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# FTSE Green Revenues Index Series

v2.0

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## Section 1

# Introduction

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### 1.0 Introduction

- 1.1 This document sets out the Ground Rules for the construction and management of the FTSE Green Revenues Index Series. Copies of the Ground Rules are available from [www.ftserussell.com](http://www.ftserussell.com).
- 1.2 The FTSE Green Revenues Index Series is designed to obtain increased exposure to companies engaged in the transition to a Green Economy.
- 1.3 The FTSE Green Revenues Index Series takes account of ESG factors in its index design. Please see further details in Section 4 and 5.
- 1.4 Price, Total Return and Net of Tax Indexes will be calculated on an end of day basis.  
Total return indexes include income based on ex dividend adjustments. All dividends are applied as declared.
- 1.5 A series of net of tax Total Return Indexes are also calculated based on the maximum withholding tax rates applicable to dividends received by institutional investors who are not resident in the same country as the remitting company and who do not benefit from double taxation treaties.  
Withholding tax rates used in the net-of-tax indexes can be accessed using the following link:  
[Withholding Tax Service](#)  
Please also refer to the FTSE Russell Withholding Tax Guide which can be accessed using the following link:  
[FTSE Russell Withholding Tax Guide.pdf](#)
- 1.6 All indexes are calculated in US Dollars and local currency. The index values are also published in Euros, UK Pounds Sterling and Japanese Yen.
- 1.7 **FTSE Russell**  
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 MTSNext Limited), Mergent, Inc., FTSE Fixed Income LLC, The Yield Book Inc and Beyond Ratings.

- 1.8 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.
- 1.9 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's 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 for any losses, damages, claims and expenses suffered by any person as a result of:
- any reliance on these Ground Rules, and/or
  - any errors or inaccuracies in these Ground Rules, and/or
  - any non-application or misapplication of the policies or procedures described in these Ground Rules, and/or
  - any errors or inaccuracies in the compilation of the index series or any constituent data.



## Section 2

# Management Responsibilities

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## 2.0 Management Responsibilities

### 2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the benchmark administrator of the index series.<sup>1</sup>

2.1.2 FTSE is responsible for the daily calculation, production and maintenance of the FTSE Green Revenues Index Series 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 the periodic index reviews of the index series 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;
- disseminate the indexes.

2.1.3 These Ground Rules set out the methodology and provide information about the publication of the FTSE Green Revenues Index Series.

### 2.2 Amendments to These Ground Rules

2.2.1 These Ground Rules shall be subject to regular review 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 Product Governance Board before approval is granted.

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<sup>1</sup> 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).

2.2.2 As provided for in the Statement of Principles for FTSE Russell Equity Indexes, 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.



## Section 3

# FTSE Russell Index Policies

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### 3.0 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 FTSE Global Equity Index Guide to Calculation Methods

- 3.1.1 The aim of the guide is to describe how the indexes are calculated, to facilitate users replication of the indexes in order to support their investment and trading activities and to assist users in understanding the factors which influence the performance of the indexes.

[FTSE Global Equity Index Series Guide to Calc.pdf](#)

#### 3.2 Corporate Actions and Events Guide

- 3.3 Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide for Non Market Cap Weighted Indexes using the following link:

[Corporate Actions and Events Guide for Non Market Cap Weighted Indices.pdf](#)

#### 3.4 Statement of Principles for FTSE Russell Equity Indexes (the Statement of Principles)

- 3.4.1 Indexes need to keep abreast of changing markets and the Ground Rules cannot anticipate every eventuality. Where the Ground Rules do not fully cover a specific event or development, FTSE Russell will determine the appropriate treatment by reference to the Statement of Principles 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 Product Governance Board.

The Statement of Principles can be accessed using the following link:

[Statement of Principles.pdf](#)

#### 3.5 Queries and Complaints

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

[Benchmark Determination Complaints Handling Policy.pdf](#)

#### 3.6 Index Policy for Trading Halts and Market Closures

- 3.6.1 Guidance for the treatment of index changes in the event of trading halts or market closures can be found using the following link:

[Index Policy for Trading Halts and Market Closures.pdf](#)

### 3.7 **Index Policy in the Event Clients are Unable to Trade a Market**

- 3.7.1 Details of FTSE Russell's treatment can be accessed using the following link:

[Index Policy in the Event Clients are Unable to Trade a Market.pdf](#)

### 3.8 **Recalculation Policy and Guidelines**

- 3.8.1 The FTSE Green Revenues Index Series are recalculated whenever errors or distortions occur that are deemed to be significant. Users of the FTSE Green Revenues Index Series are notified through appropriate media.

For further information refer to the FTSE Russell Recalculation Policy and Guidelines document which is available from the FTSE Russell website using the link below or by contacting [info@ftserussell.com](mailto:info@ftserussell.com).

[Recalculation Policy and Guidelines Equity Indexes.pdf](#)

### 3.9 **Policy for Benchmark Methodology Changes**

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

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





## Section 4

# Eligible Securities

### 4.0 Eligible Securities

4.1 The following FTSE Green Revenues Indexes are available:

Index	Underlying Index	Review Schedule
FTSE All-World Green Revenues Index	FTSE All-World Index	March, September
FTSE Developed Green Revenues Index	FTSE Developed Index	March, September
FTSE Emerging Green Revenues Index	FTSE Emerging Index	March, September
FTSE Asia Pacific Green Revenues Index	FTSE Asia Pacific Index	March, September
FTSE Europe Green Revenues Index	FTSE Europe Index	March, September
FTSE All Share Green Revenues Index	FTSE All Share Index	March, September
FTSE China Green Revenues Index	FTSE China All Cap Index	March, September
FTSE Japan Green Revenues Index	FTSE Japan Index	March, September
Russell 1000 Green Revenues Index	Russell 1000 Index	June, December
Russell 2000 Green Revenues Index	Russell 2000 Index	June, December
Russell 3000 Green Revenues Index	Russell 3000 Index	June, December

Note: Russell US related indexes will migrate to the new ICB classification system in September 2020 and FTSE related indexes in March 2021.

4.2 All constituent securities of the underlying indexes are eligible for inclusion in the FTSE Green Revenues Index Series.

4.2.1 Saudi Arabia will be assigned Secondary Emerging market status in March 2019. Securities will be eligible for inclusion in the FTSE Green Revenue Index Series from September 2019.

4.2.2 China A Shares (available under the Northbound China Stock Connect Scheme) will be assigned Secondary Emerging market status beginning in June 2019. Securities will be eligible for inclusion in the FTSE Green Revenue Index Series from September 2019.



## Section 5

# Sustainable Investment Data Inputs

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### 5.0 SI Data Inputs

The following Sustainable Investment datasets are used in the construction of the FTSE Green Revenues Index Series.

#### 5.1 Green Revenues Data

5.1.1 Further information on the FTSE Green Revenues can be found here:

<https://www.ftserussell.com/data/sustainability-and-esg-data/green-revenues-data-model>

5.1.2 Green Revenues data are collected from publicly available information by FTSE Russell analysts.

5.2 All data undergo several layers of quality control including consistency checks over time, sector-relative checks, and knowledge checks. Where discrepancies are found analysts refer to primary data sources.

5.3 Further information as to the definitions can be found in Section 6.

5.4 Further details on the use of FTSE Sustainable Investment data can be found in the following guide:

[Guide to FTSE Sustainable Investment Data used in FTSE Russell Indexes.pdf](#)



## Section 6

# FTSE Green Revenues Data

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### 6.0 The FTSE Green Revenues Data Model

6.1 The FTSE Green Revenues data model helps investors understand the global industrial transition to a green and low carbon economy with consistent, transparent data and indexes.

Companies are analyzed and categorized using a unique industrial taxonomy for green goods, products, and services that covers 10 sectors and 64 subsectors. For companies classified in one or more of the green subsectors, a total percentage(s) of revenue from green products is provided.

6.2 The FTSE Green Revenues data model does not currently utilize international standards in its construction but can be used to determine the degree to which companies are exposed to sustainable activities.

#### 6.3 Data Collection

6.3.1 To construct the FTSE Green Revenues dataset:

6.3.2 Information is collected from publicly available reports by FTSE Russell analysts. Companies are also invited to provide more detailed information where the subsegmental revenue breakdown in their annual reports is not granular enough to facilitate the green revenues assessment.

6.3.3 To ensure data quality new green revenues assessments are reviewed by senior analysts and automated checks are applied.

#### 6.4 FTSE Green Revenues Ratio Construction

6.4.1 The FTSE Green Revenues ratio for a company is:

- The ratio of green revenues as classified by the FTSE Green Revenues Classification System to total revenue.
- The FTSE Green Revenues excludes areas of nuclear activity. Nuclear activity is defined as revenue from the following subsectors:
  - i. EG06 - Nuclear Energy Generation
  - ii. EQ06 - Nuclear Energy Equipment
  - iii. ER04 - Mining (with Uranium in the sub-segment description)
  - iv. ER05 – Minerals and Metals (with Uranium in the sub-segment description)

6.5 All constituent securities are assigned a FTSE Green Revenues ratio value. The FTSE Green Revenues ratio can be:

- Zero if a constituent company has no exposure to the Green Economy.
- A non-zero value, when exact Green Revenues were disclosed by a constituent company.
- 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<sup>2</sup>.

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<sup>2</sup> For further details of the FTSE Green Revenues Classification System, please refer to FTSE Russell Quantitative & Structural Data (QSD) available at <https://qsd.ftserussell.com>.

## Section 7

# Periodic Review of Constituents

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### 7.0 Periodic Review

- 7.1 Each FTSE Green Revenues Index is reviewed using the following process:
- 7.1.1 Constituents with exposure to the Green Economy and non-zero Green Revenues have their investable market capitalisation weights increased by  $(1 + GRR_i)$ , where  $GRR_i$  is the FTSE Green Revenues ratio.
  - 7.1.2 Constituents with exposure to the Green Economy via a stated range with a minimum of zero Green Revenues retain their investable market capitalisation weights.
  - 7.1.3 Constituents with no exposure to the Green Economy have their investable market capitalisation weights reduced in proportion to investable market capitalisation to reflect the aggregate overweighting achieved in Rule 6.1.1.
- 7.2 In the event that the aggregate investable market capitalisation of constituents with no exposure to the Green Economy is less than the aggregate overweighting achieved in Rule 6.1.1 the following adjustment is made:

Constituents with exposure to the Green Economy via non-zero Green Revenues have their investable market capitalisation weights increased by a factor  $(1 + \alpha \times GRR_i)$ , where  $\alpha$  is a ratio that reflects the level of over weighting that is feasible:

$$\alpha = \frac{\sum_{j \in G^*} w_j'}{\sum_{i \in G} w_i' \times GRR_i}$$

where  $w_i'$  ( $w_j'$ ) is the market capitalisation weight of stock  $i$  ( $j$ ) in the underlying universe and  $G$  is the collection of constituents with Green Revenues and  $G^*$  is the collection of constituents with no Green Revenues.

- 7.2.1 Constituents with exposure to the Green Economy via a stated range with a minimum of zero Green Revenues retain their investable market capitalisation weights.
  - 7.2.2 Constituents with no exposure to the Green Economy have their investable market capitalisation weights set to zero.
- 7.3 **Review Dates**
- 7.3.1 The review of FTSE Green Revenues Indexes derived from an underlying FTSE index will be implemented after the close of business on the third Friday of the review month (Table 4.1),

- 7.3.2 The review of FTSE Green Revenues Indexes derived from an underlying Russell index will be implemented on the same date as the Russell annual reconstitution in June and after the close of business on the third Friday of the review month in December (Table 4.1),
- 7.3.3 For details of the implementation dates of Russell indexes, please refer to the Russell U.S. Equity Indexes Construction and Methodology which can be accessed using the following link: [Russell-US](#).
- 7.4 **Data Cut off Dates**
- 7.4.1 The reviews will be conducted using prices as at close of business on the last business day in the month prior to the index review, with shares-in-issue and free float adjustment information as at the review effective date.
- 7.4.2 The data cut-off date for the calculation of the FTSE Green Revenues ratio is the close of business on the last business of the month preceding the month of the review implementation date.



## Section 8

# Changes to Constituent Companies

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### 8.0 Changes to Constituent Companies

#### 8.1 Intra-review Additions

8.1.1 Additions into the FTSE Global Equity Index Series and Russell 3000 Indexes will be considered for inclusion in the relevant FTSE Green Revenues Indexes at the next review of the relevant FTSE Green Revenues Index.

#### 8.2 Intra-review Deletions

A constituent will be removed from the FTSE Green Revenues Index Series if it is also removed from its corresponding underlying index. If the index is a Russell derived FTSE Green Revenues Index a minimum of 2 days notice will be provided and its weight will be distributed pro-rata amongst the remaining constituents in the relevant index. If the index is a FTSE derived FTSE Green Revenues Index the deletion will be concurrent with the deletion from the underlying index and its weight will be distributed pro-rata amongst the remaining constituents in their respective FTSE Green Revenues Index.

## Section 9

# Corporate Actions and Events

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### 9.0 Corporate Actions and Events

- 9.1 If a constituent of a FTSE Green Revenues Index has a stock split, stock consolidation, rights issue, bonus issue, a change in the number of shares in issue or a change in free-float, the constituent's weighting in the relevant index remains unchanged pre and post such an event.
- 9.2 Full details of changes to constituent companies due to corporate actions and events can be accessed in the Corporate Actions and Events Guide for Non Market Cap Weighted Indexes using the following link:

[Corporate Actions and Events Guide for Non Market Cap Weighted Indexes.pdf](#)

A Corporate 'Action' is an action on shareholders with a prescribed ex date. The share price will be subject to an adjustment on the ex date. These include the following:

- Capital Repayments
- Rights Issues/Entitlement Offers
- Stock Conversion
- Splits (sub-division) / Reverse splits (consolidation)
- Scrip issues (Capitalisation or Bonus Issue).

A Corporate 'Event' is a reaction to company news (event) that may impact the index depending on the index rules. For example, if a company announces a strategic shareholder is offering to sell their shares (secondary share offer), this could result in a free float weighting change in the index. Where an index adjustment is required, FTSE Russell will provide notice advising of the timing of the change.

### 9.3 Takeovers, Mergers and Demergers

The treatment of takeovers, mergers and demergers can be found within the Corporate Actions and Events Guide for Non Market Cap Weighted Indexes.

### 9.4 Suspension of Dealing

Suspension of dealing rules can be found within the Corporate Actions and Events Guide for Non Market Cap Weighted Indexes.





## Section 10

# Index Calculation Method

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### 10.0 Index Calculation Method

#### 10.1 Prices

10.1.1 The FTSE Green Revenues Index Series uses actual closing mid-market or last trade prices, where available, for securities with local market quotations. Further details can be accessed using the following link:

[Closing Prices Used For Index Calculation.pdf](#)

#### 10.2 Calculation Frequency

10.2.1 The Index Series will be calculated on an end of day basis.

#### 10.3 Index Calculation

10.3.1 The Index Series is calculated using the algorithm described below:

$$\sum_{i=1}^N \frac{(p_i \times e_i \times s_i \times f_i \times c_i)}{d}$$

Where,

- $i=1,2,\dots,N$
- $N$  is the number of securities in the index.
- $p_i$  is the latest trade price of the component security (or the price at the close of the index on the previous day).
- $e_i$  is the exchange rate required to convert the security's currency into the index's base currency.
- $s_i$  is the number of shares in issue used by FTSE Russell for the security, as defined in these Ground Rules.
- $f_i$  is the Investability Weighting Factor to be applied to a security to allow amendments to its weighting, expressed as a number between 0 and 1, where 1 represents a 100% free float. This factor is published by FTSE Russell for each security in the underlying index.
- $c_i$  is the Weight Adjustment Factor to be applied to a security to correctly weight that security in the index. This factor maps the investable market capitalisation of each stock to a notional market capitalisation for inclusion in the index.

$$C_i = \frac{\hat{W}_i}{W_i}$$

where  $\hat{W}_i$  are the constituent index weights as calculated in Section 6 and  $W_i$  are the underlying eligible universe investable market capitalisation index weights as at the most recent review date.

- $d$  is the divisor, a figure that represents the total issued share capital of the Index at the base date. The divisor can be adjusted to allow changes in the issued share capital of individual securities to be made without distorting the index.



## Appendix A: Further Information

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

[Glossary.pdf](#)

Further information on the FTSE Green Revenues 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](mailto:info@ftserussell.com).

Website: [www.ftserussell.com](http://www.ftserussell.com)

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