Fund asset allocation 31 March 2022



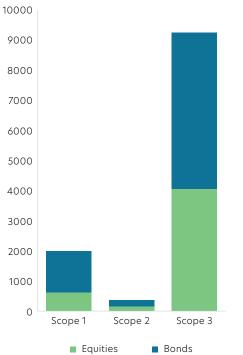
CLOSED FUND – DATA COVERAGE

Asset class (% DB assets)	Details of missing data or estimations
Equities (8%)	See Appendix 3
Corporate Credit (6%)	
Government bonds and LDI (33%)	Calculations are based on Total UK GHG emissions per £ of government debt (tons/£m) where Scope 1+2 emissions are calculated on a production basis and Scope 3 emissions are for imports (per DWP guidance).
Buy-ins (53%)	Buy-in assets are expected to comprise largely public debt (both corporate credit and government) and private holdings. The insurers' emissions calculations largely consider corporate debt only (public & private) and they have excluded government absolute emissions calculations as part of their summarised metrics. This methodology differs to guidance offered by the DWP and calculations for the Fund's other gilt-based holdings. Consequently data reported for buy-in assets is not directly comparable with other assets classes/holdings.

CLOSED FUND – METRICS

Manager,	Scop	e 1 and 2 en	nissions	Scope 3 emissions			Portfolio	Data	Date of
asset class and valuation (£m)	Coverage (%)	Total GHG emissions (tCO2e)	Carbon footprint (tCO2e/£m)	Coverage (%)	Total GHG emissions (tCO2e)	Carbon footprint (tCO2e/£m)	alignment Proportion with SBTi target (%)	source – See Appendix X	portfolio value and data
BlackRock - Global equity (£13m)	99.5	583	52	99.3	3,854	347	34.8	MSCI	Value - 31/3/22 Data - 30/9/21
BlackRock - Corporate credit (£10m)	76.3	1,525	183	74.9	5,649	690	38.4	MSCI	Value - 31/3/22 Data - 30/9/21
BlackRock - Index-linked Gilts (£56m)	N/A	N/A	198	N/A	N/A	136	N/A	N/A	Value - 31/3/22 Data - 30/9/21
PIC - Buy-in (£88m)	N/A	N/A	63	N/A	N/A	238	N/A	N/A	Value - 31/3/22 Data - 31/10/21

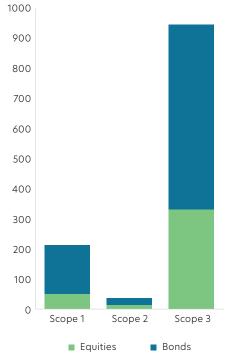
N/A - data not available. The overall impact of the unavailable data is uncertain, and the Funds will continue to work with the investment managers and buy-in providers in future to help make this data available. Certain data ©2022 MSCI ESG Research LLC. Reported by permission. See Appendix 3 for more details.

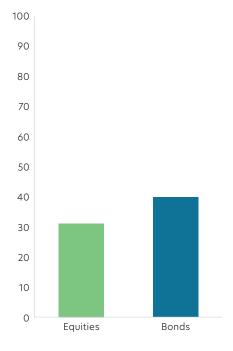


TOTAL GHG EMISSIONS (tCO2e)

CARBON FOOTPRINT (tCO2e/£m)

PROPORTION WITH SBTI TARGETS (%)





Manager, asset class and valuation (£m)	Scope 1 and 2 emissions coverage	Scope 3 emissions coverage	Emissions targets coverage (SBTi)
BlackRock - Global equity (31/3/22 - £13m)	 Reported Estimated No data 	Reported Estimated No data	Yes No or no data
BlackRock - Corporate credit (31/3/22 - £10m)	Reported Estimated No data	Reported Estimated No data	Yes No or no data

5.3 TARGET USED BY THE FUNDS TO MANAGE CLIMATE-RELATED RISKS AND OPPORTUNITIES AND PERFORMANCE AGAINST TARGETS.

The Trustees have set the following target:

Target	Open Fund DB Section	Open Fund DC Section	Closed DB Fund
75% of listed equity and corporate bond investments to have set SBTi targets by 2030	Listed equities and corporate bonds (25% of total invested DB assets)	Listed equities and corporate bonds (53% of total DC assets)	Listed equities and corporate bonds (30% of total invested DB assets)

Initial performance against the target

The climate reporting carried out for the Funds during the year included an assessment of the current alignment with the above target. The weighted averages of the Funds' listed equity and corporate bond investments that have set SBTi targets by 31 March 2022, based on information held on the MSCI database, and assuming that no other portfolio companies have set SBTi targets, are as follows:

Target	Open Fund DB Section	Open Fund DC Section	Closed DB Fund
75% by 2030	2022 - 30.0%	2022 - 25.1%	2022 - 36.4%

The proportion of each fund with set SBTi targets is broadly in line with a comparable relevant market index with similar characteristics. The Trustees have agreed upon the most appropriate equity and corporate bond funds to focus their engagement on, which are expected to result in the most significant improvement in the Funds' alignment with its target.

The following steps are being taken to achieve the target:

- The Trustees have communicated the target to each investment manager.
- Investment managers are routinely invited to present at Investment Committee meetings as part of the existing monitoring process. When meeting with any of the Funds' investment managers, the Trustees will ask the manager how they expect the proportion of portfolio companies with SBTi targets to change over time and encourage the manager to engage with portfolio companies about setting SBTi

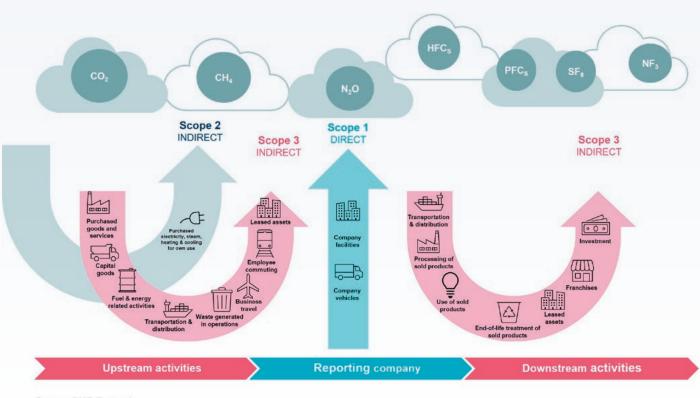
targets, prioritising those with the highest carbon footprint.

- The investment adviser encourages managers to support the goal of net zero emissions by 2050 or earlier and has published its expectations for investment managers in relation to net zero. This includes the use of effective voting (where applicable) and engagement with portfolio companies to encourage achievement of net zero. The investment adviser continues to engage with managers on this topic and will encourage them to use their influence with portfolio companies to increase the use of SBTi targets.
- The Trustees will review progress towards the target each year and consider whether additional steps are needed to increase their chance of meeting the target. Also, to help achieve the target the Trustees switched the equity holdings in the DB Sections to low carbon equity funds following the 31 March 2022 year end.

APPENDIX 1 – GREENHOUSE GAS EMISSIONS EXPLAINED

Emissions metrics relate to seven greenhouse gases - carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3). The figures are shown as "CO2 equivalent" (CO2e) which is the amount of carbon dioxide that would be equivalent to the excess energy being stored by, and heating, the earth due to the presence in the atmosphere of these seven greenhouse gases. The metrics related to greenhouse gas emissions are split into the following three categories: Scope 1, 2 and 3. These categories describe how directly the emissions are related to an entity's operations, with Scope 1 emissions being most directly related to an entity's everyday activities and Scope 3 referring to indirect emissions in an entity's value chain. Scope 3 emissions often form the largest share of an entity's total emissions but are also the ones that the entity has least control over.

- Scope 1 greenhouse gas emissions are all direct emissions from the activities of an entity or activities under its control.
- Scope 2 greenhouse gas emissions are indirect emissions from electricity purchased and used by an entity which are created during the production of energy which the entity uses.
- Scope 3 greenhouse gas emissions are all indirect emissions from activities of the entity, other than scope 2 emissions, which occur from sources that the entity does not directly control.



Source: GHG Protocol

APPENDIX 2 – CLIMATE SCENARIO ANALYSIS MODELLING APPROACH

MODELLING APPROACH

The scenario analysis is based on the ClimateMAPS model developed by Ortec Finance and Cambridge Econometrics and was then applied to the Funds' assets and liabilities by the investment adviser, LCP. The three climate scenarios were projected year by year, over the next 40 years.

ClimateMAPS uses a top-down approach that consistently models climate impacts on both assets and liabilities, enabling the resilience of the Funds' funding strategy to be considered. The model output is supported by in-depth narratives that bring the scenarios to life to help the Trustees' understanding of climate-related risks and opportunities.

ClimateMAPS uses Cambridge Econometrics' macroeconomic model which integrates a range of social and environmental processes, including carbon emissions and the energy transition. It is one of the most comprehensive models of the global economy and is widely used for policy assessment, forecasting and research purposes. The outputs from this macroeconomic modelling - primarily the impacts on country/regional GDP - are then translated into impacts on financial markets by Ortec Finance using assumed relationships between the macroeconomic and financial parameters.

Ortec Finance runs the projections many times using stochastic modelling to illustrate the wide range of climate impacts that may be possible, under each scenario's climate pathway. LCP takes the median (i.e. the middle outcome) of this range of impacts, for each relevant financial parameter, and adjusts it to improve its alignment with LCP's standard financial assumptions.

LCP then uses these adjusted median impacts to project the

assets and liabilities of the Funds to illustrate how the different scenarios could affect its funding level. The modelling summarised in this report used scenarios based on the latest scientific and macroeconomic data at 31 December 2020, calibrated to market conditions at 31 March 2021.

The Trustees discussed how future planned changes to the investment strategies for both schemes would change the analysis. For the DC Section, members' starting pots values were assumed to equal the average value for members of their age, and member and employer contributions were assumed to be paid in line with the current contribution structure. No allowance was made for changes to the investment strategy or contributions in response to the climate impacts modelled.

MODELLING LIMITATIONS

As this is a "top-down" approach, investment market impacts were modelled as the average projected impacts for each asset class, i.e. assuming that the Funds' investments are affected by climate risk in line with the marketaverage portfolio for the asset class. This contrasts with a "bottom up" approach that would model the impact on each individual investment held by the Funds'. As such, it does not require extensive scheme-specific data and so the Trustees were able to consider the potential impacts of the three climate scenarios for all of the Funds' assets.

In practice, the Funds' investments may not experience climate impacts in line with the market average. The Trustees consider, on an ongoing basis, how the Funds' climate risk exposure differs from the market average using climate metrics (which are compared with an appropriate market benchmark) and its bi-annual responsible investment review which considers the investment managers' climate approaches.

The Trustees note that the three climate scenarios chosen are intended to be plausible, not "worst case", and the modelling is based on median outcomes. It therefore illustrates how the centre of the "funnel of doubt" surrounding DB funding and DC asset projections might be affected by climate change. It does not consider tail risks within that funnel, nor does it consider how the funnel might be widened by the additional uncertainties arising from climate change. In addition, only three scenarios out of infinitely many have been considered. Other scenarios could give better or worse outcomes for the Funds.

Uncertainty in climate modelling is inevitable. In this case, key areas of uncertainty relating to the financial impacts include how climate change might affect interest rates and inflation, and the timing of market responses to climate change. ClimateMAPS, like most modelling of this type, does not allow for all climaterelated impacts and therefore, in aggregate, is quite likely to underestimate the potential impacts of climate-related risks, especially for the Failed Transition scenario. For example, tipping points (which could cause runaway physical climate impacts) are not modelled and no allowance is made for knock-on effects, such as climate-related migration and conflicts.

The Funds' currently have insurance contracts covering a significant proportion of the DB benefits payable to pensioners. As these contracts match the DB benefits payable to members, it has been excluded from the analysis. The Trustees considered qualitatively how insurance contracts might be affected by climate risk.

APPENDIX 3 – DATA SOURCED FROM MSCI

Emissions are attributed to investors using "enterprise value including cash" (i.e. EVIC, the value of equity plus outstanding debt plus cash).

The total GHG emissions figures omit any companies for which data was not available. For example, if the fund investment is worth £20m and emissions data is available for 70% of the fund by value, the total GHG emissions figure shown relates to £14m of assets and the fund's carbon footprint equals total GHG emissions divided by 14. In other words, no assumption is made about the emissions for companies without data.

The emissions target metric refers to the % of portfolio by weight of companies that have a nearterm carbon emissions reduction target that has been approved by the Science Based Targets initiative (SBTi). Science-based targets provide a clearly defined pathway for companies to reduce greenhouse gas emissions which is in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement - limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C. Coverage is not available for this metric because the MSCI database does not distinguish between companies which do not have an SBTi target and companies for which the SBTi status is not known.

EMISSIONS DATA COVERAGE AND QUALITY

Where coverage of the portfolio analysed is less than 100%, this is because the MSCI database:

 Does not cover some holdings (e.g. cash, sovereign bonds, bonds that have recently matured, shares in companies no longer listed when the analysis was undertaken);

- Does not hold emissions data for some portfolio companies because the company does not report it and MSCI does not estimate it; and/or
- Does not hold EVIC data for some portfolio companies, so emissions cannot be attributed between equity and debt investors.

The last of these reasons is usually the main explanation for the fairly low coverage of bond portfolios.

Where emissions data is estimated, MSCI uses one of three methods.

- For electric utilities, MSCI's estimate of Scope 1 emissions is of direct emissions due to power generation, calculated using power generation fuel-mix data.
- For companies not involved in power generation, which have previously reported emissions data, MSCI starts with a company-specific carbon intensity model.
- For other companies, MSCI uses an industry segment-specific carbon intensity model, which is based on the estimated carbon intensities for 1,000+ industry segments.

For Scope 3 emissions, we have chosen to use MSCI's estimated emissions even where reported emissions are available. This provides greater consistency than using a mixture of reported and estimated emissions. Analysis of reported Scope 3 emissions suggests that the data quality is currently low: data is volatile and often out of date, with relatively few companies reporting on all types of Scope 3 emissions. In contrast, MSCI estimates all types of Scope 3 emissions for most companies in its database, for a recent reporting year and using a consistent approach.

MSCI is a leading provider of climate-related data, so we would

expect the coverage to compare favourably with other data sources. Our investment adviser is engaging with MSCI to encourage them to improve EVIC coverage for debt issuers and to distinguish between companies which do not have an SBTi target and companies for which the SBTi status is not known.

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APPENDIX 4 – GLOSSARY

Carbon emissions

These refer to the release of carbon dioxide, or greenhouse gases more generally, into the atmosphere, for example from the burning of fossil fuels for power or transport purposes.

Carbon footprint

In an investment context, the total carbon dioxide or greenhouse gas emissions generated per amount invested (e.g. in £m) by an investment fund. Related definitions are used to apply the term to organisations, countries and individuals.

Climate change mitigation

Steps taken to limit climate change by reducing greenhouse gas emissions, for example by shifting to renewable sources of energy – such as solar and wind – and by using less energy and using it more efficiently.

Environmental, social and governance (ESG)

An umbrella term that encompasses a wide range of factors that may have been overlooked in traditional investment approaches. Environmental considerations might include physical resource management, pollution prevention and greenhouse gas emissions. Social factors are likely to include workplace diversity, health and safety, and the company's impact on its local community. Governance-related matters include executive compensation, board accountability and shareholder rights.

Greenhouse gas (GHG) emissions

Gases that have been and continue to be released into the Earth's atmosphere. Greenhouse gases trap radiation from the sun which subsequently heats the planet's surface (giving rise to the "greenhouse effect"). Carbon dioxide and methane are two of the most important greenhouse gases. See also Appendix 1.

<u>Net zero</u>

This describes the situation in which total greenhouse gas emissions released into the atmosphere are equal to those removed for example via man-made technologies (to capture carbon and store it) or nature-based solutions (such as the planting of trees). This can be considered at different levels, e.g. company, investor, country or global.

Paris Agreement

The Paris Agreement is an international treaty on climate change, adopted by global governments in 2015. It covers climate change mitigation, adaptation and finance. Its primary goal is to limit global warming to well below 2°C, with ambitions towards 1.5°C, compared to preindustrial levels.

Physical risk

These are climate-related risks that arise from changes in the climate itself. They include risks from more extreme storms and flooding, as well as rising temperatures and changing rainfall pattens.

<u>Science-Based Targets initiative</u> (SBTi)

An organisation that sets standards and provides accreditation for science-based targets set by companies and investors.

Scenario analysis

A tool for examining and evaluating different ways in which the future may unfold.

Scope 1, 2 and 3

A classification of greenhouse gas emissions. See Appendix 1 for an explanation.

Stewardship

Stewardship is defined by the Financial Reporting Council as the responsible allocation, management and oversight of capital to create long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society. It is often implemented via engagement with investee companies and exercising voting rights.

Taskforce on Climate-related Financial Disclosures (TCFD)

A group of senior preparers and users of financial disclosures from G20 countries, established by the international Financial Stability Board in 2015. The TCFD has developed a set of recommendations for climaterelated financial risk disclosures for use by companies, financial institutions and other organisations to inform investors and other parties about the climate-related risks they face.

Transition risk

These are climate-related risks that arise from the transition to a lowcarbon economy and can include changes in regulation, technology and consumer demand.