

FTSE Fixed Income TPI Climate Transition Index Series

v1.0



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Section 1

Introduction

Introduction

1.1 The FTSE Fixed Income TPI Climate Transition Index Series

1.2 This document sets out the Ground Rules for the construction and management of the FTSE Fixed Income TPI Climate Transition Index Series.

1.2.1 The FTSE Fixed Income TPI Climate Transition Index Series is designed to reflect the performance of corporate bonds representing a specific set of TPI and climate data.

1.2.2 The FTSE Fixed Income TPI Climate Transition Index Series is not designed to align with the minimum requirements for EU Climate Transition Benchmarks or the EU Paris-Aligned Benchmarks set out in the EU Benchmark Regulation and UK Benchmark Regulation (BMR)¹.

1.2.3 These Ground Rules should be read in conjunction with the FTSE Fixed Income Index Guide, which can be accessed using the following link:

[FTSE Fixed Income Indexes Guide.pdf](#)

1.3 The FTSE Fixed Income TPI Climate Transition Index Series consists of the following:

- FTSE World Broad Investment-Grade (WorldBIG) TPI Corporate Bond Index
- FTSE Euro Broad Investment-Grade (EuroBIG) TPI Corporate Bond Index
- FTSE US Broad Investment-Grade (USBIG) TPI Corporate Bond Index
- FTSE Australian Broad Investment-Grade (AusBIG) TPI Corporate Bond Index
- FTSE Australian Broad Investment-Grade (AusBIG) TPI Corporate Bond 0+ Years Index

1.4 The FTSE Fixed Income TPI Climate Transition Index Series takes account of ESG factors in its design (see Section 5).

1.5 FTSE Russell

1.5.1 FTSE Russell is a trading name of FTSE International Limited, Frank Russell Company, FTSE Global Debt Capital Markets Limited (and its subsidiaries FTSE Global Debt Capital Markets Inc. and FTSE Fixed Income Europe Limited), FTSE Fixed Income LLC, FTSE (Beijing) Consulting Limited, Refinitiv Benchmark Services (UK) Limited, Refinitiv Limited and Beyond Ratings.

¹ The requirements are set out in [Regulation \(EU\) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds](#) (the European Benchmark Regulation) and the [Commission Delegated Regulation \(EU\) 2020/1818 of 17 July 2020 supplementing Regulation 2016/1011 of the European Parliament and of the Council as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks](#). The European Benchmark Regulation is retained EU law in the UK under The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019 (the UK Benchmark Regulation)

- 1.6 FTSE Russell hereby notifies users of the index series that it is possible that circumstances, including external events beyond the control of FTSE Russell, may necessitate changes to, or the cessation of, the index series and therefore, any financial contracts or other financial instruments that reference the index series or investment funds which use the index series to measure their performance should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the index series.
- 1.7 Index users who choose to follow this index series or to buy products that claim to follow this index series should assess the merits of the index series rules-based methodology and take independent investment advice before investing their own or client funds. No liability whether as a result of negligence or otherwise is accepted by FTSE Russell (or any person concerned with the preparation or publication of these Ground Rules) for any losses, damages, claims and expenses suffered by any person as a result of:
- any reliance on these Ground Rules;
 - any inaccuracies in these Ground Rules;
 - any non-application or misapplication of the policies or procedures described in these Ground Rules; and/or
 - any inaccuracies in the compilation of the index series or any constituent data.

Section 2

Management responsibilities

Management responsibilities

2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the benchmark administrator of the index.²

2.1.2 FTSE is responsible for the daily calculation, production and operation of the index, and will:

- maintain records of the index weightings of all constituents;
- make changes to the constituents and their weightings in accordance with the Ground Rules;
- carry out periodic index reviews of the index and apply the changes resulting from the reviews as required by the Ground Rules;
- publish changes to the constituent weightings resulting from their ongoing maintenance and the periodic reviews; and
- disseminate the indices.

2.2 Amendments to these Ground Rules

2.2.1 These Ground Rules shall be subject to regular review (at least once a year) by FTSE Russell to ensure that they continue to best reflect the aims of the index series. Any proposals for significant amendments to these Ground Rules will be subject to consultation with FTSE Russell advisory committees and other stakeholders if appropriate. The feedback from these consultations will be considered by the FTSE Russell Index Governance Board before approval is granted.

2.2.2 Where FTSE Russell determines that the Ground Rules are silent or do not specifically and unambiguously apply to the subject matter of any decision, any decision shall be based as far as practical on the Statement of Principles. After making any such determination, FTSE Russell shall advise the market of its decision at the earliest opportunity. Any such treatment will not be considered as an exception or change to the Ground Rules, or to set a precedent for future action, but FTSE Russell will consider whether the Ground Rules should subsequently be updated to provide greater clarity.

² The term administrator is used in this document in the same sense as it is defined in [Regulation \(EU\) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds](#) (the European Benchmark Regulation) and [The Benchmarks \(Amendment and Transitional Provision\) \(EU Exit\) Regulations 2019](#) (the UK Benchmark Regulation).

Section 3

FTSE Russell index policies

FTSE Russell index policies

These Ground Rules should be read in conjunction with the following policy documents, which can be accessed using the links below:

3.1 Queries and Complaints

FTSE Russell's complaints procedure can be accessed using the following link:

[FTSE Russell Benchmark Determination Complaints-Handling Policy.pdf \(ftserussell.com\)](#)

3.2 Statement of Principles for FTSE Fixed Income Indices (the Statement of Principles)

Indices need to keep abreast of changing markets and the Ground Rules cannot anticipate every eventuality. Where the Rules do not fully cover a specific event or development, FTSE Russell will determine the appropriate treatment by reference to the Statement of Principles for FTSE Fixed Income Indices which summarises the ethos underlying FTSE Russell's approach to index construction. The Statement of Principles is reviewed annually and any changes proposed by FTSE Russell are presented to the FTSE Russell Policy Advisory Board for discussion before approval by the FTSE Russell Index Governance Board.

The Statement of Principles for Fixed Income Indices can be accessed using the following link:

[Statement of Principles Fixed Income Indices.pdf](#)

3.3 Recalculation Policy and Guidelines

The Recalculation Policy and Guidelines for Fixed Income Indices document is available from the FTSE Russell website using the link below or by contacting fi.index@lseg.com.

[Fixed Income Recalculation Policy and Guidelines.pdf](#)

3.4 Recalculation Policy and Guidelines – ESG Data and Scores

Where an inaccuracy in ESG data is identified, FTSE Russell will follow the guidelines set out in this document when determining if ESG data should be recalculated.

[Recalculation Policy and Guidelines ESG Products.pdf](#)

3.5 Policy for Benchmark Methodology Changes

Details of FTSE Russell's policy for making benchmark methodology changes can be accessed using the following link:

[Policy for Benchmark Methodology Changes.pdf](#)

3.6 FTSE Russell Governance Framework

To oversee its indices, FTSE Russell employs a governance framework that encompasses product, service and technology governance. The framework incorporates the London Stock Exchange Group's three lines of defence risk management framework and is designed to meet the requirements of the IOSCO Principles for Financial Benchmarks³, the European benchmark regulation⁴ and the UK benchmark regulation⁵. The FTSE Russell Governance Framework can be accessed using the following link:

[FTSE Russell Governance Framework.pdf](#)

3.7 Real Time Status Definitions

For indices that are calculated in real time, please refer to the following guide for details of real-time status definitions:

[Real Time Status Definitions.pdf](#)

³ IOSCO Principles for Financial Benchmarks Final Report, FR07/13 July 2013.

⁴ Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds.

⁵ The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019.

Section 4

Base Indices for the Fixed Income TPI Climate Transition Index Series

Base indices for the Fixed Income TPI Climate Transition Index Series

4.1 Base Indices

- 4.1.1 The Base Index for the FTSE WorldBIG TPI Corporate Bond is the corporate component of the market capitalisation weighted FTSE World Broad Investment-Grade Bond Index (WorldBIG). The FTSE WorldBIG is a multi-sector, multi-currency benchmark which provides a broad-based measure of the global fixed income markets.
- 4.1.2 The Base Index for the FTSE EuroBIG TPI Corporate Bond Index is the corporate component of the market capitalisation weighted FTSE Euro Broad Investment-Grade Bond Index (EuroBIG). The FTSE EuroBIG is a multi-sector benchmark for investment-grade, Euro-denominated government, government-sponsored, collateralized, and corporate bonds.
- 4.1.3 The Base Index for the FTSE USBIG TPI Corporate Bond Index is the corporate component of the market capitalisation weighted FTSE US Broad Investment-Grade Bond Index (USBIG). The FTSE USBIG tracks the performance of investment-grade US Dollar-denominated government, government-sponsored, collateralized and corporate bonds.
- 4.1.4 The Base Index for the FTSE AusBIG TPI Corporate Bond Index is the corporate component of the market capitalisation weighted FTSE Australian Broad Investment-Grade Bond Index (AusBIG). The FTSE AusBIG tracks the performance of investment-grade Australian Dollar-denominated government, government-sponsored, collateralized and corporate bonds.
- 4.1.5 The Base Index for the FTSE AusBIG TPI Corporate Bond 0+ Years Index is the corporate component of the market capitalisation weighted FTSE Australian Broad Investment-Grade Bond 0+ Years Index (AusBIG 0+). The FTSE AusBIG 0+ tracks the universe of securities that meet the eligibility criteria for the flagship FTSE Australian Broad Investment-Grade Bond Index (AusBIG) through to maturity.
- 4.1.6 For full details on the design criteria and calculation assumptions for the base indices, please refer to the FTSE Fixed Income Index Guide which can be accessed using the following link: [FTSE Fixed Income Index Guide](#).

4.2 Eligible securities

4.2.1 The FTSE Fixed Income TPI Climate Transition Index Series consists of the indices in the table below. To be eligible for each of the FTSE Fixed Income TPI Climate Transition Indices, securities must first meet the index eligibility criteria for the respective “Base Index” provided in the table.

FTSE Fixed Income TPI Climate Transition Index Series	Base Index	Base Date
FTSE WorldBIG TPI Corporate Bond Index	FTSE World Broad Investment-Grade Corporate Bond Index	September 30, 2015
FTSE EuroBIG TPI Corporate Bond Index	FTSE Euro Broad Investment-Grade Corporate Bond Index	September 30, 2015
FTSE USBIG TPI Corporate Bond Index	FTSE US Broad Investment-Grade Corporate Bond Index	September 30, 2015
FTSE AusBIG TPI Corporate Bond Index	FTSE Australian Broad Investment-Grade Corporate Bond Index	September 30, 2015
FTSE AusBIG TPI Corporate Bond 0+ Years Index	FTSE Australian Broad Investment-Grade Corporate Bond 0+ Years Index	September 30, 2015

4.3 Excluded companies

4.3.1 The index series apply the minimum set of exclusion.

4.3.2 The index series apply the exclusion guidelines for FTSE Russell ESG Fixed Income Indices, details of the rules can be found in the Section 9 of [Guide to the Construction and Maintenance of Exclusion Lists used in FTSE Russell Indices](#).

4.3.3 For complete exclusion categories, please refer to Appendix A.

Section 5

ESG data inputs

ESG data inputs

5.1 The following ESG datasets are used in the construction of the FTSE Fixed Income TPI Climate Transition Index Series.

ESG data inputs	Details	Used for selection, weighting or exclusion ⁶
FTSE Green Revenues	FTSE Russell's green revenues data model identifies companies providing green products and services and classifies associated revenues based on the Green Revenues Classification System (GRCS). GRCS is a taxonomy used to define and measure the industrial transition to a green economy. More information can be found here: ftse-green-revenues-classification-system.pdf	Weighting
TPI Management Quality (MQ)	FTSE Russell's TPI management quality (MQ) data evaluates and tracks the quality of companies' governance/management of their greenhouse gas emissions and of risks and opportunities related to the low-carbon transition. More information can be found here: https://www.transitionpathwayinitiative.org/methodology	Weighting
TPI Carbon Performance (CP) scores	TPI carbon performance (CP) scores assess how companies' carbon performance now and in the future might compare to the international targets and national pledges made as part of the Paris Agreement. More information can be found here: https://www.transitionpathwayinitiative.org/methodology	Weighting
FTSE Carbon Emissions	The FTSE Carbon Emissions Dataset provides reported and estimated Scope 1, Scope 2, and Scope 3 emissions data for both the assets and activities controlled by global publicly listed companies and their entire value chain (upstream and downstream activities). More information can be found here: Guide to FTSE and Third Party ESG Data used in FTSE Russell Indices	Weighting
Product related data- Sustainalytics	Sustainalytics Product Involvement data identifies the nature and extent of a company's involvement in a range of product and business activities. More information can be found here: https://www.sustainalytics.com/investor-solutions/esg-research/esg-screening/esg-criteria	Exclusion
Industry classification- TRBC	The Refinitiv Business Classification (TRBC) is a sector and industry classification used to identify the activities of companies with exposure to specific products or services. More information can be found here: https://www.refinitiv.com/en/financial-data/indices/trbc-business-classification	Exclusion

⁶ Definitions:
 Selection – ESG data is used to select or rank constituents or calculate minimum scores or thresholds.
 Weighting – ESG data is used to calculate the weight of a constituent in an index.
 Exclusion – ESG data is used to exclude companies from the index.

ESG data inputs	Details	Used for selection, weighting or exclusion ⁶
Conduct related data- Sustainalytics	Sustainalytics Global Standards Screening (GSS) assess companies' impact on stakeholders and the extent to which a company causes, contributes or is linked to violations of international norms and standards. More information can be found: https://www.sustainalytics.com/investor-solutions/esg-research/esg-screening/global-compact-norms-based-screening	Exclusion
Minimum Set of Exclusions	The minimum set of exclusions apply to this Index Series. Details of the minimum exclusions can be found in: Guide to the Construction and Maintenance of FTSE Exclusion Lists.pdf	Exclusion
Climate Bond Initiative (CBI) Green Bond data	The Climate Bond Initiative (CBI) provides independent analysis on green bond use of proceeds and provides opinions on the green credential of the intended proceeds allocation. CBI assesses each labelled green bond against its Climate Bonds Taxonomy based on its issuer's public disclosure, to understand if the bond use of proceeds is in line with the CBI eligible categories. More information can be found: https://www.climatebonds.net/files/files/cbi-gb-methodology-061020.pdf	Weighting
Industry classification- COBS	The FTSE Russell Corporate Bond Sector (COBS) scheme is maintained by FTSE Russell for all bonds tracked by the FTSE Fixed Income Indices. COBS subsectors can be used to determine issuer involvement in specific products or services. More information can be found here: FTSE Fixed Income Index Guide .	Exclusion

5.2 The update frequency for each dataset is provided in the below table:

ESG Dataset	Update Frequency	Data Cut-Off Date	Implementation of Data Update
FTSE Green Revenues Data	Annual	August month-end	October index profiles
TPI Management Quality and Carbon Performance Scores	Annual	August month-end	October index profiles
FTSE Carbon Emissions Data	Annual	August month-end	October index profiles
Sustainalytics Data (Product Involvement Data and GSS scores)	Monthly ⁷	Each monthly index fixing date	The following months' index profile
Industry Classifications (TRBC and COBS codes)	Monthly	Each monthly index fixing date	The following months' index profile
Refinitiv Hierarchical Methodology	Monthly	Each monthly index fixing date	The following months' index profile
Climate Bonds Initiative Green Bond Data	Monthly	Each monthly index fixing date	The following months' index profile

5.3 Further information on ESG data provided by FTSE Russell and third parties used in this index (index series) can be found in the following guide:

[Guide to FTSE and Third Party ESG Data used in FTSE Russell Indices](#)

This includes information on the data and standards used for these ESG data inputs. These data sets may include estimated data. The data are subject to regular checks to identify discrepancies and ensure accuracy; these checks include trend analysis to assess data quality and detailed review of data for significant score changes.

⁷ Sustainalytics data published on a quarterly basis

Section 6

Climate transition indicators

Climate transition indicators

6.1 Green Revenues Ratio (GRR)

- 6.1.1 The Green Revenues (GR) score is the ratio of Green Revenues (as determined by the FTSE Green Revenues Classification System) to total revenue based on the FTSE Russell Green Revenue 2.0 data model.
- 6.1.2 The FTSE Green Revenues Classification System excludes any Green Revenues from Tier 3 activities. Tier 3 activities are defined as micro sectors which have some environmental benefits but are overall net neutral or negative.
- 6.1.3 All index constituents are assigned a FTSE Green Revenues Ratio. The FTSE Green Revenues Ratio for a company can be:
- Zero, if a constituent company has no exposure to the Green Economy;
 - A non-zero value, if constituent company is identified to generate Green Revenues as defined by the FTSE Green Revenues Classification System;
 - The minimum of the stated range of possible Green Revenues, when a company discloses insufficient information for a precise determination of the FTSE Green Revenues Ratio.

6.2 Green Bonds

Green bonds are specifically designated to finance green projects that have environmental and/or climate benefit. CBI screens each labelled green bond against its Climate Bonds Taxonomy based on issuer's public disclosure and assists investors to understand if the bond use of proceeds is in eligible categories that are in line with the Paris target. For more information, please see section 5.1. Green bond issuers are assigned a Green Bond Ratio (GBR) value as described in Rule 6.2.1, as well as a multiplier at the issue level.

6.2.1 Green Bond Ratio (GBR)

The Green Bond Ratio (GBR) is the ratio of total par amount outstanding of green bonds to total par amount outstanding of index-eligible bonds for the same issuer. For example,

$$GBR_x = \frac{\text{Sum of Issuer } x\text{'s green bond par amount in WorldBIG}}{\text{Sum of Issuer } x\text{'s index bond par amount in WorldBIG}}$$

In the example, Issuer *x*'s total par amount outstanding of green bonds in WorldBIG would be equivalent to its total par amount outstanding in the FTSE WorldBIG Green Impact Index.

6.2.2 Green Bond Tilt

The Green Bond Tilt is a multiplier at the bond level to uplift CBI-labelled green bonds in addition to the issuer level tilt. Such bonds are assigned multipliers of 1.5 in the index weighting formula.

6.3 The Transition Pathway Initiative (TPI)

6.3.1 The TPI Methodology assesses companies progress on the transition to a low-carbon economy based on two dimensions: Management Quality (MQ) and Carbon Performance (CP).

6.3.2 The TPI Management Quality (MQ) assesses the quality of companies' management of their greenhouse gas emissions, and of risks and opportunities related to the low-carbon transition. TPI MQ scores are derived from the climate theme data from FTSE Russell's ESG data model based on TPI's methodology which is published on the public website [Methodology - Transition Pathway Initiative](#)

6.3.3 The TPI Carbon Performance (CP) assess individual companies' current and projected future emissions pathways and how this compares to the international targets and national pledges made as part of the UN Paris Agreement. Companies that receive an assessment are categorized into different groups.

For companies in Pulp and Paper:

- **Below 2°C:** A company's carbon emissions pathway is aligned with limiting global warming to below 2°C above pre-industrial levels.
- **2°C:** A company's carbon emissions pathway is aligned with limiting global warming to 2°C above pre-industrial levels.
- **Paris Pledges:** A company's carbon emission pathway is aligned with the public country-level commitments made on the Paris Agreement (known as Nationally Determined Contributions or NDCs) but is not aligned with limiting global warming to 2°C.
- **Not Aligned:** A company's carbon emissions pathway is not aligned with limiting global warming to 2°C above pre-industrial levels or has insufficient disclosures to enable such an assessment.
- **Not Assessed:** A company has not yet been assessed for its Carbon Performance

For companies in Electricity Utilities, Oil & Gas, Automobiles, Airlines, Shipping, Cement, Diversified Mining, Steel, and Aluminium sectors ("all other sectors"):

- **1.5°C:** A company's carbon emissions pathway is consistent with the overall aim of the Paris Agreement, and at the high end of the range of ambition, namely, to limit "the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels".
- **Below 2°C:** A company's carbon emissions pathway is consistent with the overall aim of the Paris Agreement to limit warming, albeit at the middle of the range of ambition.
- **National / International Pledges:** A company's carbon emission pathway is consistent with the global aggregate of emissions reductions related to policies introduced or under development as of mid-2021.
- **Not Aligned:** A company's carbon emissions pathway is not aligned with limiting global warming to 2°C above pre-industrial levels or has insufficient disclosures to enable such an assessment.
- **Not Assessed:** A company has not yet been assessed for its Carbon Performance.

Companies are assigned a TPI CP score based on their Carbon Performance assessment:

Carbon Performance Categories	CP Scores (Multiplier)
Below 2°C (pulp & paper only)/ 1.5°C	2.0
Below 2°C (pulp & paper only)/ 2°C	1.5
Paris/National/International Pledges	0.8
Not Aligned	0.0
Not yet assessed	1.0 (neutral)

6.4 Carbon Emissions Intensity (CEI)

Carbon Emissions Intensity is defined as the latest annual CO₂ equivalent greenhouse gas (GHG) emissions in metric tons scaled by enterprise value including cash (in USD). CO₂ equivalent GHG emissions data is defined as GHG Protocol Scope 1 and 2 emissions. Enterprise Value data are sourced from Worldscope. The Data Cut-Off Date for the availability of Carbon Emissions Intensity is the close of business on the last business day of the month prior to the review month.

6.5 Private subsidiaries

6.5.1 The TPI CP, TPI MQ, GR, CE Scope 1, 2 data of a listed company will be assigned to its private subsidiaries according to Rule 6.5.2. If a company's data cannot be derived, missing data treatment described in Rule 6.6 will be applied.

6.5.2 Private issuers owned by listed parents are assigned their parents' climate transition indicators when at least one of the following conditions is met:

Same industry: The private subsidiary is in the same Industry as the listed parent, determined by the Refinitiv® Business Classification (TRBC) Business Sector code (4-digit TRBC Hierarchical ID).

Financial service subsidiary: The private subsidiary provides leasing or lending services, or is a corporate financial services arm such as special purpose vehicle (SPV), investment trust, holding company determined by the Refinitiv TRBC Business Sector code and Refinitiv Entity Data. This treatment also holds for captive finance companies that are wholly owned subsidiary that provide financing for their parent company.

6.6 Z-Scores and missing data treatment for Z-Scores

6.6.1 Z-scores are calculated for the Scope 1 and Scope 2 Carbon Emissions Intensity (CEI) and TPI Management Quality (MQ).

6.6.2 Issuer scores are normalised cross-sectionally to create Z-Scores within each Base Index universe according to:

$$Z_{F,i} = \frac{F_i - \mu_F}{\sigma_F} \quad \text{where} \quad F \in \{CEI_{Scope1\&2}, MQ\} \quad (1)$$

where F_i is the ESG factor score of the i^{th} issuer and μ_F and σ_F are its cross-sectional factor mean and standard deviation, respectively.

Z-Scores that are greater (less) than three (minus three) are truncated to a value of three (minus three). Post-truncation, individual Z-Scores are renormalized by the re-application of equation (1).

All Z-Scores, including truncated ones, are included in this re-application. This process is repeated until all Z-Scores lie in a range between plus and minus three.

Companies having no data are excluded from the Z-score calculation processes.

6.6.3 Issuers with missing Carbon Emissions Intensities (for Scope 1 and 2) are assigned the lowest 25th percentile Z-Score of their respective TRBC Business Sector (4-digit TRBC Hierarchical ID). The 25th percentile score is taken across non-missing Z-Scores of Carbon Emissions Intensities in the sector at the process described in Rule 6.6.2. A Z-Score of -3 is assigned when there are less than three issuers with Z-Scores in the sector.

6.6.4 Issuers with missing TPI MQ scores are assigned neutral scores (Z-Score of zero).

6.6.5 Academic Institutions, Charity or Social Organization and Hospital that are assigned a TRBC of 631020 "Schools, Colleges & Universities", or TRBC of 611010 "Institutions, Associations & Organizations", or 561020 "Healthcare Providers and Services" that are private issuers are kept neutral.

- 6.6.6 Z-Scores are then mapped to S-Scores using the cumulative normal distribution with mean zero and standard deviation one. An additional linearization process is applied to the s-score between 0.1 and 1 to introduce a floor.

Section 7

Index methodology

Index methodology

7.1 The ESG Data Inputs used in the calculation of the FTSE Fixed Income TPI Climate Transition Index Series are updated either on a monthly, quarterly or annual basis. The update frequency for each input is detailed in Section 5. Index constituent market value weights are rebalanced at each month-end based on changes in the Base Index composition and to reflect the issuer tilting described in Rule 7.2.1.

7.2 Index weights

7.2.1 Constituent market value weightings in the FTSE Fixed Income TPI Climate Transition Index Series are determined using the FTSE Fixed Tilt methodology. The market value weight of each constituent is determined as:

$$w_i = \frac{v_i}{\sum_j v_j}$$

where $v_i = \hat{w}_i \times M_{CEI_{Scope\ 1,2},i}^a \times M_{MQ,i}^b \times M_{CP,i}^c \times M_{GRR,i}^d \times M_{GBR,i} \times M_{GB,i} \times C_i$

and

- \hat{w}_i is the market capitalisation weight of bond i in the Base Index,
- $M_{CEI_{Scope\ 1,2},i}^a$ is the adjustment based on bond i issuers' Carbon Emission Intensity Scope 1 and 2 where the component is detailed in Rule 7.2.2,
- $M_{MQ,i}^b$ is the adjustment based on bond i issuers' TPI MQ where the component is detailed in Rule 7.2.3,
- $M_{CP,i}^c$ are values based on bond i issuers' TPI CP scores detailed in Rule 6.3.3,
- $M_{GRR,i}^d$ are values based on bond i issuers' Green Revenue Ratio (GRR) detailed in Rule 6.1, where $M_{GRR,i}^d = 1 + GRR_i$,
- $M_{GBR,i}$ are multipliers based on bond i issuers' Green Bond Ratio (GBR) detailed in Rule 6.2.1, where $M_{GBR,i} = 1 + GBR_i$,
- $M_{GB,i}$ are additional tilts on specific CBI-Labelled Green Bond detailed in Rule 6.2.2,
- C_i are corrective tilts to satisfy sector and issuer constraints detailed in Rule 7.2.6,
- a, b, c and d are tilt-strengths that are specified in Rule 7.2.5.

For details of the FTSE Fixed Tilt methodology, see [FTSE Global Factor Index Series](#).

7.2.2 Carbon Emission Intensity (CEI) adjustment, $M_{CEI_{Scope\ 1,2,i}}$, is calculated by multiplying the S-Scores detailed in Rule 6.6 and the industry sector neutrality adjustment, which is the ratio of the industry weight from market capitalisation divided by the industry weight after applying CEI tilting.

7.2.3 TPI MQ adjustment, $M_{MQ,i}$, is calculated by multiplying the S-Scores detailed in Rule 6.6 and the industry sector neutrality adjustment, which is the ratio of the industry weight from market capitalisation divided by the industry weight after applying TPI MQ tilting.

7.2.4 Below table displays the industry sector neutral threshold to calculate the industry sector neutrality adjustments mentioned in Rule 7.2.2 and 7.2.3.

Index	Carbon Emission Intensity	TPI MQ
FTSE WorldBIG TPI Corporate Bond Index	+/- 0%	+/- 0%
FTSE EuroBIG TPI Corporate Bond Index	+/- 0%	+/- 0%
FTSE USBIG TPI Corporate Bond Index	+/- 0%	+/- 0%
FTSE AusBIG TPI Corporate Bond Index	+/- 5%	+/- 5%
FTSE AusBIG TPI Corporate Bond 0+ Years Index	+/- 5%	+/- 5%

7.2.5 Below table displays the tilt-strengths used in the FTSE Fixed Income TPI Climate Transition Index Series:

Index	Carbon Emission Intensity	TPI MQ	TPI CP	Green Revenue
FTSE WorldBIG TPI Corporate Bond Index	1	2	1	1
FTSE EuroBIG TPI Corporate Bond Index	1	2	1	1
FTSE USBIG TPI Corporate Bond Index	1	2	1	1
FTSE AusBIG TPI Corporate Bond Index	1	2	1	1
FTSE AusBIG TPI Corporate Bond 0+ Years Index	1	2	1	1

7.2.6 FTSE Fixed Income TPI Climate Transition Index Series also applies below constraints:

Index	Industry*	Max Issuer Weight (%)	Max Issuer Capacity Ratio	Min Issue Weight (%) **
FTSE WorldBIG TPI Corporate Bond Index	+/- 10%	5	10	0.001
FTSE EuroBIG TPI Corporate Bond Index	+/- 10%	3	10	0.001
FTSE USBIG TPI Corporate Bond Index	+/- 10%	5	10	0.001
FTSE AusBIG TPI Corporate Bond Index	+/- 10%	10	10	0.001
FTSE AusBIG TPI Corporate Bond 0+Years Index	+/- 10%	10	10	0.001

* Industry is determined based on TRBC Economic Sectors Code (2-digit TRBC Hierarchical ID). Industry weight changes due to exclusions are exceptions to the sector constraint.

** Minimum issue weight applies to scenario where the weight changes are due to reweighting process specified in Rule 7.2.1.

- 1.1.1 Academic Institutions, Charity or Social Organization and Hospital that are assigned a TRBC of 631020 “Schools, Colleges & Universities”, or TRBC of 611010 “Institutions, Associations & Organizations”, or 561020 “Healthcare Providers and Services” that are private issuers are kept neutral.

7.3 Index history

- 7.3.1 Company carbon emissions data are lagged for one year before the end of April 2022.
- 7.3.2 TPI data as of September 2018 are used in the calculation of index weights prior to 2018.
- 7.3.3 Sustainalytics data as of December 2020 are used for exclusions in index back history.

Appendix A

Exclusions

FTSE Russell excludes issuers with activity in the product involvement categories outlined below. The exclusions are reviewed monthly at each index rebalance date. Data for the index exclusions are sourced from Sustainalytics, TRBC and COBS.

Data from all three sources, Sustainalytics, TRBC and COBS, are mapped at a direct issuer level. In cases where direct issuer Sustainalytics data are not available, the issuer's parent involvement data will be used.

Exclusions	Definition	Revenue Threshold						
Controversial Weapons	Companies that produce anti-personnel mines, cluster munitions, and/or biological and chemical weapons.	Greater than 0% of revenues						
Tobacco	Companies that manufacture tobacco products.	Greater than 0% of revenues						
	Companies/Issuers assigned the following TRBC code:							
	<table border="1"> <thead> <tr> <th>TRBC</th> <th>TRBC Hierarchy</th> <th>TRBC Hierarchical ID</th> </tr> </thead> <tbody> <tr> <td>Tobacco</td> <td>Industry</td> <td>54102030</td> </tr> </tbody> </table>	TRBC	TRBC Hierarchy	TRBC Hierarchical ID	Tobacco	Industry	54102030	
	TRBC	TRBC Hierarchy	TRBC Hierarchical ID					
Tobacco	Industry	54102030						
Companies/Issuers assigned the following FTSE COBS Code:								
<table border="1"> <thead> <tr> <th>COBS</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>TOBC</td> <td>Tobacco</td> </tr> </tbody> </table>	COBS	Description	TOBC	Tobacco				
COBS	Description							
TOBC	Tobacco							
Thermal Coal	Companies that extract thermal coal or generate electricity from thermal coal.	Greater than or equal to 50% of revenues						
	Companies/Issuers assigned the following TBRC code:							
	<table border="1"> <thead> <tr> <th>TRBC</th> <th>TRBC Hierarchy</th> <th>TRBC Hierarchical ID</th> </tr> </thead> <tbody> <tr> <td>Coal</td> <td>Industry Group</td> <td>501010</td> </tr> </tbody> </table>	TRBC	TRBC Hierarchy	TRBC Hierarchical ID	Coal	Industry Group	501010	
TRBC	TRBC Hierarchy	TRBC Hierarchical ID						
Coal	Industry Group	501010						

Conduct exclusions

FTSE Russell excludes issuers involved in controversies related to the UN Global Compact (UNGC) controversies exclusion list outlined below to the underlying eligible universes. This data is provided by third party data vendor, Sustainalytics.

Exclusions	Definition	Threshold
UN Global Compact (UNGC) violations	Companies involved in controversies related to the UNGC principles. The principles are classified into four categories: Human Rights, Labor, Environment and Anti-corruption.	All companies deemed to be non-compliant

Appendix B

Chronological summary of events

FTSE Fixed Income TPI Climate Transition Index event summary

Year	Highlight
2024	September: FTSE Fixed Income TPI Climate Transition Index Series is introduced

Appendix C

Further information

A Glossary of Terms used in FTSE Russell's Ground Rules documents can be found using the following link:

[Glossary.pdf](#)

The FTSE Russell ESG Metrics website can be found using the following link: [ESG Metrics](#)

Further information on the FTSE Fixed Income TPI Climate Transition Index Series is available from FTSE Russell.

For contact details, please visit the FTSE Russell website or contact FTSE Russell client services at info@ftserussell.com.

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