

# **Toyota Motor Manufacturing (UK) Ltd Pension Plan (“the Plan”)**

**Task Force on Climate-Related Financial Disclosures (“TCFD”) Report  
Reporting to 31 March 2023**

**August 2023**

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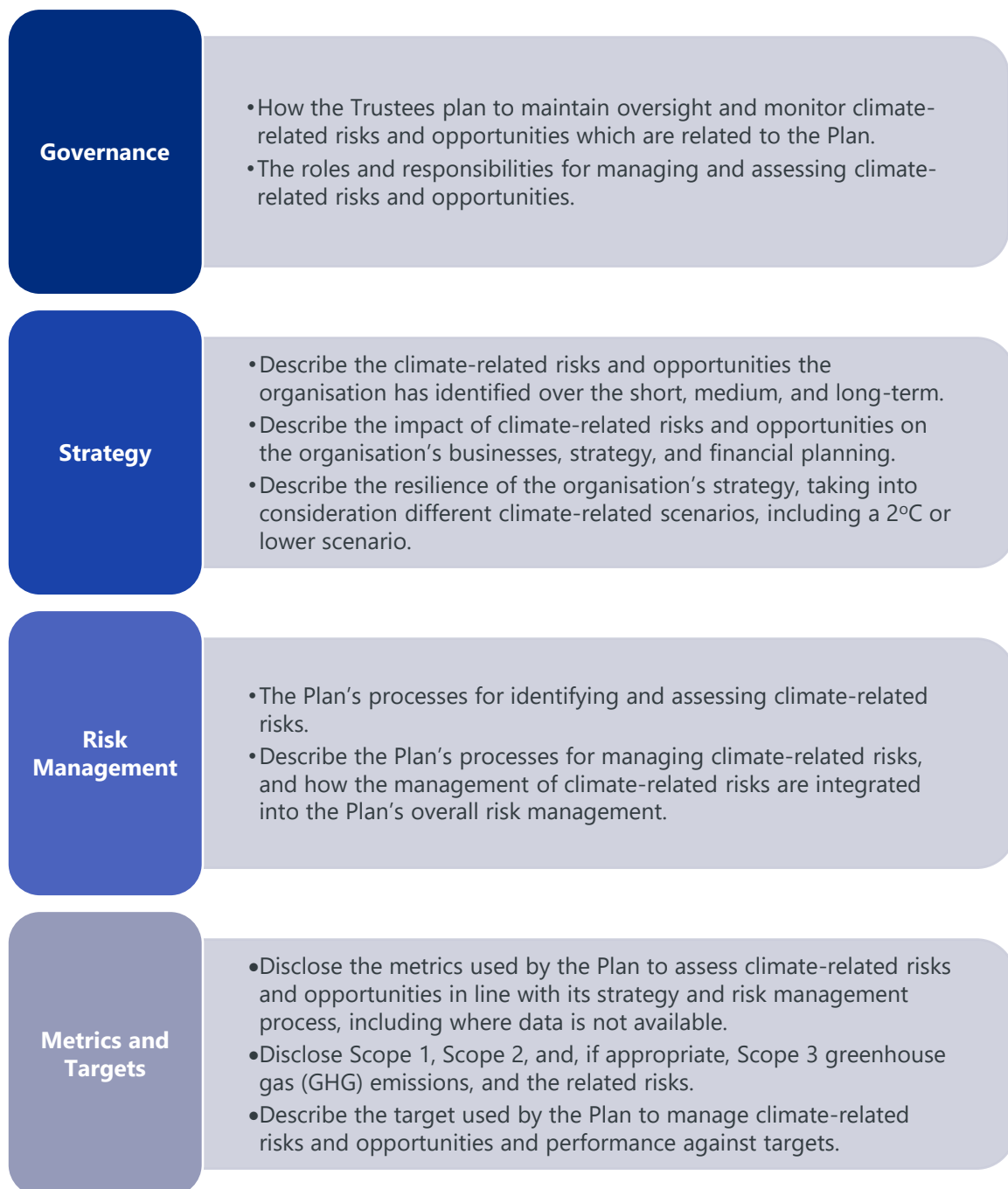
## Background and Executive Summary

The purpose of this report is to meet the climate change reporting requirements, building on the approach set out by the Trustees of the Plan in the Plan's Statement of Investment Principles ("SIP"). This report sets out how the Trustees plan to respond to the requirements in Climate Change Regulations. The report has been prepared in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosures ("TCFD").

Climate change is the large-scale, long-term shift in global weather patterns and temperatures. It poses an existential threat to our planet and society and a risk to financial markets. The potential severity of the impacts motivated the commitment to reducing emissions via the Paris Agreement. Policy responses to achieve 2.0°C alignment will result in changes to the fundamental structure of the economy and society, resulting in impacts on investment portfolios.

*In the UK, the Pension Schemes Act 2021 introduced new requirements for scheme trustees, with a view to ensuring that there is effective governance of the scheme with respect to the effects of climate change. It also introduced a requirement for information relating to the effects of climate change on the scheme to be published. As part of this, new governance and reporting requirements are being phased in. These new requirements implement the recommendations of the TCFD.*

Climate-related issues are complex in nature and can be difficult to report. To address this problem, the Financial Stability Board created the Task Force on Climate-related Financial Disclosures (TCFD) in 2015. Following a consultation, TCFD published a framework of recommendations in 2017 to improve the way that private and public organisations can report on climate-related financial information. The framework can be separated into four key sections: Governance, Strategy, Risk Management and Metrics and Targets. The recommended disclosures are detailed on the following page.



## Governance

### Overall Governance Framework

- **Trustees:** The overall Statement of Investment Principles (“SIP”) which includes the Trustees’ approach to ESG factors. The Trustees have oversight of the approach and are responsible for actively monitoring compliance.
- **Investment managers:** The Trustees have delegated the ongoing monitoring and management of ESG risks and those related to climate change to the Plan’s Investment Managers. The Trustees require the Plan’s Investment Managers to take ESG and climate change risks into consideration within their decision-making, in relation to the selection, retention or realisation of investments, recognising that how they do this will be dependent on factors including the characteristics of the asset classes in which they invest.
- **Investment Consultant:** The Trustees will seek advice from the Investment Consultant on the extent to which their views on ESG and climate change risks may be taken into account in any future Investment Manager selection exercises. Furthermore, the Trustees, with the assistance of the Investment Consultant, will monitor the processes and operational behaviour of the Investment Managers from time to time, to ensure they remain appropriate and in line with the Trustees’ requirements as set out in this Statement.
- **Actuarial advisor:** The Trustees’ advisors are responsible for keeping the Trustees informed of how climate change related matters and ESG considerations impact the liabilities and for considering how the Company may be affected by these factors.
- **Covenant Advisor:** The Covenant Advisor’s responsibilities include, but are not limited to, the following. Undertaking periodic reviews, at least triennially, of the extent to which climate-related risks and opportunities might affect the Plan’s sponsoring employer over the short, medium, and long term.

The Trustees have consulted with the Company in relation to the climate-related risks to establish the potential impact on the Company and it has been determined that the risk to the Company is relatively low. The agreed funding strategy provides considerable protection against a reduction in covenant. There is visibility over the strength of the UK covenant until 2026 and an evergreen guarantee has been provided by a parent company.

Given the Trustee’s reliance on the Investment Consultant and Actuarial advisors for advice in relation to ESG and climate change issues, it is important that both are sufficiently skilled. The Trustee is comfortable that this is the case based on ongoing assessments made in relation to the quality of training, advice and communications provided on such topics.

## Investment beliefs related to climate change

The Trustees consider climate change to be a significant long-term financial and systemic risk that if not managed has the potential to adversely affect the value of the Plan's investments.

Further details of the Trustees' beliefs are contained in the Plan's SIP. These will be formally reviewed at least every three years to ensure they remain appropriate and will be informally reviewed on a more frequent basis.

## Climate-related requirements into manager selection, review and monitoring

The Trustees rely on the Investment Consultant's research process which explicitly considers ESG factors within their manager ratings and recommendations. This has been detailed further within the SIP.

## Day-to-day Trustees operations

In discharging its responsibilities, the Trustees will remain mindful of the impact of its own operations on the environment. This includes, but is not limited to, the frequency and physical location of Trustee meetings and minimising unnecessary use of paper and other resources. The Trustees also consider the extent to which environmental considerations are a priority for their providers and advisors which is reviewed periodically and as part of new appointments.

## Monitoring climate risk

The Trustees will monitor the below metrics related to climate change.

Reporting content and frequency

Reporting content	Frequency
Specific climate-related metrics	Annually
Scenario analysis	At least tri-annually
Progress toward climate change related target	Annually
Assessment of the investment managers' ESG and climate-related credentials from XPS	As required
Any holdings/activity within the portfolio that require attention from a climate-related perspective	As required
Any notable stewardship activity related to climate risk within the portfolio	As required

The Trustees are satisfied that it has monitored each of the above items throughout the year. Examples of actions taken during the Scheme's reporting year are provided within this report.

## **Climate change as an agenda item within Trustee meetings**

The Trustees will incorporate a climate-related agenda item into Trustee meetings whenever there is demand from the Trustees to further climate-related knowledge to enable it to actively discuss climate risk and opportunities. Topics of discussion can include:

- Relevant updates from the advisers and investment managers regarding the investment portfolio, strategic allocation and/or relevant developments within the industry.
- Input from the sponsor's in-house experts where appropriate.

## **Ongoing training needs**

The Trustees are required to maintain sufficient knowledge and understanding of climate-related risks. Given the fast evolution and innovation within the industry the Trustees and / or a subgroup of the Trustees will hold a training session to climate-related issues alongside ESG issues on at least a tri-annual basis.

## Strategy

### Time Horizon

The Plan is closed to accrual but has a long-term time horizon, given the immaturity of the Plan's liabilities compared to the average UK Pension Scheme. Therefore, the Trustees have defined the time horizons as below and identified relevant climate-related risks and opportunities which will be managed as far as practicable via the overall framework.

The Trustees are clear that climate change represents a material financial risk to the Plan's funding level. Furthermore, the Trustees recognise that there are opportunities available within the investment strategy as a result of the transition to a low carbon economy.

Time horizons monitored by the Trustees:

Time horizon		Risks and opportunities
Short term	0-5 years	<b>Transition risks highly prevalent:</b> Changes in consumer and corporate behaviour, driven by policy and technological change.  <b>Legal and Regulatory risks:</b> Changes in asset prices/stock price movements.  <b>Opportunities:</b> Companies which adapt well can take advantage of this fundamental shift in the economy.  Physical risks exist but impacts expected to be less severe.
Medium term	5-10 years	
Long term	10-50 years	<b>Transition risks as above, and physical risks more likely:</b> Damage to real assets and resource availability e.g., sea level rise and more frequent severe weather events. There will be knock-on effects on input costs and supply chains.

The key assumptions that have a significant impact on the assessed value of the liabilities are:

1. Gilt yields: a reduction in the level of the gilt yield curve increases the assessed value of the liabilities and vice versa.
2. Future price inflation: an increase in the level of future expected price inflation would increase the expected payments out of the Plan, and hence increase the assessed value of the liabilities.
3. Life expectancy: any change in life expectancy for Plan members would impact on the length of time benefits are assumed to be paid out of the Plan and hence impact on the assessed value of the liabilities.



## **Impact of climate-related risks and opportunities**

### **Impact on investment strategy**

The Trustees are cognisant of climate related risks and opportunities, and this therefore informs the Trustees when setting the investment strategy and taking any investment decisions.

The Trustees have assessed the investment managers' ability to analyse climate change related risks and opportunities during the investment process as a feature in its due diligence when appointing new managers for the Plan assets. Therefore, the investment managers selected are those which demonstrate clear integration of climate change risk analysis, alongside other fundamental and technical risk analysis techniques. As such, climate change is a consideration when the investment manager's make investment related decisions.

As the Plan invests in pooled funds, the Trustees acknowledge that they cannot directly influence the policies and practices of the companies in which the pooled funds invest.

They have therefore delegated responsibility for the exercise of rights (including voting rights) attached to the Plan's investments to the Investment Managers. The Trustees encourage them to engage with investee companies and vote whenever it is practical to do so on financially material matters such as strategy, capital structure, conflicts of interest policies, risks, social and environmental impact and corporate governance as part of their decision-making processes.

The Trustees require the Investment Managers to report on significant votes made on behalf of the Trustees.

## Scenario modelling - choice of scenarios

The Trustees have considered different climate-related scenarios to form a view on the resilience of the Plan's current strategy.

The below scenarios represent four of the six designed by the Network for Greening and Financial System ("NGFS") which provide a good overview of possible outcomes. For added context, the NGFS scenarios explore the impacts of climate change and climate policy with the aim of providing a common reference framework.

Disorderly 1.5C	Disorderly 2.0C	Orderly below 2.0C	Hot house world 3.0C
<ul style="list-style-type: none"> <li>Reaches net zero around 2050 but with greater costs due to divergent policies introduced across sectors (leading to varying carbon prices across sectors) resulting in a quicker phase out of oil use. This scenario is also known as "Divergent Net Zero". This leads to high transition risk but the worst physical damage and risks from climate change are averted.</li> </ul>	<ul style="list-style-type: none"> <li>Assumes annual emissions do not decrease until 2030. As a result, there is higher transition risk (when compared to the orderly 2°C scenario) due to policies being delayed or divergent across countries and sectors. For example, carbon prices are typically higher for a given temperature outcome. Strong policies are needed to limit warming to below 2°C. This scenario is also known as "Delayed Transition".</li> </ul>	<ul style="list-style-type: none"> <li>Similar to disorderly 2°C, but more gradual increase in the stringency of climate policies, giving a 67% chance of limiting global warming to below 2°C.</li> </ul>	<ul style="list-style-type: none"> <li>Assumes that some climate policies are implemented in some jurisdictions, but globally efforts are insufficient to halt significant global warming. The scenarios result in severe physical risk including irreversible impacts like sea-level rise. The "Nationally Determined Contributions (NDCs)" scenario includes all pledged targets even if not yet backed up by implemented effective policies.</li> </ul>

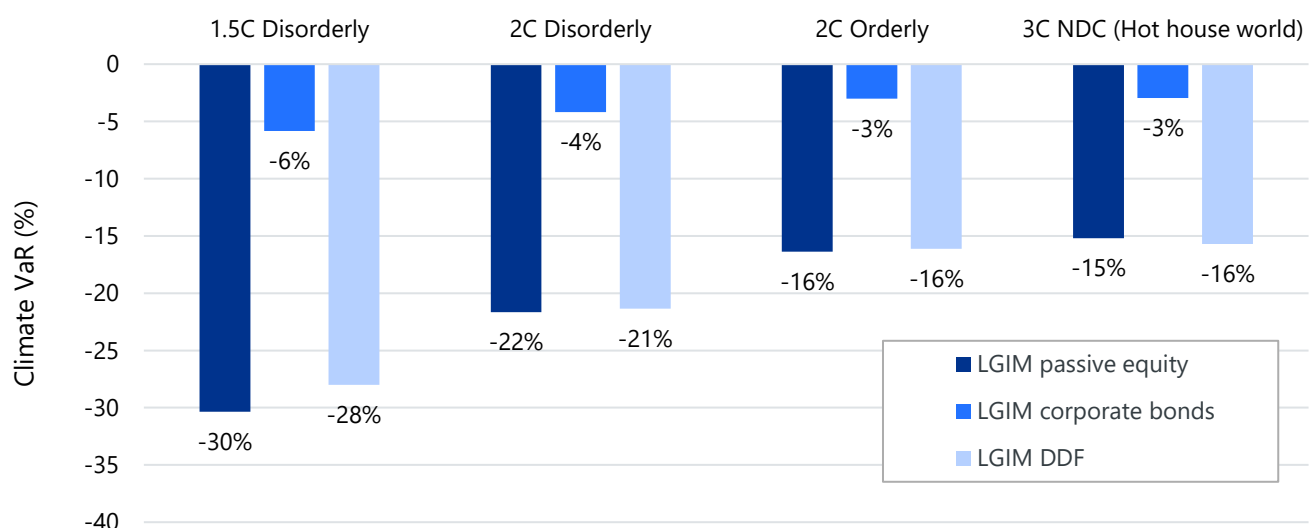
## Scenario Analysis on the Plan's Assets

Climate Value at Risk (VaR) provides a forward-looking and return-based valuation assessment to measure climate related risks and opportunities in an investment portfolio. It provides insights into the potential climate-stressed market valuation of investment portfolios and downside risk. The below chart shows the changes in portfolio value of the Plan's funds held with Legal & General Investment Management ("LGIM") under the scenarios broadly in line with the above.

CVAR is a function of both:

- **transition risks** (downside risk arising from regulatory and policy changes, and also opportunities for companies adapting to the modelled scenario); and
- **physical risks** (how trends in extreme cold, extreme heat, extreme precipitation, heavy snowfall, extreme wind, coastal flooding, fluvial flooding, tropical cyclones, river flow and wildfires continue along the modelled scenario).

Figure 1: Climate impact of the Plan's LGIM assets



Most of the risk existed in the Plan's passive equity holdings and diversified growth holdings. Given the allocation to the equity holdings is <1% of total scheme assets, this allocation will not have a significant effect on the climate impact to the Plan.

A Disorderly 1.5C scenario would present the greatest risk to valuations due to the significant transition risk embedded in this scenario. If this scenario played out these risks would emerge in the short to medium term.

The narrative around the 2C scenarios (Orderly and Disorderly) and Hot House world are more aligned to the medium and long term time-frames defined by the Plan. The impact on the Plan's assets under the Hot House World scenario appears to be either the same or lower compared to the orderly 2°C scenario. This is because Plan is expected to be more susceptible to transition risk as opposed to physical risk, based on its portfolio composition. A Hot House World scenario carries more physical risk as opposed to transition risk.

To mitigate these long term risks the Plan could engage more closely with current managers to identify the high-risk holdings or consider investing in funds which take more explicit account of forward-looking low carbon transition alignment with the same financial objectives.

The Trustee notes the limitations of scenario modelling given it is underpinned by a series of assumptions which may or may not hold in practice, noting in particular that the investment outcomes in a Failed Transition (Hot House World), where physical risks associated with climate change are expected to be high, are hard to estimate. Nevertheless, the Trustees are comfortable that the modelling serves the purpose of helping the Trustee to better manage climate-related risks.

## **Impact of and resilience to liability-related risks**

The key assumptions that have a significant impact on the assessed value of the liabilities are:

- **Gilt yields:** a reduction in the level of the gilt yield curve increases the assessed value of the liabilities and vice versa.
- **Future price inflation:** an increase in the level of future expected price inflation would increase the expected payments out of the Plan, and hence increase the assessed value of the liabilities.
- **Life expectancy:** any change in life expectancy for Plan members would impact the length of time benefits are assumed to be paid out of the Plan and hence impact on the assessed value of the liabilities.

Gilt yields and future price inflation are financial risks. Overall, the Trustee notes that these risks are not currently fully hedged, and to the extent that this remains the case over the short to medium term, these risks may impact the funding position. However as the level of hedging increases towards target levels the funding impact of these changes will reduce.

Life expectancy is a key risk from climate-related changes and is typically unhedged. Life expectancy changes tend to happen gradually over a long period and are rarely significant one-off hits. Over the short and medium-term, the Trustee believes that significant changes to life expectancy due to climate change are unlikely and it will not be easy to distinguish any climate impact from the usual "statistical noise". However over the longer term the impact could be more significant.

The Trustee has commissioned qualitative analysis on these risks under the above scenarios and a summary of the expected impact is given below:

### **Disorderly 1.5°C**

There may be an increase in liabilities in the short term due to increased inflation. This may be offset to an extent by increases in interest rates. There may be a slow-down in improvements in life expectancy over the short term which may offset inflation increases to some extent. Overall, a modest deterioration in funding position could be expected in the short term due to unhedged liability increases.

### **Disorderly 2.0°C**

There may be an increase in liabilities in the medium term due to increased inflation. This may be offset to an extent by increases in interest rates. Depending on the level of liability hedging in place these changes could be offset to some extent by increases in matching assets. There may be a more significant slow-down in life expectancy improvements over the short- to medium term. The overall impact on the funding position is more uncertain, but overall the funding position could improve due to decreased life expectancy if the inflation and interest rate impacts are hedged.

### **Orderly 2.0°C**

There may be a modest increase in liabilities in the short term due to increased inflation, which may be offset to an extent by increased interest rates. There may be a small improvement in life expectancy over medium term. Overall the impact on funding could be a modest deterioration over the short- to medium term due to unhedged liability increases.

### **Hot House World 3.0°C**

There may be a decrease in liabilities over the long term due to increased interest rates. However to the extent that hedging is expected to be in place by this time, any increase in liability may be offset by increases in matching assets. There may be a reduction in life expectancies over the long term, leading to a fall in liability values. Overall there may be an improvement in the funding position in the long term due to unhedged liability movements.

### **Impact on covenant**

The Trustees have consulted with the Company in relation to the climate-related risks to establish the potential impact on the Company and it has been determined that the risk to the Company is relatively low, based on the latest Covenant report available as at the date of this report.

### **Resilience to covenant-related risks**

Covenant: The agreed funding strategy provides considerable protection against a reduction in covenant. There is visibility over the strength of the UK covenant until 2026 and an evergreen guarantee has been provided by a parent company.

## Risk management

### **Processes to identify and assess the potential impact of climate-related risks/opportunities**

The Trustees recognise the importance of identifying and assessing the potential impact of climate change within the Plan's investments and have taken the following key actions:

- Defined their broad investment beliefs related to climate change.
- Delegated the management of climate risk and opportunities (including stewardship of assets) to the investment managers. As such, responsibility for identifying and assessing climate-related risks has also been delegated to the investment managers.
- The Trustees will, at least, tri-annually require the investment managers to undertake climate risk modelling and scenario testing in order to understand the risk exposure of the Plan's assets to various climate scenarios.
- Consulted with the Company in relation to the climate-related risks to establish the potential impact on the Company, and therefore the potential impact on the Plan.

During the year the Trustees commissioned a report from their Investment Consultant which provided an overview of the extent to which ESG integration, climate change considerations and stewardship are incorporated within the investments.

The report concluded that a high-level of ESG integration, climate change analysis and a good commitment to stewardship was in place across the mandates.

### **Processes to manage the potential impact of climate-related risks/opportunities**

The Trustees recognise the importance of managing the potential impact of climate change within the Plan's investments and has taken the following key actions:

- Set out in the Statement of Investment Principles the Trustees' the intended approach within the investments to ensure climate related risks are appropriately managed.
- Set out a monitoring process to review how the underlying investment managers are assessing, managing and mitigating climate risks including the portfolio's positioning in relation to the transition to a lower-carbon economy. This includes conducting scenario analysis on, at least, a tri-annual basis to understand the resilience of the portfolio to various climate scenarios as far as practicable..
- Appointed managers who demonstrate robust stewardship and engagement with the underlying investments (recognising that active ownership is key to managing ongoing risks).

The Trustees' approach in this regard is detailed further in the Statement of Investment Principles.

### **The integration of processes for identifying, assessing, and managing climate-related risks into the organisation's overall risk management**

The Trustees recognise the importance of integrating the considerations which surround climate change within the Plan's overall risk management and has taken the following key actions:

- Defined its investment beliefs related to climate change in order to gain clarity over the views of the Trustees and the necessary steps to be taken.
- Climate change is considered alongside other risks (in terms of invested assets and the impact on the funding strategy).

## Metrics

This section of the report details the metrics used by the Trustees to assess climate-related risks and opportunities in line with the strategy and risk management process outlined.

### Scope 1 and 2 greenhouse gas emissions

Carbon emissions are categorised into three groups according to the Greenhouse Gas (GHG) Protocol.

The GHG Protocol defines direct and indirect emissions as follows:

- *Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity.*
- *Indirect GHG emissions are emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity.*

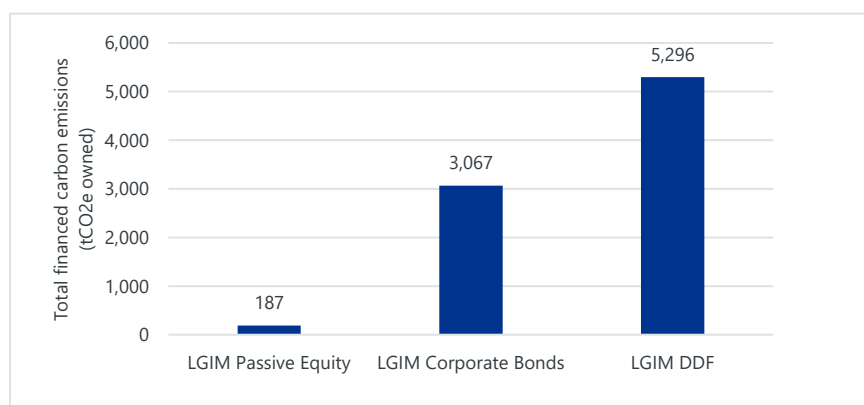
The GHG Protocol further categorises these direct and indirect emissions into three broad scopes:

- **Scope 1:** All direct GHG emissions.
- **Scope 2:** Indirect GHG emissions from consumption of purchased electricity, heat or steam.
- **Scope 3:** Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc.

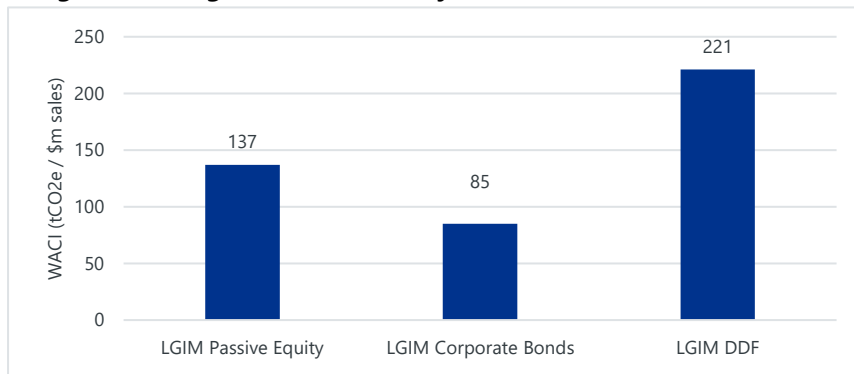
**Source:** <https://ghgprotocol.org/calculationg-tools-faq>

## Climate change metrics for LGIM listed holdings

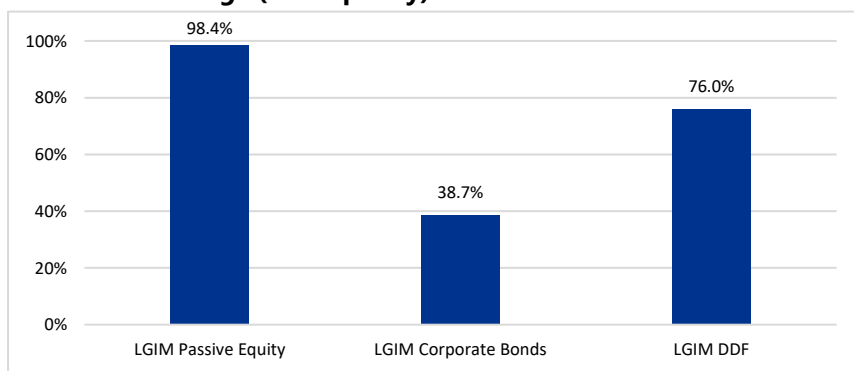
### Total financed (absolute) carbon emissions (tCO<sub>2</sub>e)



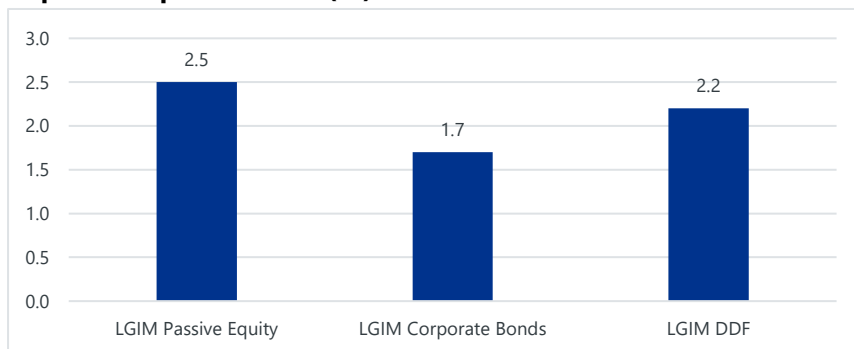
### Weighted average Carbon Intensity (tCO<sub>2</sub>e / \$m sales)



### GHG data coverage (Data quality)



### Implied temperature rise (°C)



Notes regarding core metrics (LGIM):

- Scope 1 and 2 carbon emissions shown.
- Metric results sourced from MSCI (see full Disclaimer on page 21) ESG Manager tool for all funds using underlying fund holdings provided by LGIM at 31 March 2023.
- Coverage indicates the proportion of the fund for which carbon data is available.
- Where coverage is less than 100%, data provided has been re-normalised to reflect 100% of the funds (assumes unknown emissions data is equivalent to known data points).



## Climate metrics for illiquid managers

	Absolute Emissions	Emissions intensity	Emissions intensity	Other
	Total carbon emissions	Weighted Average Carbon Intensity ("WACI") (tCo2e / \$m revenue)	Carbon footprint (tCo2e / \$m invested)	Carbon emissions Coverage
<b>Columbia Threadneedle UK Property Fund</b>	4,561	26.3	2.2	100%
	Scope 1 and 2 data as at 30 Sept 2022	As at 31 Dec 2022	As at 31 Dec 2022	As at 31 Dec 2022
<b>Fidelity UK Real Estate Fund</b>	4,433	0.1 <sup>1</sup>	16.4	26%
	Scope 1 and 2 data as at 31 Dec 2021 Data available for 26% of portfolio (by capital value)	As at 31 Dec 2021 Data available for 26% of portfolio (by capital value)	As at 31 Dec 2021 Data available for 26% of portfolio (by capital value)	As at 31 Dec 2021
<b>IFM Global Infrastructure Fund</b>	20,587	343.1	146.2	100%
	Scope 1 and 2 data as at 31 Dec 2021	As at 31 Dec 2022	As at 31 Dec 2022	As at 31 Dec 2022
<b>Partners Fund</b>	For the 2022 reporting year, Partners can only provide GHG emissions data on an asset-level basis. They expect to be able to share GHG emissions metrics aggregated to fund level for the reporting year 2023 by Q2 2024.			

Source: Investment managers as at date indicated.

1. Estimated Scope 1 & 2 WACI is not relevant for this fund given they are invested in buildings not companies. Fidelity have provided the WACI based on rental income.

Please note that a transition alignment metric is not available for these funds.

The Trustees measure the following emissions related metrics on an annual basis:

- Absolute: Total carbon emissions. This measures the absolute emissions associated with a portfolio, expressed in tons of CO<sub>2</sub>e
- Intensity: Weighted Average Carbon Intensity ("WACI"). This measures a portfolio's exposure to carbon-intensive companies. It normalises for company size to enable comparison regardless of company size.

The implied temperature rise metric uses forward-looking estimates to indicate a global temperature rise associated with the greenhouse gas emissions of a single company or portfolio. Companies and portfolios which have an implied temperature rise of 2°C or lower are consistent with the Paris Agreement

The Trustees are reliant on the data and metrics provided by third parties and a key challenge related to this is the coverage and reliability of the data and metrics which differ across asset classes, industries and geographies. A measure which attempts to summarise this is the "data quality metric" which represents the proportions of the portfolio for which the Trustees have high quality data on Scope 1 and 2 emissions.

## Targets

The Trustees will measure and monitor the level of greenhouse gas emissions data coverage across the portfolio annually at year end. The target will be for this to increase relative to the prior year.

## Appendix - Glossary

**Absolute emissions** –represents each company’s reported or estimated greenhouse gas emissions, where available (includes scope 1 and scope 2 emissions).

**Weighted Average Carbon Intensity (“WACI”)** –measures the carbon emissions (in metric tons) generated per million US dollars of revenue generated. For sovereign assets, this is normalised by Gross Domestic Product (“GDP”) rather than revenue.

**Carbon footprint**–measures the carbon emissions (in metrics tons) per million £ sterling invested.

**Implied Temperature Rise** –analyses the warming scenario that the investment is aligned with. As a reminder, the 2015 Paris Agreement was to keep global temperature rises to below 2°C above pre-industrial levels.

**Climate VaR**–an estimation of the impact related to climate change under a 1.5 degree scenario.

**Data Quality** -proportion of the company’s emissions data either reported by the company, estimated by the data provider, not reported, or estimated, or reported by a third party.

**Scope 1:** All direct emissions from sources owned or controlled by the company. For example, emissions from fossil fuels burned on site and emissions from entity-owned or leased vehicles.

**Scope 2:** Indirect emissions from electricity purchased and used by the organisation.

**Scope 3:** Other indirect emissions that occur from sources not owned or controlled by the company. For example, the extraction and production of purchased materials; transportation of purchased fuels; and emissions resulting from the use of sold products and services.

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