

**Climate  
Report**  
March 2025

# Sainsbury's Pension Scheme



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# Welcome

We are pleased to publish our latest climate report, covering the year to 30 September 2024.

This report comes to you at a time of heightened uncertainty in relation to climate policy and investing. Most obviously this is seen in the US, with the new administration announcing a withdrawal from the Paris Agreement and a refocus on the development of more fossil fuels.

We have also seen significant withdrawals by companies from climate initiatives such as Climate Action 100+, and the breakdown of the Net Zero Asset Managers Initiative for fear of legal backlash. Even the EU, is now looking to scale back these ambitions to remain competitive with the US.

However, despite this difficult backdrop, we continue to believe that climate change poses a material long-term risk to the portfolio and should be subject to specific attention and risk management. Alongside J Sainsbury plc (the “Sponsor”), we continue to have an aspiration of being net-zero by 2050, while keeping our fiduciary obligations to our members front and centre.

With these aims in mind we have updated our target this year, to shift our focus from improving disclosures to supporting real-world decarbonisation, via a forward-looking temperature alignment metric. This gives us a fruitful way to encourage the transition to a lower-carbon economy in the long term, providing the policy environment allows us to do so. This is done by holding the Scheme’s investment managers to account for engaging on this with the companies in which the Scheme invests. Whilst we have moved to an alignment target, we will review the metric underlying the target, i.e. the SBTi (“Science Based Targets initiative”) Score, to ensure its ongoing appropriateness. We continue to believe the physical risks of climate change are a key risk to the Scheme, and are ever more important to manage.

This report contains our analysis of how the Scheme would respond to different temperature outcomes including one where the transition fails to happen. We will continue to measure these risks as well as our portfolio’s ability to meet the long-term real-world decarbonisation targets we aspire to. It is through this lens that we will monitor the investment-decision-making and stewardship our asset managers undertake on our behalf.


We have previously set a target to have 65% of our underlying non-gilt assets reporting their climate data by year end. We are disappointed that data coverage across non-gilt assets continues to be poor, and to have missed this target as a result. However, we have developed new processes to estimate emissions data through a consistent methodology. This means we now have full data coverage albeit through proxies.

We prioritise improving data quality as this provides useful context for interpreting the Scheme’s emissions-based metrics and for making better-informed decisions in relation to these. We will pursue our fund managers to improve the quality of the data every year until we have verified carbon data directly from our underlying investments. This ‘data quality’ will be one of the important metrics that we will monitor amongst others.

It is important to note that the framework around ESG continues to develop at pace, and the updates we have made to the way we calculate our metrics means that a year-on-year comparison is challenging. To make comparisons possible, we have applied a consistent methodology, for one of our corporate bond mandates to help understand our progress.

We will continue to develop our thinking on climate change, and we will review the appropriateness of our metrics and targets in advance of our next report, to ensure they remain appropriate in light of the wider backdrop and market best practice. We will also review how the metrics have developed and report our progress against our new target.

I hope readers find this report informative and useful.

A handwritten signature in black ink, appearing to read 'John Preston', written in a cursive style.

*On behalf of the Trustee of the Sainsbury's Pension Scheme*

**John Preston**

**Chair of the Trustee**

# Introduction

J Sainsbury Pension Scheme Trustees Limited (the “Trustee”) is Trustee of the Sainsbury's Pension Scheme (the “Scheme”). The Trustee has produced this Climate Report to comply with the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021. The sub-headings in this report address the specific disclosure requirements in the regulations which are based on the recommendations of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (“TCFD”).

This is the third Climate Report in respect of the Sainsbury's Pension Scheme. The purpose of the report is to provide a better understanding of the Scheme’s exposure to climate-related risks, the Scheme’s resilience to these risks and the climate related-opportunities that may be considered. The Scheme is a closed defined benefit (DB) scheme with two sections, the Sainsbury’s Section and the Argos Section.

**The report is based on the Scheme’s position over the Scheme year to 30 September 2024 and the analysis has been carried out based on investments held by the Scheme at this date.**

This report has been prepared in line with the Department for Work and Pensions (“DWP”) regulations based on the Task Force on Climate Related Financial Disclosures (“TCFD”) framework, and covers the following pillars of disclosure:



**Governance** – which discloses the Trustee’s governance structure around climate-related risks and opportunities.

**Strategy** – which sets out the actual and potential impacts of climate-related risks and opportunities on the Scheme where the information is material.

**Risk management** – which discloses how the Trustee identifies, assesses and manages climate-related risks and opportunities; and

**Metrics and targets** – which discloses how the Trustee measures and monitors progress against climate-related metrics and targets.

The key findings from this third Climate Report are summarised in the Key Takeaways over the page.

The Trustee’s priorities in respect of climate-related risks remain unchanged, and are set as follows:





# Key Takeaways

## Governance

The Trustee has established a framework to identify, assess and mitigate climate change risks and to identify opportunities associated with the transition to a lower- carbon economy.

The Trustee has set climate change (with a focus on disclosures) as one of its priorities when assessing the engagement activity undertaken by the appointed investment managers. The Trustee will report on this as part of the annual Implementation Statement.

Scheme governance and related documentation explicitly incorporate the ongoing assessment of climate change risks as part of decision-making.

## Strategy

The Sections of the Scheme are well funded on a Gilts + 0.50% basis, have a high allocation to investment-grade-quality credit assets and maintain a high level of interest rate and inflation hedging.

The Trustee assessed the impact of possible climate pathways in its first Climate Report, and this has been refreshed as part of this Climate Report. In both sets of scenario analysis, this included the impact of physical risks (e.g. extreme weather) and transition risks (the move to a lower-carbon economy) under a range of potential climate pathways over the short, medium and long term. The scenarios have, however, been updated for this report, to reflect a wider range of temperature rises – that is a 2°C rise for the “Orderly” and “Disorderly” scenarios, and a 5°C rise for the “Hot House World” scenario.

The impact of the scenarios on the Scheme’s funding position appears to be limited over relevant timeframes (for the scenarios modelled). That said, the Trustee accepts the limitations of current modelling, and these are explained in more detail in Appendix 3.

The Trustee does not believe that any immediate change is required at an asset allocation level based on the climate scenario analysis, and focuses on risk management through manager selection, ongoing monitoring, and monitoring the engagements undertaken with issuers. The Trustee will continue to review this position and refine the strategy as required and as the modelling and data in respect of climate risks evolves.

## Risk Management

The Trustee has overall responsibility for the assessment and management of climate-related risks and opportunities. The implementation of investment decisions, including those relating to climate change, lies with the Investment Committee.

The Trustee has adopted several approaches to managing climate-related risks, including monitoring ESG-related risks as part of the Investment Committee risk dashboard. This is regularly reviewed and updated by the Investment Committee. The majority of the Scheme’s investment managers are also signatories to the United Nations Principles for Responsible Investments and the UK Stewardship Code.

The Investment Committee meets the Scheme’s key investment managers and reviews their approach to managing ESG risk, including climate. The Investment Committee also encourages the Scheme’s managers to disclose engagement activity on ESG matters, including those related to climate risk, undertaken on its behalf.

## Metrics and Targets

### Metrics

The Trustee monitors several climate metrics to understand the exposure to climate change risks and opportunities. This year, the Trustee has updated the approach used for calculating the Scheme's emissions. In particular, in order to provide a more "complete" picture of the Scheme's emissions, asset class proxies have been used for mandates where there is low data coverage. This is a change from previous reports, where these emissions were not captured in the figures.

Data coverage (reflecting the proportion of the portfolio where emissions data is available on the underlying companies) has remained broadly unchanged from the 2023 position, at around 30% and 40% for the Sainsbury's and Argos Sections respectively. This is largely a result of the availability of emissions data for unlisted securities remaining poor over the period. However, by using asset class proxies, this has, in effect, increased the proportion of the portfolio for which carbon emissions data is available to 100%.

As asset class proxies have been used to estimate the carbon emissions for asset classes where there is limited data coverage, the focus is now to improve the quality of the data over time. As a result, the Trustee has agreed to update the Scheme's non-emissions-based metric from data coverage to data quality, based on the Partnership for Carbon Accounting Financials ("PCAF") data quality score. The PCAF score is an evolution of the existing data coverage metric.

To provide some context to the metrics information included in this report, the Trustee would like to highlight the following points:

- As a result of using asset class proxies for assets with low data coverage, the reported emissions are higher than those reported in prior periods. This change in approach is expected to have made the reported emissions closer to the "true" emissions of the Scheme; however, it has made comparison relative to prior years more challenging.
- The report focuses on the emissions from non-gilt assets where the Trustee can influence outcomes through manager selection decisions, mandate changes and engagement with managers. Within the non-gilt assets, the liquid corporate bonds have the highest-quality data (with higher-quality data being that which is reported by underlying companies, rather than being proxied) and the highest scope for meaningful engagement.
- Government bonds are reported on separately, in part because the approach for calculating their emissions differs to that used for corporate bonds. In addition, while these are held to manage liability-related risks, the Trustee has very limited influence on actions the UK Government takes. There would also be the potential for double-counting emissions if figures were aggregated.
- The Trustee monitors the SBTi ("Science Based Targets initiative") Score of both Sections, both in terms of the portfolio as a whole, as well as specifically in relation to the corporate bond holdings. This measures the proportion of the financed emissions that are emitted by companies who have SBTi-approved net-zero targets in place.

The key Scope 1 and 2 metrics for each Section are summarised below.

**Sainsbury's Section**

Metric	Dec-21 (Base year)	Dec-22	Dec-23 (Indicative <sup>4</sup> )	Sept-24 <sup>2</sup>
Absolute emissions (tonnes of CO2)	296,587	46,400	93,483	429,180
Carbon Footprint (tonnes of CO2/£m invested) <sup>1</sup>	115	62	87	106
Data Coverage	41%	21%	34%	32%
SBTi Score <sup>3</sup> (Total Portfolio)	n/a	2%	7%	10%
SBTi Score <sup>3</sup> (Corporate Bond Mandates)	n/a	n/a	n/a	43%

**PCAF Data Quality Score (30 September 2024)<sup>1</sup>**

Grade 1 Verified	Grade 2 Unverified or estimated from energy consumption	Grade 3 Estimated from company production	Grade 4 Estimated from company revenue and sector	Grade 5 Other estimated
0%	31.4%	0%	0.9%	67.7%

Source: Redington, as at 30 September 2024



### Argos Section

Metric	Dec-21 (Base year)	Dec-22	Dec-23 (Indicative <sup>4</sup> )	Sept-24 <sup>2</sup>
Absolute emissions (tonnes of CO2)	58,117	5,486	10,179	60,522
Carbon Footprint (tonnes of CO2/£m invested) <sup>1</sup>	111	40	70	99
Data Coverage	42%	32%	41%	39%
SBTi Score (Total Portfolio)	n/a	3%	8%	13%
SBTi Score (Corporate Bond Mandates)	n/a	n/a	n/a	42%

### PCAF Data Quality Score (30 September 2024)<sup>1</sup>

Grade 1 Verified	Grade 2 Unverified or estimated from energy consumption	Grade 3 Estimated from company production	Grade 4 Estimated from company revenue and sector	Grade 5 Other estimated
0%	38.1%	0%	1.7%	60.3%

<sup>1</sup> Not reported prior to September 2024. Metric is provided as a breakdown across different levels of data quality.

<sup>2</sup> Emissions metrics as at 30 September 2024 use asset class proxies for assets with insufficient data coverage, resulting in an increase in reported emissions.

<sup>3</sup> SBTi Score estimated based on financed emissions as at September 2024, and on market value for prior years.

<sup>4</sup> Data for December 2023 is the indicative position that was shown in the 2023 report.

Based on the analysis of the Scheme's Scope 1 and 2 metrics set out above, the Trustee notes the following:

- **Absolute emissions:** There is a material increase in the reported absolute emissions for both Sections of the Scheme. This is predominantly due to the updated methodology of using proxies for some of the Scheme's assets, which the Trustee believes provides a more complete picture of the true emissions of the Scheme. Prior to the use of proxies, it was assumed that certain assets, primarily the Scheme's illiquid assets, had no emissions associated with them.
- **Carbon footprint:** The carbon footprint for both Sections has increased from the prior year. This is also in line with expectations given the use of asset class proxies, as assets which have poor data coverage tend to be higher-yielding illiquid assets; as many of the issuers of

securities in these markets operate in higher-emitting sectors, these assets are often more emissions intensive.

- **Data coverage:** The level of data coverage on non-proxied assets remains broadly unchanged over the year.
- **Data quality:** The Scheme's liquid corporate bond mandates have relatively high data quality scores (largely rated as "Grade 2"), meaning that the emissions data reported by underlying publicly listed companies is in line with the Greenhouse Gas Protocol, but is unverified. Emissions from the Scheme's illiquid mandates have been estimated by the investment advisor using asset class proxies and so have a lower data quality (Grade 5).
- **Portfolio alignment:** A relatively high proportion of the Scheme's emissions from corporate bond mandates are from companies with SBTi targets in place. This is materially lower when looking at the portfolio as a whole.

## Targets

The Trustee has identified climate change risk as a material financial risk for the Scheme and has an aspiration of being net-zero by 2050, while keeping its fiduciary obligations to members front and centre. The Trustee has previously set a target to improve the data coverage for the Scheme's non-gilt assets to 65% by 31 December 2024. This data coverage target was set because the Trustee believes that availability and quality of data is important to be able to assess the Scheme's bottom-up exposure to climate risks.

Based on the estimated position as at 30 September 2024 the data coverage for the Sainsbury's and Argos Sections' non-gilt assets was c.32% and c.39% respectively. These fell below the target level of 65%.

The Trustee has reviewed its target and, although the data coverage target was not reached, has chosen to update its target to a portfolio-alignment target described below. The logic for this change is that an alignment target is forward-looking, more closely linked with real-world change, and supports the Trustee's net-zero goal.

The Trustee also notes that due to changes in its methodology for calculating emissions (where proxies are used when data is missing), the accuracy of the Scheme's reported emissions (relative to the Scheme's "actual" emissions) will improve over time as the quality of the data improves.

The Trustee notes, however, that there is some uncertainty over forward-looking metrics and climate initiatives such as the SBTi more generally without sufficient supportive policy for the transition. As a result, whilst the Trustee views the SBTi metric as the most appropriate target/metric at this time, there is unavoidable uncertainty that could cause a review of this in some future circumstances.

### Previous Target

**To increase data availability to 65% over the next three years (from the baseline as at 31 December 2021 to the position as at 31 December 2024) for the non-gilt assets.**

Based on the position as at 30 September 2024, the data coverage for the Sainsbury's and Argos Sections' non-gilt assets was c.32% and c.39% respectively.

Further detail on the considerations for updating the target are included in Section 5.

### Updated Target

**To improve the portfolio's SBTi score to 70% for each Section's corporate bond mandates by 2030.**

Based on the position as at 30 September 2024, the SBTi Score of the Scheme's physical corporate bond mandates (i.e. excluding the credit default swap mandates) was 43% and 42% for the Sainsbury's and Argos Sections respectively.

## Some actions we have taken over the Scheme year

1. The Trustee's Investment Committee held an ESG training day, provided by Insight Investment. This covered Insight's approach to ESG, stewardship and engagement, and the spectrum of different approaches that could be adopted in respect of net zero alignment, exclusions, engagement, and reporting.
2. In September 2024, the Trustee's Investment Committee undertook a review of engagement activity carried out by the Scheme's investment managers. As part of this review, it was noted that reporting amongst corporate mandates was notably higher than for non-corporate mandates, although some managers for non-corporate mandates had made significant progress in their reporting.
3. After Scheme year-end, the Trustee attended a training session on biodiversity, held by the Scheme's new investment adviser. The session primarily focussed on how biodiversity and nature-related considerations can be incorporated within the Trustee's strategy to aid the Trustee's net-zero ambitions.

## Section 1 | Governance: Oversight & Investment Beliefs

The Trustee considers the impact of climate risks and opportunities when setting the Scheme's strategy. Recognising the importance of this risk, the Trustee has an aspiration of being net-zero by 2050 (subject to its wider fiduciary duty).

The Trustee's approach to climate change and environmental, social and corporate governance ("ESG") more generally is informed by the Trustee's current ESG principles. These ESG principles are documented in the Trustee's Statements of Investment Principles (SIP) and were reviewed in July 2024. The SIPs were reviewed during the Scheme year, and the Trustees reaffirmed the appropriateness of their documented approach. The Trustee believes that ESG issues, including climate change, can have a significant financial impact on short-, medium- and long-term investment returns.

Over the year, the Trustee has set specific ESG priorities to focus its efforts when it comes to the selection, oversight and engagement with its investment managers, particularly with respect to stewardship activities undertaken by the investment managers. The Trustee has set "Climate risk (with a focus on disclosures)" as one of its engagement priorities. The Trustee engages with the Scheme's investment managers on climate change to mitigate risks, with disinvestment being considered as a 'last resort' if companies do not adapt sufficiently

A risk register is maintained which includes risks arising from climate change. The Trustee is responsible for setting the risk management framework and for monitoring its implementation to ensure the underlying risks that have been identified are managed. The Trustee consider each risk in detail at least twice a year.

The Trustee is also responsible for producing the annual Climate Report for the Scheme and reviews the climate metrics associated with the Scheme's investments as well as progress against the targets that have been set. At the end of the Scheme year, the Trustee appointed a new adviser (Redington Ltd.), who supports the Trustee in reviewing its metrics, targets and approach to scenario analysis. Following advice from Redington, the TCFD Working Group challenged the information provided to them in light of growing political uncertainty in the US. The Trustee is planning a review of its wider ESG strategy, including in relation to climate, in 2025.

The Trustee produces an Implementation Statement each year, summarising the engagement activity carried out by the investment managers, and engagements on climate-related matters, including case studies, are reviewed by the Trustee in the preparation of this report.

The Trustee undertakes training to ensure it has sufficient knowledge and understanding of climate issues.

The Trustee believes that integrating sustainable investment into its processes and decision-making should lead to better outcomes for the Scheme, including by helping to manage regulatory and reputational risks. In particular, the Trustee believes:

01

The Trustee can best implement its sustainable investment strategy through its investment managers and advisers and will, therefore, closely review, monitor and challenge their activities in this area.

03

Climate change poses material financial risks to the Scheme and therefore should be subject to specific attention and risk management.

02

The Trustee should manage risks and exploit opportunities, particularly through ESG integration, effective stewardship, identifying attractive sustainability themes, and understanding the real-world impact of its investments.

04

The Trustee prefers a collaborative approach, leveraging its efforts through engagement, working with its investment managers, advisers, and Sponsor.

## Section 1 | Governance: Roles and Responsibilities

The Trustee is ultimately responsible for compliance with the governance requirements which underpin the TCFD recommendations and for reporting how this has been done. The Trustee has delegated certain responsibilities to sub-groups, and relies on several other parties, as follows:

### Investment Committee

The Trustee has delegated responsibility for the development, implementation and monitoring of the Scheme's investment strategy to the Investment Committee. The Investment Committee is responsible for undertaking the governance and reporting requirements relating to the identification, assessment and management of climate-related risks and opportunities and for making recommendations to the Trustee to inform its overarching strategy.

The Investment Committee meets at least once a quarter, and considers matters relating to ESG, including climate risks at each quarterly meeting, as part of the manager monitoring and risk dashboard reports, and annually as part of formal manager review meetings with key investment managers and the Stewardship and Engagement Reporting from the investment adviser.

The Investment Committee must maintain their knowledge and keep up to date on sustainable investment and climate change-related risks and opportunities, and how these may influence investment policy decisions. Industry experts, such as advisers, and representatives from the Sponsor also attend Investment Committee meetings. The Investment Committee updates their training as required.

### TCFD Working Group

The TCFD Working Group is a sub-group of the Investment Committee, which works with the investment adviser to formulate advice for the Investment Committee in relation to TCFD and carbon reporting. In producing this year's Climate Report, the TCFD Working Group held meetings with its new investment adviser to consider the approach taken with respect to reporting on metrics, setting targets, and undertaking scenario analysis.

### Investment Adviser

The investment adviser is responsible for advising the Trustee on investment strategy, taking into account climate-related risks and opportunities alongside other financial risks and opportunities. Sustainable Investment specialists attend TCFD Working Group, Investment Committee and Trustee meetings where appropriate to support this advice and deliver relevant training.

The investment adviser is also responsible for ensuring investment managers are aware of the Trustee's expectations with respect to the integration of ESG issues in their investment processes and supports the Trustee in its monitoring of ESG and Stewardship matters.

The Trustee recently held a full market review to appoint a new investment consultant. Their requirements, which were covered in both the Request for Proposal and the interview questions for potential candidates, included how they would approach helping a Trustee develop an ESG strategy and associated reporting framework, and how this would progress in light of new developments such as the Taskforce on Nature-related Financial Disclosures ("TNFD"). The Trustee regarded ESG competence and the performance of the relevant internal resource as a crucial requirement and this will be included in the annual review of the successful adviser.

The investment adviser will support the Trustee in preparing the Climate Report each year and will collate and report on certain climate-related metrics as part of this.

## **Section 1 | Governance: Roles and Responsibilities**

### **Investment Managers**

The Trustee believes that active engagement is key to influencing the behaviour of corporates to ensure a better transition to a low-carbon world (although, in practice, the Trustee has very limited influence on actions the government takes). The Trustee believes that the Scheme's investment managers are best placed for the day-to-day assessment of ESG risks, including climate change, and engagement with issuers. An assessment of how effectively investment managers incorporate ESG risks and opportunities into their own investment processes and how effectively they engage with issuers, forms part of the Trustee's ongoing monitoring of manager performance. This assessment is undertaken through challenging managers on their approach and by taking advice from the Trustee's investment adviser.

In particular, in October 2023, two of the Trustee's key investment managers, Insight and PIMCO, were invited to present to the Investment Committee and the Trustee's investment adviser. During the meeting, the Committee emphasised the importance of ongoing engagement and the ability to track actions that resulted from the engagements.

ESG integration and the approach to engagement are areas of key focus when selecting new managers although there were no new manager appointments during the Scheme year. Both as part of ongoing monitoring and as part of the selection process or when allocating further funds to existing managers, the Trustee asks managers to explain how they have considered ESG and climate change when constructing and monitoring their portfolios.

### **Scheme Actuary**

The Scheme Actuary is responsible for considering the impact of climate-related risks on the Scheme's liabilities. The Scheme Actuary provides quarterly updates on the funding position of the Scheme. On at least a triennial basis, the more detailed update will include an understanding of the potential funding impact from changes in demographic assumptions driven by climate change. The Scheme Actuary has performed quantitative analysis covering the impact of climate scenarios on longevity, alongside more qualitative comments on the limitations of such analysis.

### **Covenant Adviser**

The covenant adviser is responsible for supporting the Trustee in monitoring the impact of climate risks on the covenant of J Sainsbury plc (the "Sponsor"). The Sponsor publishes an annual TCFD report which the Trustee and its advisers use to inform their assessment of the impact of climate-related risks and opportunities on the covenant. A summary of the assessment of climate risk on the covenant is provided in Section 3 and in Appendix 2. As with the investment adviser, specific questions on the adviser's ESG capabilities were asked in a request for proposal prior to the adviser's appointment.

### **Legal Adviser**

The legal adviser is responsible for updating the Trustee on the applicable legislation, regulation and guidance relating to TCFD, advising on legal issues relating to TCFD that the Trustee raises.

### **In-house Pensions Department**

The Pensions Department is responsible for supporting the Trustee in ensuring there is effective governance, risk management, communication and administration.



## Section 1 | Governance: Roles and Responsibilities

### Review of Investment Adviser and Pensions Department

In complying with its governance and reporting requirements, the Trustee is supported by its professional advisers and the Pensions Department.

The Trustee has established processes for reviewing the competency of its investment advisers to support the Trustee on climate-related matters. As part of its annual assessment of the investment adviser's performance against their objectives, the Trustee will consider how the adviser has supported the climate risk policy.

The Trustee review the competency of the Pensions Department on an annual basis.

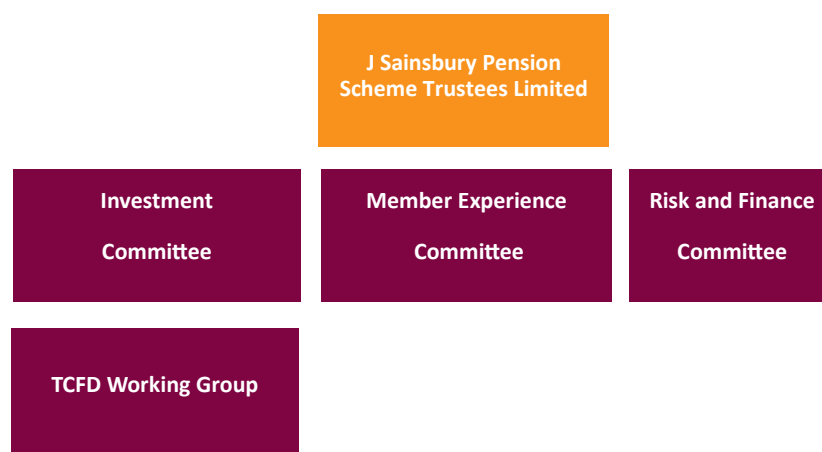
### Knowledge and Understanding

ESG and climate risk has been included on the training agenda for the Trustee and the Investment Committee. It is recognised that this is a fast-moving area and so these areas will continue to feature in the Trustee and the Investment Committee's training schedule. The Trustee places great emphasis on allocating sufficient time and resources at quarterly meetings to the governance of climate-related risks and opportunities, given its belief that climate change risk is likely to affect the Scheme's funding strategy. For this reason, climate-related issues are discussed in the majority of Investment Committee meetings, as well as in all TCFD Working Group meetings. The Trustee ensures that time spent on climate change is proportionate, given the range of other matters that must be considered for the Scheme's investment and funding strategy.

As part of a review of the Trustee's ESG and engagement strategy, the Trustee will be holding a Sustainable Investment workshop with their investment adviser in 2025.

The risks linked to ESG issues, including climate change, are separately identified in the risk dashboard which is reviewed and updated by the Investment Committee on a quarterly basis and reported to the Trustee Board.

### Committees



## Section 2 | Strategy: Impact on Funding and Investment Strategy

### Climate-related risks and opportunities over the short, medium and long term

The Trustee has considered climate risks and opportunities over the short, medium and long term. In this context, the Trustee has decided that “short term” reflects a three-year period and has considered what the potential impact would be from a climate shock assuming one took place over this three-year period. “Medium term” has been considered as the time horizon up to 2030, as this reflects the timeframe for the Scheme’s transition to a low-risk investment strategy; “long term” is therefore considered as the time horizon after 2030, at which point the Trustee is expected to have implemented a low-risk strategy. The Trustee’s emphasis is on the short and medium term in line with the transition to a low-risk investment strategy.

### Net Zero Goal

Having considered how climate-related risks and opportunities may impact the Scheme, the Trustee has an aspiration of achieving net zero carbon emissions on its investment portfolio by 2050, subject to the Trustee’s wider fiduciary duty. To assist this goal, the Trustee has updated the Scheme’s target to be based on portfolio alignment, which it views as more effective in driving real-world change aligned with this net zero goal.

### Types of risks and opportunities

The Trustee has identified “Transition Risks” and “Physical Risks”, as the key climate-related risks to its investment and funding strategy. When and how these risks are expected to impact the Scheme, is set out below.

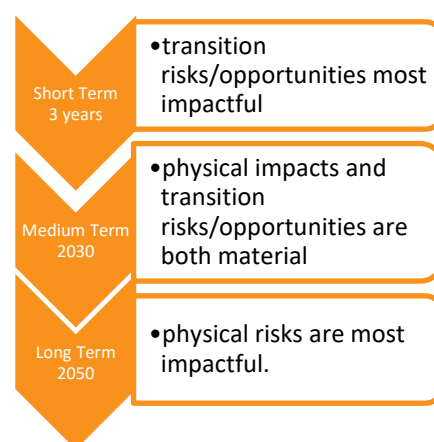
#### Transition Risks

This relates to the risks (and opportunities) from the realignment of the global economic system towards low-carbon, climate-resilient and carbon-positive solutions (e.g. via regulations or market forces).

In this transition, some industries may become obsolete, while others prosper as the world moves to a no (or low) carbon economy (for example, as renewable energy replaces thermal coal).

#### Physical Risks

This relates to the physical impacts of climate change as climate change can impact the physical assets underpinning the securities held by the Scheme. For example, extreme weather events such as flooding or wildfires could impact the business operations of portfolio companies.



These climate-related risks could have a material financial impact on the assets held by the Scheme. In particular, the value of certain assets could reduce as markets reprice and/or the risk of defaults on investments held by the Scheme could increase resulting in a loss of capital, lower cashflows to meet benefit obligations and lower investment returns. The table that follows shows some examples of climate risks and opportunities that might arise over different time horizons.

	Short term (three years from now)	Medium term (up to 2030)	Long term (beyond 2030)
<b>Examples of risks and/or opportunities</b>	<ul style="list-style-type: none"> <li>• Carbon prices</li> <li>• Regulation</li> <li>• Wider policy and geopolitical uncertainty</li> <li>• Changes in consumer behaviour</li> <li>• Competitive pressures</li> <li>• Extreme weather events</li> </ul>	<ul style="list-style-type: none"> <li>• Carbon prices</li> <li>• Regulation</li> <li>• Wider policy and geopolitical uncertainty</li> <li>• Changes in consumer behaviour</li> <li>• Competitive pressures</li> <li>• Extreme weather events</li> </ul>	<ul style="list-style-type: none"> <li>• Carbon prices</li> <li>• Regulation</li> <li>• Changes in consumer behaviour</li> <li>• Competitive pressures</li> <li>• Extreme weather events</li> <li>• Sea level rises</li> <li>• Commodity scarcity</li> <li>• Food price inflation</li> <li>• Population migration</li> <li>• Productivity loss</li> </ul>

In addition, the Trustee considers the climate policy of the sponsoring employers given the impact this could have on the covenant. The Sponsor has published its own TCFD report which the Trustee and its advisers have used to inform their assessment of the impact of climate-related risks on the covenant. Further detail is provided in Section 3 and in Appendix 2.

The Trustee has not identified any specific investment opportunities consistent with its strategy. However, the Trustee's Investment Committee will continue to consider any relevant opportunities supported by its investment adviser. The Trustee also relies on the Scheme's managers to identify investment opportunities at the security level where relevant.

## Section 2 | Strategy: Impact on Funding and Investment Strategy

### Ongoing Monitoring

The impact of climate-related risks and opportunities, such as those arising from physical and transition risks, is monitored on an ongoing basis by the Trustee's investment adviser through their proprietary modelling software, ADA. The results are summarised in an annual ESG report which is reviewed by the Investment Committee.

### Impact of climate-related risks and opportunities on the investment and funding strategy

The high-level allocations for each Section of the Scheme are set out in the charts. The Scheme is invested predominantly in high-quality fixed-income assets and maintains a high level of interest rate and inflation hedging. A key objective for the Trustee is to reach the following over medium-term:

- a) 100% funding on a Gilts + 0.50% basis for the Sainsbury's Section; and
- b) 100% on a Gilts + 0.25% basis for the Argos Section (having achieved 100% funding on a Gilts + 0.50% at the end of the scheme-year).

Once 100% funding on a Gilts + 0.50% basis for the Sainsbury's Section has been achieved, the objective will be updated to be to achieve 100% funding on a Gilts + 0.25% basis for the Section. An agreement is in place with the Sponsor to achieve this.

The Trustee has used scenario analysis to assess the potential impact of climate-related risks on the Scheme's funding position and to consider if changes are required to the investment strategy. The analysis adopts the climate scenarios of the Network of Central Banks and Supervisors for Greening the Financial System ('NGFS'). The NGFS scenarios offer a common basis for the financial sector to assess climate risks, and are used by investors, banks, and regulators, including the Bank of England. The Scheme's analysis uses three reference scenarios from the NGFS scenario set, covering a broad spectrum of emissions and temperature trajectories until 2050. The assumptions used in this analysis are set out in the appendices and more information on the NGFS scenarios can be found on the NGFS portal.<sup>1</sup>

Having refreshed this analysis in producing this year's Climate Report for the Scheme, the Trustee notes that the impact of climate change on the Scheme's funding position appears to be relatively limited over the relevant time periods (for the scenarios modelled). However, the Trustee notes that there are limitations to the scenario analysis, which are discussed in more detail in Section 3. To date, the Trustee has prioritised transition risk as this has generally been expected to be the most prominent risk over the next few decades, with stewardship in relation to the liquid credit portfolio being the main lever used to manage this risk. However, in a world where the low-carbon transition is progressing relatively slowly, it is becoming increasingly important to focus on physical risk. As a result, this may become more of a focus for the Trustee.

There are no changes that have been made to either Sections' investment strategy as a result of the scenario analysis. Rather, the Trustee manages climate-related risks through manager selection, ongoing monitoring, and assessing the engagements undertaken with issuers, and will continue to assess climate-related opportunities as and when they arise. The Trustee will continue to review its position and will consider refining its strategy and approach as required and as the modelling and data in respect of climate risks evolves. The Trustee will repeat this analysis at least every three years (which would next be for the 2027 report).

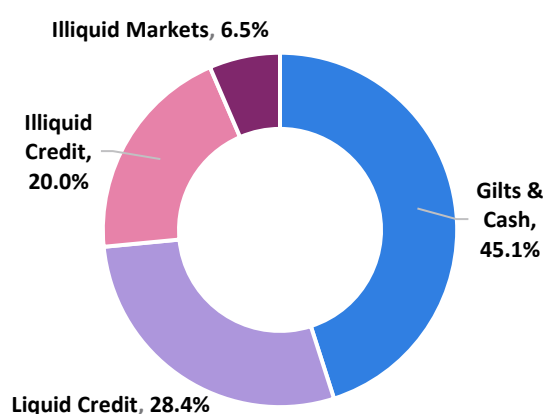
The Trustee recognises the increasing scrutiny of climate modelling and scenario analysis. This scrutiny has highlighted that current methodologies may not fully account for the short- and medium-term

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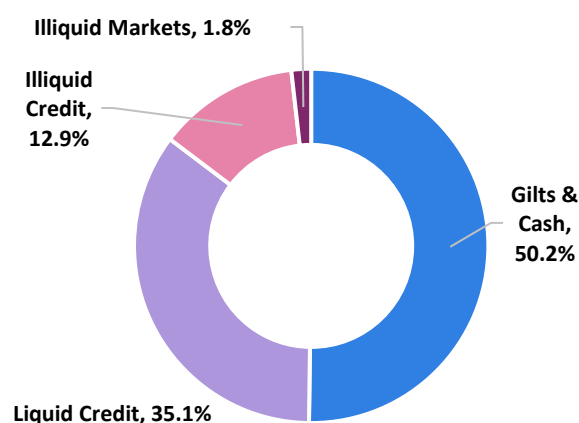
<sup>1</sup> <https://www.ngfs.net/ngfs-scenarios-portal/>

climate risks the Scheme could face; the analysis may therefore have limited reliability and usefulness as a decision-making tool. As such, the Trustee does not rely solely on this analysis to inform its strategic decision-making. Nonetheless, the scenario analysis does help to highlight that climate change risks do exist, and the Trustee therefore believes that appropriate risk management steps should be taken to address and limit their potential impacts. The Trustee has delegated the day-to-day management of these risks to the appointed investment managers.

*Figure 1: Sainsbury's Section  
(30.09.2024)*



*Figure 2: Argos Section  
(30.09.2024)*



### Engagement with investment managers and underlying issuers

Engagement is an important part of the Trustee's strategy. To address security-level risks, and to bring about meaningful real-world change, the Trustee's approach is to engage with the investment managers to ensure that climate change considerations are fully integrated into security selection and in the managers' engagements with issuers.

The Trustee views the engagement with issuers through its investment managers as being an important tool to manage climate risks and opportunities and has set climate risk (with a focus on improved disclosures) as one of its engagement priorities. The Trustee has set a forward-looking alignment target and believes that this will increase its ability to hold its managers to account on effecting real-world change via engagement.

## Section 3 | Scenario Analysis: Climate Scenarios

### Climate Scenarios

The Trustee has refreshed the climate scenario analysis to assess the potential impact on the Sections' funding levels under a range of different climate scenarios (previously this was carried out for the first Climate Report). These are discounted back from a point in time shock in 2050, using the Sections' current portfolios.

As part of the refreshed analysis, the temperature rises associated with each scenario have been updated to 2.0°C for the "Orderly" and "Disorderly" scenarios (previously 1.5°C), and to 5.0°C for the "Hot House World" scenario (previously 2.5°C).

Given the likelihood of achieving a 1.5°C rise is falling, the Trustee considers it important to consider a wider range of outcomes. The scenarios are as follows:

Scenario	Description	Temperature Rise by 2050
<b>Orderly</b>	This is the lowest-risk scenario, and is illustrative of countries gradually increasing the stringency of climate policies to increase the likelihood of global warming being limited to 2°C.	2°C
<b>Disorderly</b>	This is illustrative of a scenario where rapid and unexpected policy changes occur in a panicked effort to limit global warming to 2°C. This scenario represents a high level of transition risk.	2°C
<b>Hot House World</b>	This is illustrative of a global warming scenario where a climate tipping point* could be reached, and warming is worse than expected. This scenario accounts for countries' current national climate policy pledges (even if they have not yet been implemented) and 5°C of warming	5°C

*\*Tipping points are critical thresholds in a system that, when exceeded, can significantly accelerate climate change, often with an understanding that the change is irreversible. An example is the melting of permafrost, which is believed to hold twice as much carbon as the amount that is already in the atmosphere.*

The climate scenarios are designed to analyse climate risks to the economy and the financial system. These scenarios consider downside risks arising from both physical changes and the costs of decarbonisation, with some mitigation from technological opportunities. Rather than assessing the potential impact on asset and liability present values in a "top-down" manner using forward-looking projections of economic growth and asset returns, the stress tests are "bottom-up". In other words, they are applied as point-in-time shocks to asset and liability present values, assessing the potential impact on financial, not economic, data. This includes credit spreads, default rates, equity prices, and inflation and interest rates, among others.

However, they do not account for other potential upsides, such as an increase in business volume. It is important to note that these scenarios represent risk exposures rather than central cases, meaning that even the most favourable scenarios carry inherent risks. Additionally, the scenarios do not account for the actions underlying companies could take to mitigate climate-related risks (such as passing increased costs on to consumers).



## Limitations

The Trustee recognises that the approach to modelling the impact of climate risks is fast evolving and will keep this under review. The Trustee also recognises the limitations of the modelling, in particular:

- Any climate pathway reflects just one possible way to achieve a certain temperature goal while, in reality, many different pathways are possible for the same temperature outcome.
- Different models lead to different results, due to different model structures and assumptions.
- There is uncertainty around assumptions adopted; for example, ambitious scenarios depend on future (negative emissions) technologies such as carbon capture and storage.
- It is recognised that there are gaps in assumptions; for example, certain necessary changes to achieve zero emissions, such as changes in lifestyle or economic systems, are currently not included.
- The asset allocation is assumed to remain constant throughout the modelling period, which is unlikely to happen in practice.
- The scenarios are intended to provide an indication of the risks to which the Scheme might be exposed. They are not centralised cases, and are instead intended to be reflective of one of the many possibilities that may transpire as a result of climate change.
- The scenarios are not directly comparable between one year and the next as the impact of changes in assumptions can dwarf that of changes to a portfolio.

Although there are limitations, the Trustee believes that the modelling undertaken is useful in giving a high-level understanding of the potential impact on the Scheme's funding position as a result of climate change risks under different possible climate pathways.

The tables below show the output of the scenario analysis, setting out the impact on the Sections' assets and liabilities (with and without an impact on longevity) and their combined impact on the Sections' funding levels on the Gilts + 0.50% basis.

### Scenario Analysis Outcome

Sainsbury's Section	Orderly Transition	Disorderly Transition	Hot House World
Assets	-2.7%	-7.2%	-3.7%
Liabilities - Excluding Longevity	-1.7%	-4.7%	-1.8%
<i>Impact on funding level</i>	-0.9%	-2.4%	-1.8%
Liabilities - Including Longevity	+0.8%	-7.1%	-5.5%
<i>Impact on funding level</i>	-3.3%	-0.1%	+1.8%

Argos Section	Orderly Transition	Disorderly Transition	Hot House World
Assets	-2.3%	-6.8%	-2.8%
Liabilities - Excluding Longevity	-2.0%	-5.6%	-2.0%
<i>Impact on funding level</i>	-0.3%	-1.3%	-0.9%
Liabilities - Including Longevity	+0.6%	-7.9%	-5.7%
<i>Impact on funding level</i>	-2.9%	+1.2%	+3.1%

*Source: Redington, WTW as at 30 September 2024. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.*

Under all three scenarios, the Sections' assets are expected to fall in value, with the largest impact arising in the "Disorderly" Scenario. This is largely due to the Scheme's holdings in illiquid assets (for example, private equity, property and private debt). These higher-yielding assets are typically more greatly impacted by the scenarios than the Scheme's higher-quality assets, as many of the issuers of securities in these markets operate in higher-emitting sectors. These assets are, therefore, often more emissions intensive and suffer more transition risk.

The Argos Section holds a lower proportion of these lower-quality assets relative to the Sainsbury's Section, and as a result, is less negatively impacted by the scenarios than the Sainsbury's Section (in funding level terms).

With regard to the impact on the liabilities, the above tables show the impact including and excluding the impact on longevity. That is, the scenarios excluding longevity show purely the impact of changes in interest rates and inflation on the Sections' liabilities. When longevity is excluded, the liabilities fall under each of the scenarios, albeit by a proportionately smaller amount than the assets, resulting in a net decrease in the funding level.

When the impact of longevity is accounted for, this results in differing impacts on the liabilities depending on the scenario. In the more extreme scenarios (i.e. "Disorderly" and "Hot House World") the impact of longevity can result in a net increase in the funding levels, as these scenarios have lower life expectancies relative to the funding assumptions.

It is important to recognise that an assessment of what is in the best interests of the Scheme and its members is a much broader question than the impact on funding level alone. In particular, key considerations may be a reduction in the quality (and length) of members' lives, and the quality of the environment that they will retire into. Moreover, the strength of the Sponsor's covenant to the Scheme may be adversely affected in such a scenario (discussed below).

Consequently, the results of any such modelling should not be assumed to reflect any complacency or acceptance (either implicit or explicit) that the Trustee consider global inaction or business-as-usual with respect to climate change to be in the best interests of the Scheme or its members.

### **Covenant Analysis**

Both sections of the Scheme may be reliant on the covenant support provided by the Group over the long-term, as the sections complete their journey to a low dependency funding position and deliver their long-term objective to provide member benefits. This corresponds to an important period in the Group's transition to net zero and a period where the Group is exposed to the potential impact of climate-related risks.

Assessing the potential impact of climate change on the Group is therefore an important consideration when assessing the strength and prospects of the covenant and helps inform the overall strategy for both Sections of the Scheme. Currently there is no indication that climate risks will materially impact the employers' ability to support both Sections of the Scheme, after allowing for planned mitigating actions. However, it remains important for the Trustee to continue to monitor the impact of climate risks as the position evolves over time.

## Summary

The analysis indicates that the Scheme's investment and funding strategy appears to be relatively robust across the various climate scenarios, with the disorderly transition having the most significant impact on the funding level. However, the Trustee recognises the limitations of current quantitative scenario analysis methods and therefore maintains a cautious approach to risk management, as detailed in the Risk Management section. Despite these limitations, the scenario analysis for the Scheme's assets and liabilities continues to assist the Trustee in evaluating different potential climate-related risks and opportunities. The Trustee also takes a degree of comfort from the assessment that there are not expected to be material impacts on the ability of the employers to support both Sections of the Scheme.

Nevertheless, the Trustee acknowledges that climate risks and opportunities are likely to evolve over time, and will continue to assess the potential impacts of these on the Scheme's investment and funding strategy to ensure the Trustee remains comfortable as the situation evolves. The Trustee is also aware that this is just one lens for assessing risk; as a result, the Trustee uses other metrics and tools, such as stewardship, to assess and manage the Scheme's exposure. These are detailed in the Sections of the report that follow.

## Section 4 | Risk Management: Identifying, Assessing and Managing Risk

The Trustee has overall responsibility for the assessment and management of climate-related risks and opportunities. The implementation of investment decisions, including those relating to climate change, lies with the Investment Committee.

The governance and reporting standards implemented by the Trustee will enable it to have an appropriate understanding of climate risk within the Scheme's investments and will help to guide it in setting and refining interim targets and milestones to measure progress towards the Scheme's net zero aspiration. The scenario analysis included in Section 3 of this report and the metrics included in Section 5 are used as inputs for assessing the Scheme's exposure to potential climate-related risks and opportunities. Any changes in the level of risk arising from climate-related risks is then captured in the quarterly risk dashboard.

The Trustee sees stewardship as a key lever for managing the Scheme's climate risk, and encourages the improvement of disclosures across the corporate sector to assist with this process by actively engaging with its investment managers on their own engagement efforts with portfolio companies. The Trustee has set engagement on climate risks (with a focus on disclosures) as one of its key engagement priorities and this has been communicated to all the Scheme's investment managers. In October 2023, Insight and PIMCO were invited to present to the Investment Committee. During the meeting, the committee emphasised the importance of ongoing engagement and the ability to track actions that had resulted from the engagements.

The Trustee has adopted the following approaches to manage climate-related risks:

- ✓ The Statement of Investment Principles sets out the Trustee's policy on sustainable investment, ESG and stewardship.
- ✓ The Trustee has delegated responsibility to the Investment Committee and the Trustee's investment adviser to undertake the governance requirements relating to ESG, including the production of the annual Implementation Statement.
- ✓ The risks linked to ESG issues including climate change are separately identified in the Investment Committee risk dashboard which is regularly reviewed and updated by the Investment Committee with independent challenge from the Risk and Finance Committee, and then presented to the Trustee Board.
- ✓ The Trustee is supported by its professional advisers and the pensions department.
- ✓ 17 of the Scheme's 19 investment managers are signatories to the United Nations Principles for Responsible investment.
- ✓ 10 of the Scheme's 19 investment managers are also signatories of the UK Stewardship Code.

## Section 4 | Risk Management: Identifying, Assessing and Managing Risk

An important aspect of identifying, assessing and managing climate risks and opportunities is the close monitoring of the appointed investment managers by the Investment Committee and the investment adviser.

The Investment Committee holds meetings with the Scheme's key investment managers<sup>2</sup> and reviews their approach to managing ESG risks. Where the Investment Committee doesn't have meetings with the managers, the investment adviser meets with the managers to ensure the messaging is shared and understood.

The Investment Committee requires all appointed investment managers to report regularly and requests that managers disclose engagement activity on ESG matters, including climate risk matters, undertaken on its behalf. Over the Scheme year, the Investment Committee reviewed the engagements undertaken by each investment manager and considered case studies of significant engagements as part of the ongoing appraisal of the Scheme's investment managers. These activities were summarised by the Trustee's previous investment adviser in the Stewardship & Engagement report. See example case study below.

### Case Study: Utilities Issuer

**Rationale:** External factors have hampered progress relative to the issuer's near-term core greenhouse gas emission reduction target. Hence, given their ambition, there's a possibility that they may miss the target for their sustainability-linked bond ("SLB").

**The Engagement:** The manager has regular engagements with the issuer and provided significant input when they first developed their sustainability-linked bond framework.

In early 2023, the manager discussed the latest trends of their greenhouse gas emissions, and the possibility for them to miss the target for SLB, which would result in a step up in the interest rate payable on the bond.

**Outcomes and next steps:** The issuer updated their SLB framework in February 2023, including the additional targets on Scope 3 and taxonomy-aligned CAPEX.

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<sup>2</sup> The key investment managers include the investment managers that manage a significant part of the portfolio and are responsible for mandates that are expected to be maintained as a long-term part of the portfolio as the Scheme approaches its longer-term objectives.

## Section 5 | Metrics & Targets: Overview

### Metrics

To inform its understanding and monitoring of the Scheme's climate-related risks and opportunities, the Trustee has selected the following metrics, set out in the table below.

<b>Absolute emissions metric</b>	<b>Total Emissions</b> The total scope 1, 2 and 3 Greenhouse Gas ("GHG") Emissions for the Sections' assets (measured in tonnes of CO2e emitted).
<b>Emissions intensity metric</b>	<b>Carbon footprint</b> The total Greenhouse Gas emissions of the portfolio divided by the current value of the portfolio (tonnes of CO2e / £m of asset value).
<b>Portfolio alignment metric</b>	<b>Science Based Targets initiative ("SBTi") Score</b> The percentage of portfolio holdings that have set net zero targets approved by the SBTi.
<b>Additional non-emissions-based metric</b>	<b>Partnership for Carbon Accounting Financials ("PCAF") Data Quality Score</b> The data quality score, ranging from 1 to 5, as calculated by PCAF methodology.

The Trustee has updated the non-emissions-based metric from data coverage to data quality, as measured by the PCAF Data Quality Score. This metric is an evolution of the previous data coverage metric, and has been selected given:

- The use of asset class proxies for asset classes where there is limited data coverage, making the quality of the data more relevant; and
- The additional ability to interrogate the robustness of the data (e.g. to assess whether the data has been verified).

### What are Scope 1, 2 and 3 emissions?

- Scope 1 emissions are direct greenhouse gas ("GHG") emissions from sources that are owned or controlled by a company, such as emissions from combustion of fossil fuels in boilers or vehicles.
- Scope 2 emissions are indirect GHG emissions from the generation of purchased electricity, heat or steam consumed by a company.
- Scope 3 emissions are all other indirect GHG emissions that occur in a company's value chain, including emissions from the production of purchased materials and fuels, transportation and distribution, waste disposal, and the use and disposal of products and services.



## Section 5 | Metrics & Targets: Metrics

Data for the Scheme's metrics has been calculated by the Trustee's investment adviser and represents the position as at 30 September 2024.

The Trustee focuses on emissions from the non-gilt assets where the Trustee can influence outcomes through manager selection decisions, mandate changes and engagement with the investment managers. The emissions from gilts do not form part of the Trustee's targets (as while these are held to manage the Scheme's liability-related risks, the Trustee has very limited influence on actions the government takes).

In estimating the Scheme's emissions for this Climate Report, asset class proxies have been used where there is low data coverage (whereas these were assumed to be zero under the previous methodology). As a result, the reported emissions are meaningfully higher than those reported in prior periods. However, this is in line with expectations, given the change in methodology.

A large portion of the Scheme's non-gilt assets are held in liquid credit-based assets, for which data coverage is generally high. However, for the Scheme's investments in higher-yielding illiquid assets, data coverage is poorer and, in these cases, emissions have largely been estimated based on asset class proxies. It is also the case that these assets tend to be more emissions intensive as they are often issued by companies operating in higher-emissions sectors. Such proxies have also been used for these assets in the scenario analysis shown in the Strategy section of this report.

The key metrics for each Section are summarised below.

### 1. Total Emissions

The total emissions analysis includes scope 1, 2 and 3 emissions for each Section of the Scheme, with the scope 3 emissions shown separately. There is a notable increase in the absolute carbon emissions for each Section in this report. This is predominantly due to the updated methodology of using proxies for some of the Scheme's assets, which the Trustee believes provides a more complete picture of the true emissions of the Scheme. Prior to the use of proxies, it was assumed that certain assets, primarily the Scheme's illiquid assets, had no emissions associated with them.

As such, the total emissions data on its own provides limited insights but as time goes on and the data quality improves the Trustee will be able to better assess trends from year to year.

### GHG Emissions Scope 1 and 2 (tonnes CO2e)

Section	Value (ex LDI) 30/09/2024	Dec 2021 Base Year	Dec 2022	Dec 2023 Indicative	Sept 2024 <sup>1</sup>
Sainsbury's Section	£3,150m (54.9% of assets)	296,587	46,400	93,483	429,180
Argos Section	£418m (49.8% of assets)	58,117	5,486	10,179	60,522

Data for December 2023 is the indicative position that was shown in the 2023 report. Data for 2024 is reported as at September of that year to align with the Scheme year-end.

### GHG Emissions Scope 3 (tonnes CO2e)

Section	Value (ex LDI) 30/09/2024	Dec 2021 Base Year	Dec 2022	Dec 2023 Indicative	Sept 2024 <sup>1</sup>
Sainsbury's Section	£3,150m (54.9% of assets)	n/a	89,925	n/a	3,524,415
Argos Section	£418m (49.8% of assets)	n/a	20,299	n/a	461,631

Data for December 2023 is the indicative position that was shown in the 2023 report. Data for 2024 is reported as at September of that year to align with the Scheme year-end.

<sup>1</sup>Source: Redington as at 30 September 2024. Carbon metrics are proxied where there is insufficient data for funds. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission. Information on the proportion of assets for which emissions data is based on reporting by underlying companies versus being proxied is included on pages 34-37.

## 2. Carbon Footprint

The carbon footprint analysis shows the scope 1 & 2 and scope 3 emissions intensity. Given the updated methodology, there is a notable increase in the emissions intensity for each Section. This is because the assets which have poor data coverage (which were previously excluded from the figures) tend to be higher-yielding illiquid assets which are often more emissions intensive.

### GHG Emissions Scope 1 and 2 (tonnes CO2e/ EVIC<sup>2</sup> £m)

Section	Value (ex LDI) 30/09/2024	Dec 2021 Base Year	Dec 2022	Dec 2023 Indicative	Sept 2024 <sup>1</sup>
Sainsbury's Section	£3,150m (54.9% of assets)	115	62	87	106
Argos Section	£418m (49.8% of assets)	111	40	70	99

Data for December 2023 is the indicative position that was shown in the 2023 report. Data for 2024 is reported as at September of that year to align with the Scheme year-end.

### GHG Emissions Scope 3 (tonnes CO2e/ EVIC<sup>2</sup> £m)

Section	Value (ex LDI) 30/09/2024	Dec 2021 Base Year	Dec 2022	Dec 2023 Indicative	Sept 2024 <sup>1</sup>
Sainsbury's Section	£3,150m (54.9% of assets)	n/a	206	n/a	872
Argos Section	£418m (49.8% of assets)	n/a	182	n/a	758

Data for December 2023 is the indicative position that was shown in the 2023 report. Data for 2024 is reported as at September of that year to align with the Scheme year-end.

<sup>1</sup>Source: Redington as at 30 September 2024. Carbon metrics are proxied where there is insufficient data for funds. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.

<sup>2</sup> "EVIC" is the Enterprise Value Including Cash. This is the sum of the market capitalisation of shares and book values of total debts and minority interests at the fiscal year-end.

#### Methodology Example

The carbon footprint for an investment portfolio can be calculated as follows:

$$\text{Carbon Footprint} = \frac{\text{Total Carbon Emissions}}{\text{Portfolio Value (GBP million)}}$$

Therefore, a hypothetical portfolio with total carbon emissions of 20,000 tonnes of CO2e and a Portfolio Value of £100m would have the following carbon footprint:

$$\text{Carbon Footprint} = \frac{20,000}{100} = 200 \text{ tonnes CO2e/GBPm}$$

### 3. Science Based Targets initiative ("SBTi") Score

The Trustee has selected the SBTi Score as the portfolio alignment metric. This forward-looking metric examines whether portfolio companies have voluntarily disclosed company decarbonisation targets aligned with a relevant science-based pathway, in line with the goals of the Paris Agreement. In previous years, this was calculated as the proportion of Scheme assets with SBTi-approved targets. In this year's report, this has been updated to reflect the proportion of the Scheme's financed emissions that are attributable to companies with SBTi-approved targets. This change was implemented to reflect the focus on aligning the largest sources of the Scheme's emissions with the goals of the Paris Agreement (rather than aligning the largest investments by market value).

Although a small proportion of total scheme assets is covered by SBTi-approved targets, coverage for this metric should improve over time as the Scheme's holdings in illiquid assets run off over time, and are reinvested into more liquid assets. As net-zero targets are most likely to be set by larger, often public, companies, the metric is most relevant to the Scheme's liquid credit assets.

The figures reported below are in respect of all the Scheme's non-gilt assets. However, this data is currently only reported for the corporate bond and credit default swap mandates.

### SBTi Score (Total Portfolio)

Section	Dec 2021 Base Year	Dec 2022	Dec 2023 <i>Indicative</i>	Sept 2024 <sup>1</sup>
Sainsbury's Section	5%	2%	7%	10%
Argos Section	7%	3%	8%	13%

Data for December 2023 is the indicative position that was shown in the 2023 report. Data for 2024 is reported as at September of that year to align with the Scheme year-end.

<sup>1</sup>Source: Redington as at 30 September 2024. SBTi Score is estimated based on the percent of financed emissions as at 30 September 2024, and on market value for prior years.

As part of the monitoring of progress towards the Scheme's updated target, the SBTi score of the Scheme's physical corporate bond mandates as at 30 September 2024 is also set out below:

### SBTi Score (Corporate Bond Mandates)

Section	Sept 2024 Base Year
Sainsbury's Section	43%
Argos Section	42%

Data for December 2023 is the indicative position that was shown in the 2023 report.

Source: Redington, as at 30 September 2024

## 4. Partnership for Carbon Account Financials ("PCAF") Data Quality Score

The Trustee has updated the non-emissions-based metric from data coverage to data quality, as measured by the PCAF Data Quality Score.

The PCAF score is an evolution of the existing data coverage metric. As asset class proxies have been used to estimate the carbon emissions for asset classes where there is limited data coverage, the focus is now to improve the quality of the data over time.

The Scheme's liquid corporate bond mandates have relatively high data quality scores (largely rated as "Grade 2"), meaning that the emissions data reported by underlying publicly listed companies is in line with the Greenhouse Gas Protocol, but is unverified. Emissions from the Scheme's illiquid mandates have been estimated by the investment advisor using asset class proxies and so have a lower data quality (Grade 5).

The aim is therefore that there is a gradual increase in the proportion of assets with PCAF scores of 1 or 2 (indicating emissions that have been reported by the underlying companies), and a decrease in the proportion of assets with PCAF scores of 3, 4 or 5 (indicating estimated emissions).

Aggregation of the PCAF data quality scores into a single metric is complex as the "gaps" between each score are not equal (i.e. improving data quality from 2 to 1 is not equivalent to moving from 5 to 4). As such, the breakdown of each Section's assets for each PCAF Data Quality Score is set out below:

### PCAF Data Quality Score

As at 30.09.2024	Grade 1 Verified	Grade 2 Unverified or estimated from energy consumption	Grade 3 Estimated from company production	Grade 4 Estimated from company revenue and sector	Grade 5 Other estimated
<b>Sainsbury's Section</b>	0%	31.4%	0%	0.9%	67.7%
<b>Argos Section</b>	0%	38.1%	0%	1.7%	60.3%

Source: Redington, as at 30 September 2024. PCAF scores are in respect of the non-LDI assets (c.54.9% for the Sainsbury's Section and c.49.8% for the Argos Section).

### Case Study: PIMCO Buy-and-maintain credit Scope 1 and 2 emissions

As the change in methodology (the introduction of proxies for some asset classes) means it is more challenging to draw comparisons relative to prior years, a case study of the estimated carbon emissions under the new methodology for the Scheme's buy-and-maintain credit mandate with PIMCO is also provided. The table that follows shows a comparison of the absolute emissions and carbon footprints of the PIMCO mandates for both the Argos and Sainsbury's Sections, showing how these have changed between December 2022 and September 2024 when using a consistent methodology.

There have been meaningful changes to the PIMCO mandates for both Sections since December 2022: both have increased in size (by around 33% for Sainsburys and 73% for Argos) and the composition of both portfolios has also changed; the latter has driven an increase in the carbon footprints for the Sections' PIMCO mandates since 2022. For the Sainsbury's Section, in 2022 around a third of the portfolio was held in assets that do not have emissions modelled for them – this includes treasuries, derivatives and cash. This allocation fell considerably, which resulted in an increase in the emissions intensity as the rest of the portfolio (corporate bonds) does have modelled emissions. For the Argos Section, the increase in the carbon footprint has largely been driven by allocations made by the manager to more emissions-intensive companies.

Sainsbury's Section	Dec 2022	Sept 2024
Carbon Emissions (tonnes CO2e scope 1 and 2)	22,498	41,948
Carbon Footprint (tonnes CO2e/EVIC £m scope 1 and 2)	52	73

Source: Redington

Argos Section	Dec 2022	Sept 2024
Carbon Emissions (tonnes CO2e scope 1 and 2)	2,066	7,894
Carbon Footprint (tonnes CO2e/EVIC £m scope 1 and 2)	40	88

Source: Redington

## Section 5 | Metrics & Targets: Portfolio Alignment Target

The Trustee has previously had a target to increase the data availability to 65% by 31 December 2024 for the non-gilt assets.

Based on the position as at 30 September 2024, the data coverage for the Sainsbury's and Argos Sections' non-gilt assets was c.32% and c.39% respectively, which is broadly in line with the 31 December 2023 position (34% and 41% for the Sainsbury's and Argos Sections respectively).

The data coverage target has therefore been missed; this is due to:

- The target was initially set prior to the gilts crisis, following which several of the more liquid mandates were terminated. In general, these liquid public assets have much better data coverage than private assets. The Trustee, via their investment consultant, engages with managers to improve the coverage of their climate data reporting. However, it is significant that these illiquid assets are legacy investments that are returning capital to the Scheme. As a result, the Trustee has limited leverage to use in discussions to improve data quality among these assets as the threat of divestment is not an option.
- It is unlikely that the Scheme would be able to achieve the 65% target in the near future without a material shift from private to public assets.

The Trustee has agreed to update the target to be based on the portfolio alignment of the Scheme's corporate bond assets. Key considerations in this decision are set out below:

- The Trustee now uses asset class proxies where data coverage is limited to provide a more "complete" picture of the Scheme's emissions. As such, data coverage is less of a limiting factor than previously.
- The ongoing development of industry standards and best practice, including the availability of new metrics.

**The Trustee has therefore agreed to update the target to be to improve the portfolio's SBTi score to 70% for each Section's corporate bond mandates by 2030.**

The SBTi score of the Scheme's physical corporate bond mandates is set out below:

Section	Sept 2024 Base Year
Sainsbury's Section	43%
Argos Section	42%

As mentioned previously, this target has been selected to shift the focus from improving disclosures to supporting real-world decarbonisation. This gives the Trustee a fruitful way to encourage the transition to a lower-carbon economy in the long term, providing the policy environment allows the Trustee to do so. The Trustee will monitor progress towards this target and engage with managers to encourage progress.



## Section 5 – Metrics & Targets: Carbon Accounting for LDI

Reporting emissions on government bond assets is a complex and evolving area. As such, the Trustee has decided to assess and report the emissions metrics separately for the liability hedging assets from the rest of the investment portfolio.

### Double counting

For physically held gilts, the emissions figure is based on the UK's total emissions which includes corporates, households and public sector emissions. The emissions from UK corporates could therefore be accounted for both through corporate bond holdings in the non-LDI mandates, as well as part of the emissions of the UK economy in the LDI mandate.

### Green gilts

In addition, the Trustee had to consider whether to include or exclude green gilts from the emissions for the LDI portfolios. Excluding green gilts has the impact of increasing carbon footprint as it is assumed that the total UK emissions are apportioned only to non-green gilts (i.e. traditional gilts that have not been classified as "green"). The non-green gilts therefore become 'dirtier'. The analysis below assumes that UK emissions are allocated pro-rata across all gilts, including green gilts.

### Funded/unfunded Exposure

Consideration also needs to be given to whether to include or exclude the unfunded exposure to UK government bonds achieved through derivatives instruments.

Unfunded exposure refers to the use of borrowing through the use of derivatives, such as gilt repurchase agreements (repos), to generate additional gilt exposure. By accounting for the emissions generated by gilts held out on repo, this can cause a marked increase in the reported emissions of the LDI portfolio.

Whilst there is no formal guidance, the Trustee notes that some pension schemes have started to report on unfunded gilt exposures, and has included total emissions including from unfunded gilts in the footnotes to the tables below.

### Sovereign Scope 1 Emissions

Sainsbury's Section	Dec 2021	Dec 2022	Sept 2024 <sup>1</sup>
Value (£m)	3,465	2,418	2,467.9
% of Section assets	33%	40%	43%
Total Carbon Emissions (Funded)	279,754	396,371	323,596
Total Carbon Emissions (Funded and Unfunded)	N/A	1,011,686	763,097
Carbon Footprint	152	162	161

The Sainsbury's Section's Scope 2 and 3 absolute emissions and carbon intensity from sovereign assets as at September 2024 were 511,991 tonnes CO<sub>2</sub>e and 108 tonnes CO<sub>2</sub>e / PPP-adjusted GDP £m respectively.

Argos Section	Dec 2021	Dec 2022	Sept 2024 <sup>1</sup>
Value (£m)	632	498	436
% of Section assets	40%	53%	45%
Total Carbon Emissions (Funded)	55,011	17,961	69,476
Total Carbon Emissions (Funded and Unfunded)	N/A	30,408	130,680
Carbon Footprint	70	45	161

The Argos Section's Scope 2 and 3 absolute emissions and carbon intensity from sovereign assets as at September 2024 were 87,678 tonnes CO<sub>2</sub>e and 108 tonnes CO<sub>2</sub>e / PPP-adjusted GDP £m respectively.

<sup>1</sup>Source: Redington as at 30 September 2024. Carbon metrics are proxied where there is insufficient data for funds. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.

## Appendix 1 | Metrics – Additional Information

### Sainsbury's Section

The table below summarise the total emissions and emissions intensity metrics for the Sainsbury's Section for each of the underlying mandates.

Fund	Fund Value (£m)	Carbon Emissions (tCO2e)		Carbon Intensity (tCO2e / EVIC £m)	
		Current - Scope		Current - Scope	
		1 & 2	3	1 & 2	3
<b>Liquid &amp; Semi-Liquid Credit</b>					
Insight Buy & Maintain Credit Portfolio	209.5	12,581	110,868	60.1	529.3
Insight Credit Default Swap Portfolio*	20.0	91,208	1,365,976	100.0	1,497.9
Insight Global ABS Fund	181.0	6,590	66,965	36.4	370.1
Insight Index-Linked Credit	32.9	1,095	4,636	33.3	141.1
PIMCO Buy & Maintain Portfolio	572.0	41,948	245,317	73.3	428.9
<b>Illiquid Credit</b>					
AG Direct Lending Fund III (Unlevered)	108.0	20,189	108,697	186.9	1,006.1
AG Direct Lending Fund IV (Unlevered)	123.7	23,120	124,480	186.9	1,006.1
M&G Secure Income	316.3	52,300	287,159	165.3	907.9
BlackRock Credit Opportunities Fund	0.8	241	1,228	298.1	1,520.0
GSAM RECP III Financing Arrangement	47.3	1,837	16,430	38.8	347.3
Insight Secured Finance	614.3	53,094	425,409	86.4	692.5
KKR Lending Partners Europe I	9.3	1,135	8,191	121.8	879.6
LGT Crown Distressed Credit Opportunities II	2.6	685	4,108	266.1	1,596.1
LGT Crown Distressed Credit Opportunities III	15.5	4,123	24,737	266.1	1,596.1
M&G Illiquid Credit Opportunities Fund VII	254.5	75,862	386,843	298.1	1,520.0
Orion Mine Finance II	25.3	2,514	22,711	99.2	896.2

Fund	Fund Value (£m)	Carbon Emissions (tCO2e)		Carbon Intensity (tCO2e / EVIC £m)	
		Current - Scope		Current - Scope	
		1 & 2	3	1 & 2	3
Stellus Credit Master Fund II	13.0	3,456	20,733	266.1	1,596.1
WP Private Debt Co-Investment Fund III	4.5	757	4,162	166.6	915.9
WP Private Debt Partnership Fund III	6.8	1,137	6,249	166.6	915.9
CapitalSpring Investment Partners V Parallel II	29.7	7,897	47,376	266.1	1,596.1
Schroders Life Insurance Linked Securities Fund I	38.4	51	356	1.3	9.3
Schroders Life Insurance Linked Securities Fund II	153.8	210	1,836	1.4	11.9
<b>Illiquid Markets</b>					
Adams Street Private Equity Portfolio	261.8	25,977	234,655	99.2	896.2
CBRE Legacy Portfolio	8.3	85	376	10.6	47.1
CBRE Long Income Portfolio	100.1	1,065	4,711	10.6	47.1
HarbourVest Private Equity Portfolio	0.2	23	206	99.2	896.2
Insight Farmland	0.6	0	0	0.0	0.0
<b>Totals</b>	<b>3,150.2</b>	<b>429,180</b>	<b>3,524,415</b>	<b>106.2</b>	<b>871.9</b>

*\*The carbon emissions and intensity metrics for the CDS portfolio reflect the c.£912m of notional exposure of the underlying CDS contracts as at 30 September 2024.*

## Argos Section

The table below summarise the total emissions and emissions intensity metrics for the Argos Section for each of the underlying mandates:

Fund	Fund Value (£m)	Carbon Emissions (tCO2e)		Carbon Intensity (tCO2e / EVIC £m)	
		Current - Scope		Current - Scope	
		1 & 2	3	1 & 2	3
Liquid & Semi-Liquid Credit					
Insight Buy & Maintain Credit Portfolio	81.1	5,623	46,582	69.3	574.4
Insight Credit Default Swap Portfolio*	4.1	15,241	171,044	115.7	1,298.7
Insight Global ABS Fund	68.3	2,488	25,283	36.4	370.1
Insight High Grade ABS Fund	41.4	1,508	15,320	36.4	370.1
Insight Index-Linked Credit	4.9	161	683	33.2	140.6
PIMCO Buy & Maintain Portfolio	89.4	7,894	36,894	88.3	412.8
Illiquid Credit					
AG Direct Lending Fund III (Unlevered)	15.4	2,884	15,528	186.9	1,006.1
AG Direct Lending Fund IV (Unlevered)	17.2	3,211	17,289	186.9	1,006.1
Arcmont Direct Lending Fund III	26.5	3,228	23,306	121.8	879.6
AXA Senior Commercial Real Estate Debt UK 8	2.3	23	253	9.9	110.4
GSAM Broad Street Loan Partners IV (Unlevered) Fund	7.9	1,323	7,271	166.6	915.9
GSAM Broad Street Loan Partners IV Financing Arrangement	14.9	578	5,172	38.8	347.3
Insight Secured Finance	50.0	4,324	34,649	86.4	692.5
KKR Special Situations I	4.6	1,229	7,375	266.1	1,596.1
M&G Illiquid Credit Opportunities Fund VII	35.6	10,619	54,152	298.1	1,520.0
Illiquid Markets					

Fund	Fund Value (£m)	Carbon Emissions (tCO2e)		Carbon Intensity (tCO2e / EVIC £m)	
		Current - Scope		Current - Scope	
		1 & 2	3	1 & 2	3
Partners Group Global Real Estate Secondaries 2009	6.6	70	309	10.6	47.1
Partners Group Global Real Estate Secondaries 2013	11.1	118	521	10.6	47.1
<b>Totals</b>	<b>481.3</b>	<b>60,522</b>	<b>461,631</b>	<b>99.3</b>	<b>757.9</b>

\*The carbon emissions and intensity metrics for the CDS portfolio reflect the c.£132m of notional exposure of the underlying CDS contracts as at 30 September 2024.

## Appendix 2 | Covenant Analysis

*The covenant analysis quoted in this report was undertaken by the Scheme covenant advisor, PwC. They stress a number of caveats to such work, as follows:*

The Sainsbury's and Argos Sections of the Sainsbury's Pension Scheme (the "Scheme") are both supported by participating employers (the "employers") within the J Sainsbury Plc group (the "Group"). As the employers represent key trading entities within the Group and both Sections of the Scheme benefit from wider Group support, the Trustee considers the potential impact of climate change on the Group as a whole.

Rising global temperatures and the transition to a low carbon economy mean the Group, consistent with many businesses, is exposed to a range of climate-related risks, such as supply chain disruption and changing consumer demand. Climate change may also provide opportunities for the Group, including increasing demand for electric vehicle charging and more sustainable products.

The Group's efforts to address climate change are supported by climate-related targets and cross-industry reporting metrics. The Group's targets include an ambition to achieve net zero greenhouse gas emissions ("GHG") in its own operations by 2035 (Scope 1 and 2) and to achieve net zero Scope 3 emissions by 2050. The Group has made good progress in delivering a reduction in GHG emissions in its own operations to date; reducing Scope 1 and 2 emissions by 51.7% by 2023/24 (against the Group's 2018/19 baseline). Sainsbury's Management estimates that 96% of its 2023/24 emissions are in its value chain (Scope 3), which are beyond the Group's direct control and as with many corporates, the reduction in Scope 3 emissions to net zero by 2050 remains a substantial challenge.

Both Sections of the Scheme may be reliant on the covenant support provided by the Group over the long-term, as the Sections complete their journey to a low dependency funding position and deliver their long-term objective to provide member benefits. This corresponds to an important period in the Group's transition to net zero and a period where the Group is exposed to the potential impact of climate-related risks.

Assessing the potential impact of climate change on the Group is therefore an important consideration when assessing the strength and prospects of the covenant and helps inform the overall strategy for both Sections of the Scheme. Currently there is no indication that climate risks will materially impact the employers' ability to support both Sections of the Scheme, after allowing for planned mitigating actions. However, it remains important for the Trustee to continue to monitor the impact of climate risks as the position evolves over time.

### **Climate-related risks and opportunities**

Sainsbury's management has identified several key climate-related risks (transition and physical) and opportunities that could impact the future operational and financial performance of the Group over the Scheme's short-, medium- and long-term time horizons. Sainsbury's management has also conducted quantitative scenario analysis to assess the potential financial impact of the Group's most material climate risks on its most exposed product categories, under different climate scenarios and time horizons (see further information below).

#### Transition risks

The transition to a low carbon economy encompasses the actions taken by governments, organisations and individuals to limit global warming by reducing GHG emissions and adopting low carbon technology. Transition risks encompass the potential impact of measures to reduce GHG emissions,

such as changing consumer behaviours and regulatory changes (e.g. carbon pricing). The key transition risks identified by Sainsbury's management include:

- Carbon pricing – the risk of an introduction of carbon pricing, which leads to an increase in the cost of higher GHG emission products. Sainsbury's management considers the potential financial impact of carbon pricing over 0-15 years (equivalent to the Scheme's short to long-term time horizon), is low (less than £25m annual revenue impact) after factoring in mitigating actions such as the development of a sustainable, low GHG product portfolio, as an alternative for consumers.
- Ban on the sale of new petrol/diesel cars and vans - the risk that the UK ban on the sale of new petrol/diesel cars and vans, which is currently expected to come into force from 2035 (noting the UK Government is also considering bringing the ban forward to 2030) leads to a reduction in fuel sales. After allowing for mitigating actions such as the rollout of electric vehicle ("EV") charging points across stores, Sainsbury's management considers the potential financial impact over 5-15 years (equivalent to the Scheme's long-term time horizon), could be high (greater than £125m annual revenue impact).

Sainsbury's management has considered the potential financial impact of key transition risks under a low emissions scenario (1.5°C) over the period to 2030. This broadly aligns to the Scheme's 'Disorderly' climate scenario over the Scheme's medium-term time horizon. This scenario considers the potential financial impact on selected product categories where physical risks associated with climate change are limited, but high transition risks are experienced as the world attempts to meet the Paris Agreement.

Under this scenario, the potential revenue impact on the Group is significant (before allowing for any mitigating actions); up to £3bn fall in fuel sales as a result of the ban on the sale of new petrol/diesel and hybrid cars and vans from 2035; and up to £500m fall in Meat, Fish and Poultry ("MFP") sales as a result of adding a carbon price to MFP products, which reduces consumer demand. This scenario highlights the potentially significant financial impact of the Group's climate-related transition risks within a relatively short timeframe.

Sainsbury's management believes that after allowing for mitigating actions, there is an overall opportunity for the Group from the sale of MFP (e.g. by developing and promoting lower GHG alternatives). Sainsbury's management also considers that the ban on the sale of new petrol/diesel and hybrid cars and vans from 2035 could provide a potential opportunity for the Group from providing customer electric vehicle charging, which as a minimum could significantly offset the loss of fuel sales.

#### Physical risks

Physical risks relate to the risk associated with increasing global temperatures and corresponding extreme weather events, such as flooding, droughts, extreme heat events and the potential impact on the Group's operations and supply chains. Key physical risks identified by Sainsbury's management include:

- Extreme global weather events – Increased likelihood of heat events, flooding and droughts leading to reduced crop yields and increased sourcing costs. Sainsbury's management considers the potential financial impact over the next 50 years (equivalent to the Scheme's short to long-term time horizon), is medium to high (greater than £25m annual revenue impact) after factoring in mitigating actions, such as the Group's work with strategic suppliers to enhance supply chain resilience.



- UK flood risk – Increased likelihood of flooding leading to water damage and closure of stores and depots. Sainsbury's management considers the potential financial impact over the next 50 years (equivalent to the Scheme's short to long-term time horizon) is low (less than £25m annual revenue or cost impact). This is after allowing for mitigating actions, such as undertaking flood risk assessments across the estate and the installation of flood defence measures in high-risk areas.

Sainsbury's management has considered the potential financial impact of key physical risks in a high emissions scenario (4.3°C) over the period to 2050. This broadly aligns to the Scheme's 'Hot House World' climate scenario over the Scheme's long-term time horizon. This scenario considers the potential financial impact on selected product categories in isolation where global warming reaches 4.3°C (high emissions), where no global action is taken to reduce emissions, leading to extreme physical risks manifesting in the long term.

Under this scenario the Group has evaluated the impact on the production of Produce, Cotton, Coffee and Tea from the most material physical climate risks (e.g. heat events, drought, flooding and labour capacity). These risks could lead to diminished or lost crop yields that would result in increased supply costs which are passed on directly to the consumers, reducing demand and impacting revenue.

The Group's analysis indicates that an extreme heat event could have the most material impact of the physical climate risks considered on the revenue of the selected products, including; Produce (up to £40m), Cotton (up to £95m), Coffee (up to £35m), and Tea (up to £45m), before allowing for any mitigating actions.

This scenario highlights the potential financial impact of the Group's climate-related physical risks on individual product categories over the long term. However, Sainsbury's management concludes that mitigating actions that are being implemented or considered as part of its ongoing strategic planning will act to minimise the financial impacts of the risks identified. This includes the Group's work with suppliers and investment in sustainability projects which Sainsbury's management considers will contribute to increased climate resilience.

In the event global temperatures increase higher or earlier than anticipated and/or efforts to transition to a low carbon economy are less successful, there is a risk that the physical and transition risks identified above are more likely to occur, may occur sooner and may have a greater financial and operational impact on the Group.

#### Climate-related opportunities

Sainsbury's management has also identified several climate-related opportunities, including:

- Launching new products to meet the demands of climate-conscious consumers that favour lower GHG emission products; and
- Launching Smart Charge (a dedicated EV charging business) to service the increasing demand for EV charging across stores.

Sainsbury's management considers these opportunities provide a potential revenue opportunity which could be realised over the Scheme's short, medium and long-term time horizons.

Sainsbury's management has also identified opportunities to invest in climate change solutions to improve the Group's energy efficiency, reduce food waste and reduce carbon emissions, which could support the Group's net zero transition and the future equity growth of the Group. These opportunities

may also act to offset the potential negative impact from transition and physical risks, e.g. the roll out of EV charging points across stores could mitigate lost revenue from fuel sales.

## **Risk Management**

Sainsbury's management recognises the evolving risk posed by climate change and has embedded climate considerations into the Group's corporate strategy to inform decision making over the short, medium and long term. The Board is ultimately responsible for risk Sainsbury's management, strategy and target setting, including climate-related matters and regularly monitors how the Group is responding to climate related risks and opportunities.

The Trustee receives advice from their covenant adviser on the impact of climate change. As part of its covenant assessments, the covenant advisor identifies climate risks and considers the materiality and timing of these risks relative to the Scheme's journey plan to inform the strategy of both Sections of the Scheme. The covenant advisor also monitors risk using regulatory and policy announcements and Group information and reports periodically to the Trustee.

Source: PwC

## Appendix 3 | Limitations of Climate Scenarios

*The liability scenario modelling quoted in this report was undertaken by the Scheme Actuary, WTW, and they stress a number of caveats to such work, as follows:*

Existing climate scenarios and their limitations have been subject to a number of (valid) criticisms more recently. A number of limitations remain in respect of these scenarios, which have important implications for how the analysis is interpreted and which is outlined below.

Climate science is complex and uncertain, and ultimately all climate scenarios are simplified and stylised (as with any set of scenarios). The real world is a complex adaptive system which is very hard to capture using any quantitative model, no matter how sophisticated. It is therefore imperative to treat climate scenario analysis as illustrative in nature.

The impact of climate change on investment returns depends upon the extent to which actual outcomes are in line with market pricing. The market pricing of climate risk is almost impossible to observe and therefore broad-brush assumptions must be made around what is currently priced in and when and to what extent market pricing will move.

Longevity impacts are also very difficult to either predict or disaggregate from other impact sources. In particular, while WTW's views on the future paths for mortality associated with the current scenarios imply relatively little direct impact on mortality for UK populations due to climate change, the indirect impacts from economic and societal change are modelled to be more significant and inherently may be dependent on those socio-economic outcomes.

The scenarios are based upon the latest climate science at the time of derivation, but this is a very rapidly evolving and uncertain field. These uncertainties mean that there can be no guarantee that any given level of transition in the scenarios will result in the associated level of warming and physical risk assumed.

### **Mortality Risk Modelling limitations**

The approach taken to modelling the future paths for mortality recognises that any detrimental view about future longevity is likely to reduce the liabilities of a pension scheme. While the market value of assets could fall quickly in response to concerns driven by climate factors, WTW's view is that any consensus on changes in future longevity would be slower to emerge.

The negative health outcomes for the population associated with climate change could be wide ranging, and the detrimental impact could potentially far exceed the allowance made within the paths for mortality modelled in light of WTW's climate scenarios, particularly if there is no possible policy response sufficient to offset the change. Such negative paths are not considered helpful in scenario analysis where the principle is to discuss actions that do fall within the power of policy makers and other stakeholders, but they should still be regarded as a potential occurrence.

Source: WTW

## Glossary of key terms

**Credit Default Swaps ("CDS")** refer to a type of derivative contract that allows an investor to transfer the credit risk of a bond to another party. By being "short" CDS, an investor can gain a "long" exposure to credit risk.

**ESG** refers to Environmental, Social and Governance factors that could affect the performance and sustainability of a business.

**EVIC** refers to a company's Enterprise Value Including Cash. This is the sum of the market capitalisation of shares and book values of total debts and minority interests at the fiscal year-end.

**Funded/Unfunded exposure** refers to the use of borrowing. In an LDI portfolio, this may be through the use of derivatives such as gilt repurchase agreements (repos) or swap agreements.

**Green Gilt** is debt issued by the UK government, and is similar to traditional gilts, except that the proceeds from the borrowing are directly used to finance "green" projects.

**Gilts-crisis** refer to the period from 23 September to 14 October 2022 when there was significant volatility in gilt markets leading to very large collateral calls in respect of derivative instruments used in LDI portfolios.

**Liability Driven Investment ("LDI")** is an investment strategy that seeks to generate an asset return in line with the Scheme's liabilities. The LDI portfolio will have sensitivity to inflation and interest rates that will be similar to that of the liabilities.

**Liquid credit** refers to investment grade corporate bonds, asset backed securities and CDS.

**Partnership for Carbon Accounting Financials ("PCAF") Data Quality Score** refers to a system used to assess the quality of data used to calculate greenhouse gas emissions from financial activities, with 1 being the highest quality data and 5 being the lowest quality data.

**SBTi** refers to the Science Based Targets initiative – an organisation that enables companies and financial institutions to set science-based emissions reductions targets.

**SBTi Score** refers to SBTi framework through which companies can set out their decarbonisation pathway and have them assessed against the goals set out in the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels or well-below 2°C. The SBTi Score is the proportion of assets invested that are classified as being Paris-aligned.

**TCFD** refers to the TaskForce on Climate-Related Financial Disclosures – a global initiative that provides recommendations and resources for reporting climate-related risks and opportunities.