RLP Long (15yr) Gilt

Task Force on Climate-Related Financial Disclosures (TCFD) Product Report

December 2024

ROYAL LONDON

RLP Long (15yr) Gilt

This report is broken down into 6 sections:

Fund overview

All climate metrics

Climate metrics

Scenario analysis

Appendix - Definitions, acronyms and methodological definitions

Appendix - Methodological and data assumptions, limitations, and disclaimers

Introduction

This report has been prepared in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) framework, in line with the Financial Conduct Authority's (FCA) Environmental, Social and Governance (ESG) sourcebook regulation (ESG 1A and ESG2).

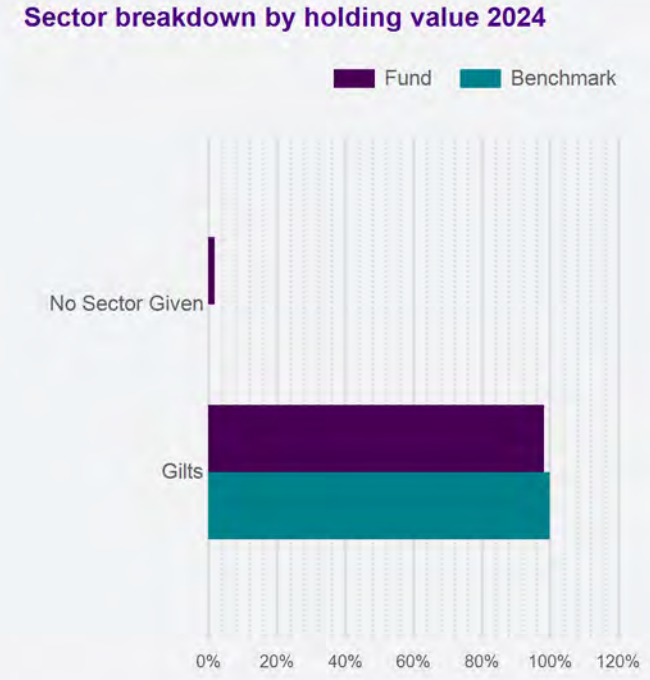
This fund is benchmarked against 21.9 FUKG1015 78.1 FTGILT15P.

Governance, Strategy and Risk Management

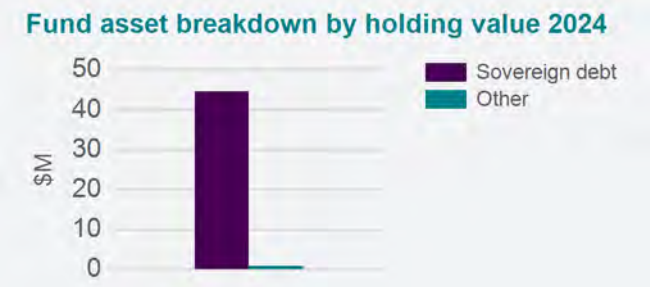
For more information on the fund's approach to governance, strategy and risk management, please refer to our Royal London Climate (TCFD) Report 2024, available here.

Fund overview

Sector* and asset breakdowns



*We apply our Royal London Asset Managament's classification for company sectors



RLP Long (15yr) Gilt compared to 21.9 FUKG1015 78.1 FTGILT15P

The following metrics have been prepared in accordance with the recommendations of the TCFD. Detailed breakdowns of the metrics can be found on subsequent pages, along with metric descriptions.

		Fund				Benchmark			
		Value		Coverage		Value		Coverage	
Metrics	Units	2023	2024	2023	2024	2023	2024	2023	2024
Corporate fixed income and listed equity emissions									
Scope 1 financed emissions	tCO2e			0.0%	0.0%	*	*	*	*
Scope 2 financed emissions	tCO2e			0.0%	0.0%	*	*	*	*
Scope 3 financed emissions (Estimated)	tCO2e			0.0%	0.0%	*	*	*	*
Scope 3 financed emissions (Reported)	tCO2e			0.0%	0.0%	*	*	*	*
Financed emissions (Scope 1 and 2)	tCO2e			0.0%	0.0%	*	*	*	*
Financed emissions (Scope 1, 2 and 3)	tCO2e			0.0%	0.0%	*	*	*	*
Carbon footprint (Scope 1 and 2)	tCO2e / $M			0.0%	0.0%			0.0%	0.0%
Carbon footprint (Scope 1, 2 and 3)	tCO2e / $M			0.0%	0.0%			0.0%	0.0%
Weighted Average Carbon Intensity (Scope 1 and 2)	tCO2e / $M			0.0%	0.0%			0.0%	0.0%
Weighted Average Carbon Intensity (Scope 1, 2 and 3)	tCO2e / $M			0.0%	0.0%			0.0%	0.0%
Implied Temperature Rise (ITR)	°C			0.0%	0.0%			0.0%	0.0%
Companies with approved near-term 1.5°C SBTi targets	% of fund			n/a**	n/a**			n/a**	n/a**
Companies with approved near-term 2°C SBTi targets	% of fund			n/a**	n/a**			n/a**	n/a**
Companies committed to set near-term SBTi targets	% of fund			n/a**	n/a**			n/a**	n/a**
Sovereign debt emissions									
Sovereign debt emissions	tCO2e	11,408.8	8,955.5	100.0%	100.0%	*	*	*	*
Sovereign debt production intensity	tCO2e / $M GDP	122.3	120.2	100.0%	100.0%	120.2	120.2	100.0%	100.0%
Sovereign debt consumption intensity	tCO2e / Capita	9.2	9.1	100.0%	100.0%	9.1	9.1	100.0%	100.0%

**Benchmark data is not provided as these are absolute metrics, and therefore market value differences between the fund and benchmark make these incomparable.*

***These metrics do not have coverage as they already report the % of the fund that covers the metric.*

Sovereign debt emissions

RLP Long (15yr) Gilt compared to 21.9 FUKG1015 78.1 FTGILT15P

Fund's asset classes included in the calculation of these metrics are sovereign debt only.

Sovereign debt emissions (tCO2e)

Includes emissions from sources located within the domestic territory (PCAF defined Scope 1), emissions from energy imports (PCAF defined Scope 2) and emissions from non-energy imports (PCAF defined Scope 3).

Sovereign debt production intensity (tCO2e / $M GDP)

Sovereign debt production intensity measures a portfolio's exposure to emissions-intensive economies, defined as the portfolio weighted average of sovereigns' greenhouse gas production intensity (production emissions / PPP - adjusted GDP).

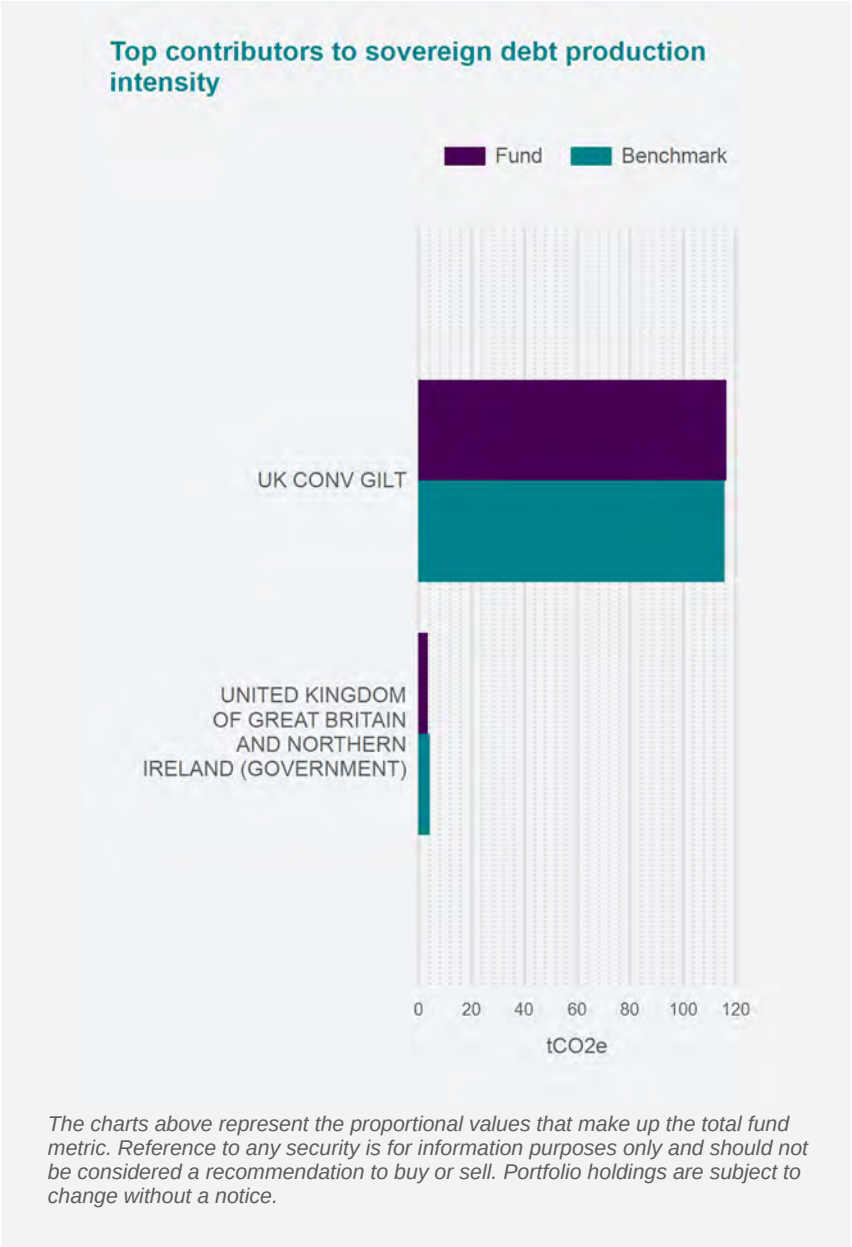
Σ[(current value of investment / current portfolio value) x (sovereign issuer's production emissions / sovereign issuer's $M PPP-Adjusted GDP)]

Sovereign debt consumption intensity (tCO2e / Capita)

Sovereign debt consumption intensity measures a portfolio's exposure to carbon-intensive economies, defined as the portfolio weighted average of sovereigns' greenhouse gas consumption intensity (consumption emissions / population for the country territory).

Σ[(current value of investment / current portfolio value) x (sovereign issuer's consumption emissions / capita)]

Metric	Units		2023	2024	YoY Change
Sovereign debt emissions	tCO2e	Fund	11,408.8	8,955.5	-21.5%
Sovereign debt production intensity	tCO2e / $M GDP	Fund	122.3	120.2	-1.7%
		Benchmark	120.2	120.2	0.0%
		Fund vs Benchmark	1.7%	0.0%	
Sovereign debt consumption intensity	tCO2e / Capita	Fund	9.2	9.1	-1.1%
		Benchmark	9.1	9.1	0.0%
		Fund vs Benchmark	1.1%	0.0%	
Sovereign debt emissions coverage	%	Fund	100.0%	100.0%	
		Benchmark	100.0%	100.0%	



The charts above represent the proportional values that make up the total fund metric. Reference to any security is for information purposes only and should not be considered a recommendation to buy or sell. Portfolio holdings are subject to change without a notice.

Climate change scenario analysis – Climate Value-at-Risk (C-VaR)

RLP Long (15yr) Gilt

Climate Change Scenario Analysis aims to quantify whether - and how much - climate change may impact future fund performance. We are required to disclose climate scenario analysis under TCFD and to achieve this we have used a model known as Climate Value-at-Risk (C-VaR), which provides a prediction of the impact global temperature rises and economic developments may have on investment returns. We do not currently use C-VaR when making investment decisions and instead favour other monitoring metrics that help assess 'Paris Alignment'.

C-VaR takes into account the physical impact of global rising temperatures like rising sea levels and increased extreme weather patterns, alongside the impact of mitigating actions like government policies and technology developments. Each of these factors is considered under different global temperature rise assumptions to try to predict the impact this may have on global markets and, in turn, fund performance. Given the uncertainty around how effectively and quickly emissions can be reduced across the economy, we have modelled multiple climate scenarios at temperature rises of 1.5°C, 2°C and 3°C.

The four transition scenarios we disclose under transition risks have been developed by the Central Banks network NGFS (for more details on the methodology and specific models used please refer to the Appendix; Definitions, acronyms and methodological definitions).

Within transition risk, disorderly and orderly scenarios refer to the possible route policy makers will take: orderly assumes global policy is aligned and implemented quickly; and disorderly assumes policy is reactive and action is late but fast. The C-VaR value illustrates the possible % movement in fund value under that scenario. Typically, a disorderly 1.5°C scenario will have the greatest impact on fund performance as the amount of changed needed to limit global warming to this temperature is the greatest under this scenario. The **bold** scenario in the table shows the climate scenario under which the fund faces higher transition risk.

This C-VaR methodology also shows physical climate risk through two scenarios which look at the impacts these risks could have in the next 15 years in a "business-as-usual" trajectory. These scenarios show the potential chronic risks of extreme cold, extreme heat, extreme precipitation, heavy snowfall, and extreme wind. They also model the potential acute (moderate) risks of coastal flooding, fluvial flooding, tropical cyclones, river low flow and wildfires.

Please note, we do not currently use C-VaR when making investment decisions as we do not believe it accurately reflects our view of company value and potential future returns. The C-VaR model involves numerous socio-economic, policy and technological assumptions on how both the world and each company we invest in may change, which we believe cannot yet be confidently relied on in investment decision making. We favour monitoring metrics that help assess 'Paris alignment' over the C-VaR models. Our Paris alignment assessment (see Royal London Asset Management's entity level report for details on our Net Zero Investment Framework alignment categories) has fewer assumptions and can be used to reasonably assess a company's emission reduction plan and impact on climate change. We are disclosing this information to provide transparency and disclosure to our clients and to meet our regulatory obligations.

The scenarios and their key characteristics are provided in the table below.

Fund's asset classes included in the calculation of these metrics are corporate fixed income and listed equity only.

Category	Scenario		Scenario summary	C-VaR	Coverage
Transition Risks	Disorderly	**Divergent Net Zero (~1.5°C)**	**Net Zero is reached by 2050 but failure to coordinate policy pushes high costs to consumers. Fast action spares us from the worst physical climate impact.**	0.00%	0.00%
		Delayed Transition (~ 2°C)	**Annual global emissions do not decrease until 2030 and are reduced later with reactive policy action. High transition risk and physical risk.**	0.00%	
	Orderly	**Below 2°C**	**Net Zero is achieved after 2070. Climate policies are introduced immediately globally and become gradually more stringent. Low transition risk and high physical risk.**	0.00%	
		National Determined Contributions (NDCs) (~ 3°C)	**Assumes all policies pledged by states to the United Nations are implemented. Emissions decline and transition is not disruptive but continued warming brings severe physical risks.**	0.00%	
Physical Risks	Moderate (average)		The average potential impact on companies' market value, assuming trends in acute and chronical physical risk from a "business as usual" scenario.	0.00%	0.00%
	Aggressive		The worst case (95th percentile) or most severe potential impact on companies' market value, assuming trends in acute and chronical physical risk from a "business as usual" scenario.	0.00%	

Definitions, acronyms and methodologies

Climate physical risk

Physical risks resulting from climate change can be event driven (acute) or longer-term shifts (chronic) in climate patterns. Physical risks may have financial implications for organisations, such as direct damage to assets and indirect impacts from supply chain disruption. Organisations' financial performance may also be affected by changes in water availability, sourcing and quality; food security; and extreme temperature changes affecting organisations' premises, operations, supply chain, transport needs and employee safety.

Climate stress-testing

A stress test is a projection of the financial condition of a firm or economy under a specific set of severely adverse conditions. This may be the result of several risk factors over multiple periods of time. Stress testing is a risk management tool used to increase a firm's awareness of its business model vulnerabilities to climate risks. Firms might consider sources of transition and physical risks that will be particularly difficult for them to withstand. (Source: FCA's Climate Financial Risk Forum - CFRF)

Climate transition risk

Transitioning to a lower-carbon economy may entail extensive policy, legal, technology and market changes to address mitigation and adaptation requirements related to climate change. Depending on the nature, speed, and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organisations.

Task Force on Climate-related Financial Disclosures

The Financial Stability Board created the TCFD to improve and increase reporting of climate-related financial information to investors, lenders, insurers and other stakeholders. It is a framework to report on climate-related risks and opportunities. As of 2023, the TCFD has fulfilled its remit and disbanded.

Overarching methodological definitions:

Metric	Asset class applicability	Brief explanation
Greenhouse gas emissions (GHG)	Listed equities, Corporate fixed income, Sovereign debt, Property	The seven gases included in the United Nations Framework Convention on Climate Change (UNFCC) as drivers of climate change: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6), and nitrogen trifluoride (NF3).
CO2e – Carbon dioxide equivalent	Listed equities, Corporate fixed income, Sovereign debt, Property	The release of greenhouse gases into the atmosphere using the universal unit of measurement to indicate the global warming potential (GWP) of each of the seven greenhouse gases, expressed in terms of the GWP of one unit of carbon dioxide.
Emissions scopes	Listed equities, Corporate fixed income	The GHG Protocol Corporate Accounting and Reporting Standard classified organisation's GHG emissions into three scopes. • Scope 1: direct emissions from owned or controlled sources. • Scope 2: indirect emissions from generation of purchased energy. • Scope 3: all indirect emissions (not included in scope 2) that occur upstream and downstream the organisation value chain. There are 15 sub-categories of scope 3 emissions. Important sub-categories include category 11, use of sold products which encompasses most energy sector emissions and category 15, financed emissions which is explained below.
Data sources and quality	Listed equities, Corporate fixed income	**Financial data:** Fund data and benchmark data is from Royal london Asset Management financial data systems with values as of end of year 2022. Revenues and EVIC data are from MSCI, latest available information with threshold of tolerance of 2019 for oldest acceptable EVIC value. **Emissions data:** We disclose % of data from Royal london Asset Management or from MSCI. We also disclose % of data reported by issuers and % of estimated data where either ourselves or MSCI have used approximations. Our listed equity emissions data comes wholly from MSCI. For fixed income securities, Royal london Asset Management has developed its own emissions research process. The report uses Royal london Asset Management data for the fixed income securities as a first port of call and MSCI where no Royal london Asset Management data is available. Royal london Asset Management's data for emissions includes a combination of company disclosures through annual reporting, sustainability supplements and filings to the carbon disclosure project and primary research by our RI team. Where we lend to ring-fenced subsidiaries, we have tried to source carbon data and revenues specific to those subsidiaries. All our scope 3 data is from MSCI. We provide separate fund aggregate metrics for scope 3 emissions reported by companies and for scope 3 emissions estimated by our data provider. **Additional metrics:** Implied Temperature Rise and Climate Value-at-Risk (C-VaR), fossil fuel exposure and green revenues are provided by MSCI.

Definitions, acronyms and methodologies

Metric	Asset class applicability	Brief explanation
Benchmark	Fund's benchmark	The benchmark applied is the performance benchmark associated with the fund.
Aggregation and coverage	Listed equities, Corporate fixed income, Sovereign debt	To calculate a fund's coverage for non-sovereign metrics, only asset types of listed quity and corporate fixed income are included and holdings with negative market values are removed. Sovereign Metrics coverage is 100% as the definition of sovereign is if the Issuer has a GDP value provided by MSCI.
Science Based Targets initiative (SBTi)	Listed equities, Corporate fixed income	The Science Based Targets initiative (SBTi) aims to drive ambitious corporate climate action by enabling businesses and financial institutions globally to set science-based greenhouse gas emissions reductions targets. (Source: SBTi)
Partnership for Carbon Accounting Financials (PCAF)	Listed equities, Corporate fixed income, Sovereign debt	PCAF is a global partnership of financial institutions that work together to develop and implement a harmonised approach to assess and disclose the greenhouse gas emissions associated with their loans and investments. (Source: PCAF)

Definitions, acronyms and methodologies

Name	Unit of metric	Metric description
Scope 1 financed emissions	Tonnes of CO2 equivalent (tCO2e)	The Scope 1 emissions associated with the investments in the fund, expressed in tCO2e (metric tonnes of CO2 equivalent). Emissions are attributed to a fund based on the portion of the company's value the fund holds, using enterprise value including cash for publicly listed corporates. In this disclosure we have excluded emissions associated with private issuers of corporate fixed income. This is because market values (EVIC) tend to be systematically higher than accounting values (equity + debt) and this therefore can make private issuers emissions look artificially higher. Financed emissions = ∑ (attribution fraction x company emissions) Attribution fraction = current value of investment / enterprise value including cash
Scope 2 financed emissions	Tonnes of CO2 equivalent (tCO2e)	The Scope 2 emissions associated with the investments in the fund, expressed in tCO2e (metric tonnes of CO2 equivalent). Emissions are attributed to a fund based on the portion of the company's value the fund holds, using enterprise value including cash for publicly listed corporates. In this disclosure we have excluded emissions associated with private issuers of corporate fixed income. This is because market values (EVIC) tend to be systematically higher than accounting values (equity + debt) and this therefore can make private issuers emissions look artificially higher. Financed emissions = ∑ (Attribution fraction x company emissions) Attribution fraction = current value of investment / enterprise value including cash
Scope 3 financed emissions (estimated)	Tonnes of CO2 equivalent (tCO2e)	The Scope 3 emissions associated with the investments in the fund, expressed in tCO2e (metric tonnes of CO2 equivalent). Emissions are attributed to a fund based on the portion of the company's value the fund holds, using enterprise value including cash (EVIC) for publicly listed corporates. For Scope 3 emissions we distinguish between company reported data and estimated data from our data providers. 3rd party estimated Scope 3 emissions are using standardised methodology, based on uniform assumption and factors reducing variability due to different companies internal reporting practices thereby ensuring a level playing field for all companies. This method can be beneficial for broad benchmarking and assessment where uniformity is crucial. This method will bypass any assurance processes that reporting companies may have used. In this disclosure we have excluded emissions associated with private issuers of corporate fixed income as not comparable with publically listed ones. This is because market values (EVIC) tend to be systematically higher than accounting values (equity + debt) and this therefore can make private issuers emissions look artificially higher. Financed emissions = ∑ (attribution fraction x company emissions) Attribution fraction = current value of investment / enterprise value including cash

Definitions, acronyms and methodologies

Name	Unit of metric	Metric description
Scope 3 financed emissions (reported)	Tonnes of CO2 equivalent (tCO2e)	The Scope 3 emissions associated with the investments in the fund, expressed in tCO2e (metric tonnes of CO2 equivalent). Emissions are attributed to a fund based on the portion of the company's value the fund holds, using enterprise value including cash (EVIC) for publicly listed corporates. For Scope 3 emissions we distinguish between company reported data and estimated data from our data providers. Using companies own reported Scope 3 emissions offers detailed, accurate, and context-specific data that can enhance transparency and provide deeper insights into individual company performance (rather than for comparing between companies and/or between funds' performance). In this disclosure we have excluded emissions associated with private issuers of corporate fixed income as not comparable with publically listed ones. This is because market values (EVIC) tend to be systematically higher than account values (equity + debt) and this therefore can make private issuers emissions look artificially higher. Financed emissions = ∑ (attribution fraction x company emissions) Attribution fraction = current value of investment / enterprise value including cash
Financed emissions (Scope 1 and 2)	Tonnes of CO2 equivalent (tCO2e)	The Scope 1 and 2 emissions associated with the investments in the fund, expressed in tCO2e (metric tonnes of CO2 equivalent). Emissions are attributed to a fund based on the portion of the company's value the fund holds, using enterprise value including cash for publicly listed corporates. In this disclosure we have excluded emissions associated with private issuers of corporate fixed income. This is because market values (EVIC) tend to be systematically higher than account values (equity + debt) and this therefore can make private issuers emissions look artificially higher. Financed emissions = ∑ (attribution fraction x company emissions)
Financed emissions (Scope 1, 2 and 3)	Tonnes of CO2 equivalent (tCO2e)	The absolute emissions associated with the investments in the fund, expressed in tCO2e (metric tonnes of CO2 equivalent). Emissions are attributed to a fund based on the portion of the company's value the fund holds, using enterprise value including cash for publicly listed corporates. We provide GHG emissions for Scope 1 and 2 emissions. For Scope 3 emissions we distinguish between company reported data and estimated data from our data providers. In this disclosure we have excluded emissions associated with private issuers of corporate fixed income. This is because market values (EVIC) tend to be systematically higher than account values (equity + debt) and this therefore can make private issuers emissions look artificially higher. Financed emissions = ∑ (attribution fraction x company emissions)
Carbon footprint (Scope 1 and 2)	Tonnes of CO2 equivalent per million dollars invested (tCO2e / $M)	The emissions intensity of an investment fund, expressed in tCO2e / $M invested. Total GHG emissions (Scope 1 and 2) is divided by the fund value. The resulting indicators measures absolute emissions generated for each dollar invested in the fund. Carbon Footprint = ∑ (Financed emissions / current fund value)
Carbon footprint (Scope 1, 2 and 3)	Tonnes of CO2 equivalent per million dollars invested (tCO2e / $M)	The emissions intensity of an investment fund, expressed in tCO2e / $M invested. Total GHG emissions (Scope 1, 2 and 3) is divided by the fund value. The resulting indicators measures absolute emissions generated for each dollar invested in the fund. Carbon Footprint = ∑ (Financed emissions / current fund value)
Weighted Average Carbon Intensity (WACI) (Scope 1 and 2)	Tonnes of CO2 equivalent per million dollars revenue (tCO2e / $M)	The fund's exposure to revenue emission-intensive companies, expressed in tCO2e / $M revenue. Scope 1 and Scope 2 GHG emissions are divided by company's revenues, then multiplied based on fund weights (the current value of the investment relative to the current fund value). The WACI is calculated as a weighted average sum of the holdings with carbon intensity coverage. WACI = ∑ [(current value of investment / current fund value) x (company emissions / company $M revenue)]

Definitions, acronyms and methodologies

Name	Unit of metric	Metric description
Weighted Average Carbon Intensity (WACI) (Scope 1, 2 and 3)	Tonnes of CO2 equivalent per million dollars revenue (tCO2e / $M)	The fund's exposure to revenue emission-intensive companies, expressed in tCO2e / $M revenue. Scope 1, Scope 2 and Scope 3 GHG emissions are divided by company's revenues, then multiplied based on fund weights (the current value of the investment relative to the current fund value). The WACI is calculated as a weighted average sum of the holdings with carbon intensity coverage. WACI = ∑ [(current value of investment / current fund value) x (company emissions / company $M revenue)]

Definitions, acronyms and methodologies

Name	Unit of metric	Metric description
Sovereign debt emissions	tCO2e	Emissions allocated to financiers on the basis on sovereign debt proportioning sovereign emissions by PPP-adjusted GDP relative to the value of our investment. Sovereign emissions scope includes emissions from sources located within the domestic territory (PCAF defined Scope 1), emissions from energy imports (PCAF defined Scope 2) and emissions from non-energy imports (PCAF defined Scope 3).
Sovereign debt production intensity	Production emissions (tCO2e / $M PPP adjusted GDP)	Sovereign debt production intensity measures a portfolio's exposure to emissions-intensive economies, defined as the portfolio weighted average of sovereigns' greenhouse gas production intensity (production emissions/PPP- adjusted GDP). Production emissions (PCAF defined Scope 1) reflect the emissions generated within the sovereign territory. Values exclude land use, land-use change and forestry (LULUCF). Production emissions normalised by Purchasing Power Parity adjusted Gross Domestic Product (PPP-adjusted GDP) provides a metric to compare sovereign economies emissions relative to output and real economy size. Σ[(current value of investment / current portfolio value) x (sovereign issuer's production emissions / sovereign issuer's $M PPP-Adjusted GDP)]
Sovereign debt consumption intensity	Consumption emissions (tCO2e / capita)	Sovereign debt consumption intensity measures a portfolio's exposure to carbon-intensive economies, defined as the portfolio weighted average of sovereigns' greenhouse gas consumption intensity (consumption emissions/population for the country territory. Consumption emissions (PCAF defined Scope 1 + 2 + 3 -exported emissions) reflect the emissions attributable to consumption within the sovereign territory. Consumption emissions by capita provides a metric to compare demand-size of sovereign economies. Σ[(current value of investment / current portfolio value) x (sovereign issuer's consumption emissions / capita)]
Implied Temperature Rise (ITR)	ºC	Implied Temperature Rise aims to measure the warming the emissions from a company would drive by year 2100, if the whole economy had the same over- or under-shoot level of greenhouse gas emissions. It is based on the company's most recent Scope 1, 2 and 3 emissions, projecting these to the future and incorporating the company's targets. It is expressed in °C. Further details on MSCI's methodology can be found at: Implied Temperature Rise Methodology - Executive Summary (msci.com).
Companies with approved SBTi targets	%	'Companies with Science Based Targets initiative (SBTi) - approved near-term targets (%)' is the percentage of companies in our corporate fixed income and listed equity asset classes that have had their climate near-term targets approved by the SBTi. The percentage of instruments (by value) held in the portfolio through listed equities or corporate fixed income that have validated science-based targets with near-term target trajectories below 1.5°C and 2°C respectively.
Companies with commitment to set SBTi targets	%	Companies that commit to set science-based targets have 24 months to submit targets to the SBTi for validation. A company's commitment is fulfilled when the company submits a target within the commitment time frame and, after completion of the validation process, the company has a target in line with the level of ambition of the commitment approved by the SBTi.
Climate Value-at-Risk (C-VaR)	%	Our C-VaR model aims to provide an assessment on how climate change may affect the investment return in portfolios based on conditions associated with global temperature trajectories. The underlying climate model we selected is the Regionalised Model of Investment and Development (REMIND). It is a global model that couples an economic growth model with a detailed energy system model and a simple climate model. It is hosted at the Potsdam Institut fur Klimafolgenforschung (PIK), Germany. We use four scenarios developed by the Central Banks' NGFS: • National Determined Contributions – 'hot house' 3°C scenario • Below 2°C - an 'orderly transition' scenario • Delayed Transition - a 2°C 'disorderly transition' scenario • Divergent Net Zero - a 1.5°C degrees 'disorderly transition' scenario. Orderly or disorderly depends on global cooperation and adequate policies being in place, among other variables. The variables behind each scenario can be reviewed on the MSCI website.

Methodological and data assumptions, limitations and disclaimers

We recognise there are currently limitations to the reliability and usefulness of climate data due to the emerging nature of climate data applications and methodologies in finance. Low levels of data coverage may give inaccurate fund statistics. All data is supplied for information purposes only and should not be relied upon for investment decisions. We endeavour to improve climate data in finance through our engagement with companies and data providers. We believe that technological innovations will make data more easily accessible and auditable in the future. We are also working with regulators, such as through the FCA's Climate Financial Risk Forum (CFRF) in the UK, to support the evolution of good practice in climate risk disclosures.

Although Royal London Asset Management Ltd's information providers, including but not limited to, MSCI ESG Research LLC and its affiliates (the ESG parties), obtain information from sources considered reliable, none of the ESG parties warrants or guarantees the originality, accuracy and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose.

We have identified the following areas where limitations are most evident:

Accuracy and availability of emissions data

Scope 1 and 2 emissions data

Not all companies disclose their emissions. The level and accuracy of disclosure varies across geographies and industry sectors, and where disclosures are made, they are typically subject to less rigorous auditing processes than financial data. Issuers disclose emissions with different levels of transparency, coverage and methodologies, making disclosures less comparable.

The accuracy of data is reduced further through "subsidiary mapping", where subsidiaries are mapped back to their parent company when subsidiary emissions data is not available. Where emissions data is still not available, our data provider applies its estimation methodology to allow for higher overall coverage.

Reported emissions are supplemented by estimated emissions calculated by our data provider to allow for higher overall coverage, which can make emissions data less reliable. Methodologies to estimate emissions can be based on a company's production data, historical companies' emissions reports or by using the subindustry segment intensity average. Since 2019, Royal London Asset Management has enhanced its Scope 1 and 2 emissions data with in-house research for fixed income credit instruments based on detailed knowledge of the issuers, capital structure considerations and underlying assets.

Royal London Asset Management uses its enhanced fixed income data set for Weighted Average Carbon Intensity (WACI). However, it is unable to use this same approach for financed emissions and carbon footprint as it is restricted by the calculation of enterprise value (EVIC for public markets, which includes equity market value) that is incompatible with the 'Equity + Debt' metrics for private companies, which are either not being disclosed or include equity book value (instead of market value). Royal London Asset Management provides this as an explanation of why data coverage may vary between metrics.

Scope 3 emissions data

Few companies are currently reporting their Scope 3 emissions resulting in only estimations being available for most of our holdings. Companies are selectively disclosing certain subcategories of Scope 3, often not the most material but the easiest to calculate, which can lead to underestimation of emissions if reported Scope 3 emissions are relied on for calculations.

There is a lack of consistency on the methodology being adopted across the industry to estimate these emissions. As a result, Scope 3 emissions can vary significantly across different data providers, and in the subsequent reporting across our peers. The Scope 3 estimation methodologies cannot follow entirely the GHG Protocol as it would require complete understanding of each company's entire value chain and market. Nonetheless, the methodologies are based on bottom-up company specific data when available but can also use top-down sector intensities. Estimations allow for better like-for-like comparison of Scope 3.

We note that the Scope 3 emission estimates are particularly weak for financials. This is mostly as methodologies for financials are only recently being supplemented by PCAF, disclosures are more complex and estimations involve using reference proxy portfolios and sub-industry average emissions which are less accurate in nature than estimations for sectors where activities can be tracked by revenue split or assets.

Accuracy and availability of financial data

The financial data standardised by ESG data providers used in this report may differ to data used in our internal financial analysis. For example, conversion rates and differences in tax system reporting make data less comparable. To assess companies' performance, we use the financial data from various data providers, including the ESG data vendors used in this assessment. This includes revenue, market capitalisation and enterprise value.

Timeliness of emissions data reporting

The comparability and timeliness of companies' disclosures is limited by research cycles and the rapidly moving landscape of corporate and policy climate pledges. Timing of disclosure varies across jurisdictions and companies, with announcements on climate strategy or emissions targets not necessarily following the financial disclosure schedules.

The data reported may not always utilise the most recently reported emissions from our underlying holdings, particularly with regard to our fixed income data set. The reported emissions are updated on a best-efforts basis following company disclosures which is in line with the carbon emissions data provided by our external vendor. MSCI and Royal London Asset Management make regular updates to their databases following company disclosures, but still do not always report the most recent carbon emissions for all companies. This results in carbon data often being out of date by 12-24 months. We endeavour to use the most up-to-date data available to us at the time of calculation.

MSCI make ongoing updates to their database, therefore the carbon emissions reported for our Funds can vary from one day to the next. Using our underlying holdings data as at the end of our financial reporting year (31 December), we extract our emissions data within 10 business days each year. This provides some consistency with the data from the previous periods.

Methodological and data assumptions, limitations and disclaimers

Asset class coverage

There are some asset classes where emissions data or methodologies to calculate proxies are not readily available, and therefore these are excluded from our analysis. This includes private markets and derivatives. While these make up a relatively small proportion of our Fund, we will aim to report emissions for these asset classes as they become available in the future.

Aggregation and data coverage

The percentage data coverage for each metric is based on the portion of corporate fixed income and listed equity with available data and expressed in % value in the Fund. For the portion of Fund where data (emissions or financial data, including holding value, revenue or EVIC) is not available, the holdings are removed and the Fund is reweighted to 100%. We follow the aggregation process that our data provider uses. The portion of our Fund that has no climate disclosures is assumed to mirror the behaviour of the holdings with available data. Sovereign debt follow the same aggregation and coverage logic explained above and are treated as a distinct Fund.

We classify assets internally to perform aggregation calculations. This means there may be, on occasion, incidents where we have excluded instruments from our analysis with available carbon data as they are not considered to be corporate fixed income or listed equity instruments.

Forward-looking and Fund alignment metrics

Forward-looking metrics are underpinned by many uncertainties and subjective choices. While we observe improvements, they may still:

- exclude widely accepted material climate risks that cannot be modelled, including the impacts from external policy decisions, market sentiment and climate tipping points.
- rely on material subjective assumptions, including viability of investee net zero plans and assumed sector-level transition pathways.

Data providers' methodologies, using the latest available climate science, will inevitably need to evolve with changes in scientific understanding. This could make our year-on-year disclosures non-comparable. Whilst quantitative information is useful, we do not rely on these forward-looking metrics for investment decisions or assessing climate risk exposure due to the limitations described [below]. This allows us to consider more nuanced qualitative assessment and judgement when making decisions.

Despite ongoing enhancements by data providers such as MSCI, modelling limitations look set to persist in the short term. We will continue to encourage enhancements by MSCI and other data providers, and we will strive to use and report the most logical and decision useful data available. This approach will be kept under review as the quality of climate data for financials improves and as decision makers become more familiar with the basis and limitations of climate metrics.

Climate Value-at-Risk (C-VaR)

C-VaR relies on necessary climate model and socio-economic assumptions as well as cost and valuation calculations that reduce confidence in the metric.

The metric consists of three models: policy C-VaR, physical C-VaR and technology C-VaR. For each, climate impact is calculated at asset level and translated into impact on cost or return for the next 15 years.

1. **Policy C-VaR calculations make necessary assumptions on how much a company may need to reduce its greenhouse gas emissions due to climate policy and how much this may cost.**
   Assumptions include countries adequately disclosing their plans to the UNFCCC and implementing them. Carbon prices used to estimate costs are taken from IPCC referenced integrated assessment models (IAM)and scenarios. IPCC and NGFS IAM scenarios assumptions are openly auditable and can be considered the latest science which informs policy. However, these models have assumptions around GDP growth, technology uptake and marginal abatement costs which mean inherently each scenario for which a carbon price is taken will show only one possible alternative future.
2. **Physical C-VaR makes assumptions on the climate impact on a company's assets from climate change and how costly this could be in terms of increased business interruptions and/or asset damage.**
   Climate impact models are used that include chronic hazards such as gradual temperature, precipitation and snowfall changes as well as acute hazards such as coastal flooding and cyclones. The impact of emissions on warming has lower uncertainties than the planet's warming effects on weather and climate and its implications in specific locations. Beyond the difficulty of accurately estimating the increase in vulnerability of assets due to climate change, estimating how much this may cost the business has additional assumptions, for example how costs are aggregated from asset to business balance sheets, assumptions of companies' lack of adaptive capacity, and insurance costs.
3. **Technology C-VaR has embedded various assumptions on green technology ownership and uptake to estimate how much a company may benefit from transitioning to a low-carbon economy.**
   For this analysis, millions of low-carbon patents granted by various patent authorities are assessed. Using current green revenues and patent analysis to understand companies' low-carbon innovation, a model simulates which companies may benefit when policies from IPCC and NGFS IAM models that reach different warming goals are implemented globally. Assumptions are made on: technology uptake, the returns these technologies will yield, and that patent ownership and citations are a good starting point to understand transition opportunity.

Further assumptions are embedded in the consolidation of each of the sub-model costs and its expression as a final aggregated financial metric. Yearly costs from the three models are added using different assumptions in line with IAM climate modelling, for example that climate policy cost peaks in the next decade and that climate physical risk costs grow steadily. Once all costs are added, a discount rate is applied to bring these to present value. Discount rates are controversial within climate models and economists have argued for different discount rates to be applied to climate cost, given that tail risk has very high impact. The final C-VaR expresses the present value costs of climate impacts over the current enterprise market value. An additional model splits this C-VaR into equity and debt following reasonable assumptions in line with market practice. There is no consideration as to whether the market has already priced in any of these risks.

Methodological and data assumptions, limitations and disclaimers

Implied Temperature Rise (ITR)

ITR compares the current and projected greenhouse gas emissions of nearly every publicly listed company across all emissions scopes (based on the company's track record and stated reduction targets) with its share of the remaining global carbon budget for keeping warming this century well below 1.5°C. A company projected to emit carbon below budget can be said to "undershoot" the budget; a company projected to exceed the budget "overshoots" it. Implied Temperature Rise converts the overshoot or undershoot to an implied rise in average global temperatures this century, expressed in degrees Celsius (°C). An implied temperature of 1.5°C, for instance, indicates that a company is projected to remain within its share of a carbon budget that would keep warming this century to 1.5°C. An implied temperature of 2.5°C or 3°C, in contrast, would show that the company's emissions align with temperatures that keep rising, bringing greater harms. The portfolio-level Implied Temperature Rise compares the sum of projected greenhouse gas emissions against the sum of carbon budgets for the underlying constituents or holdings. The estimated carbon budget overshoot or undershoot for the portfolio in question converts to a degree of temperature rise.

The scientific inputs to the ITR model used by our data provider are carbon budgets based on IPCC reviewed research. Carbon budgets link economic activity to levels of carbon emissions and these emissions to a level of warming by the end of the century. The relationship between emissions and warming is well-established by science, but other assumptions remain subject to scientific debate. IPCC assertions and models have inherent uncertainties, probabilistic claims and confidence ranges typically used in climate science. For instance, the remaining carbon budget may change with new findings, as well as the upper boundary or worst-case warming scenario. Some modelling assumptions are socio-political such as the rates of population and economic growth and the relative importance of carbon removal strategies to expand the carbon budget through negative emissions (taking greenhouse gases from the atmosphere).

Further uncertainties arise when the global scientific carbon budget concept is applied to company emission intensities and their trajectories over time. For ITR, the allocation of a carbon budget to a company is similarly based on the company's emission intensity per dollar of revenue. This means that changes in the company's revenues, for factors unrelated to its emissions reductions such as M&A or sector cyclicality, affect the company's implied temperature scores. There are currently no factors of credibility included in the forward-looking trajectory of the company emissions. The ITR model assumes the company will meet its targets and does not provide judgement on whether those targets are credible or achievable.

Binary target metrics

As with ITR models, a key assumption in alignment metrics is that companies' emission targets are met. These metrics therefore may not account for the dynamic nature of climate change and the need for ongoing adaptation and mitigation efforts. A company that is currently considered 'aligned' may not remain so in the future if it does not adapt to changing climate change conditions or if the regulatory landscape shifts.

Other sources of uncertainty in the methodology include company emissions targets which are typically not standardised. These metrics provide limited detail regarding the climate targets that our investee companies have set, other than whether or not they have set these targets and if they are SBTi-approved.

SBTi provides a source of validation for corporate climate targets, however the initiative does not provide full disclosure of the material provided by companies to obtain verification. SBTi approval is also not a necessary requirement of a credible net zero target – companies may have credible net zero targets while choosing not to align with SBTi. Conversely, MSCI's companies with targets across all scopes' metric is susceptible to including companies that have set weak or immaterial targets in its count.

The SBTi allows for different methods for corporates to establish and receive validation of targets, some of which are more likely to avoid a global overshoot of the 1.5°C carbon budget. Additional shortcomings include that the SBTi is solely focused on emission reductions and not on full climate transition plans and does not provide a methodology for verification in key sectors where most global emissions are concentrated. Furthermore, the methodologies for target setting represent typically one possible path to net zero and there is a lack of acknowledgement of the multiple potential routes to net zero or a broader systemic understanding of the role that different companies within a sector may have to deliver emission reductions.

Data sources and quality

Financial data:

- Fund and benchmark data for Listed equities and Corporate fixed income is from Royal london Asset Management financial data systems with values as at end of 2023.
- Revenues and EVIC data from MSCI and revenues data from Royal london Asset Management's proprietary research are with values in-line with the date of the collected emissions data.

Emissions data:

- Royal london Asset Management discloses percentage of data sourced from Royal london Asset Management's proprietary research or from MSCI. It also discloses percentage of data reported by issuers and percentage of estimated data where either Royal london Asset Management or MSCI have used approximations.
- Listed equity emissions data comes wholly from MSCI.
- For fixed income securities, Royal london Asset Management has developed its own emissions research process which provides carbon emissions data that is more granular and relevant to fixed income issuers. The emissions figures are calculated using a formula which uses the sourced data as a preference where this data is available, supplementing with MSCI data or estimates where it has not gathered proprietary data. Royal london Asset Management's data for emissions includes a combination of company disclosures through annual reporting, sustainability supplements, filings to the carbon disclosure project and primary research by Royal london Asset Management's Responsible Investment and Credit teams. Where lending is to ring-fenced subsidiaries, Royal london Asset Management has tried to source carbon data and revenues specific to those subsidiaries.
- All Scope 3 data is sourced from and estimated by MSCI for both Corporate fixed income and Listed equities.

Methodological and data assumptions, limitations and disclaimers

The metrics we disclose are following requirements captured in the United Kingdom Financial Conduct Authority and the Department for Work and Pensions climate disclosures regulations. Our climate scenario analysis uses the Network for Greening the Financial System (NGFS) climate scenarios. As of March 11th 2025, the NGFS is a network of 145 Central Banks including the Bank of England.

We follow the Task Force for Climate-related Financial Disclosure (TCFD) and Climate Financial Risk Forum (CFRF) industry recommendations.

MSCI disclaimer

Certain information contained herein (the "Information") is sourced from/copyright of MSCI Inc., MSCI ESG Research LLC, or their affiliates ("MSCI"), or information providers (together the "MSCI Parties") and may have been used to calculate scores, signals, or other indicators. The Information is for internal use only and may not be reproduced or disseminated in whole or part without prior written permission. The Information may not be used for, nor does it constitute, an offer to buy or sell, or a promotion or recommendation of, any security, financial instrument or product, trading strategy, or index, nor should it be taken as an indication or guarantee of any future performance. Some funds may be based on or linked to MSCI indexes, and MSCI may be compensated based on the fund's assets under management or other measures. MSCI has established an information barrier between index research and certain Information. None of the Information in and of itself can be used to determine which securities to buy or sell or when to buy or sell them. The Information is provided "as is" and the user assumes the entire risk of any use it may make or permit to be made of the Information. No MSCI Party warrants or guarantees the originality, accuracy and/or completeness of the Information and each expressly disclaims all express or implied warranties. No MSCI Party shall have any liability for any errors or omissions in connection with any Information herein, or any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

Important information

Past performance is not a guide to future performance. The value of investments and the income from them is not guaranteed and may go down as well as up and investors may not get back the amount originally invested. Capital at risk. Portfolio characteristics and holdings are subject to change without notice. The views expressed are those of Royal London Asset Management at the date of publication unless otherwise indicated, which are subject to change, and is not investment advice.

Issued in June 2025 by Royal London Asset Management Limited, Firm Reference Number: 141665, registered in England and Wales number 2244297; Royal London Unit Trust Managers Limited, Firm Registration Number: 144037, registered in England and Wales number 2372439; RLUM Limited, Firm Registration Number: 144032, registered in England and Wales number 2369965. All of these companies are authorised and regulated by the Financial Conduct Authority. Royal London Asset Management Funds Plc, an umbrella company with segregated liability between sub-funds, authorised and regulated by the Central Bank of Ireland, registered in Ireland number 364259. Registered office: 70 Sir John Rogerson's Quay, Dublin 2, Ireland.

All of these companies are subsidiaries of The Royal London Mutual Insurance Society Limited, registered in England and Wales number 99064. Registered office: 80 Fenchurch Street, London, EC3M 4BY. The Royal London Mutual Insurance Society Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. The Royal London Mutual Insurance Society Limited is on the Financial Services Register, registration number 117672.

We're happy to provide your documents in a different format, such as braille, large print or audio, just ask us when you get in touch.

All of our printed products are produced on stock which is from FSC® certified forests.

The Royal London Mutual Insurance Society Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. The firm is on the Financial Services Register, registration number 117672. Registered in England and Wales number 99064. Registered office: 80 Fenchurch Street, London, EC3M 4BY