

FTSE ESG Risk-Adjusted Index Series

v1.2



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Section 1

Introduction

1. Introduction

- 1.1 This document sets out the Ground Rules for the construction and management of the FTSE ESG Risk-Adjusted Index Series.
- 1.2 The FTSE ESG Risk-Adjusted Index Series Family is designed to reflect the performance of indices with specific ESG risk adjustments compared to the underlying benchmark. This is achieved using a tilted methodology to adjust constituent weights taking into account ESG and climate data sets and excluding companies involved in specific activities.
- 1.3 The FTSE ESG Risk-Adjusted Index Series included the following indices:
- FTSE 100 ESG Risk-Adjusted Index
 - FTSE 250 ESG Risk-Adjusted Index
 - FTSE 350 ESG Risk-Adjusted Index
 - FTSE All-Share ESG Risk-Adjusted Index
 - Russell 1000 ESG Risk-Adjusted Index
 - Russell 2000 ESG Risk-Adjusted Index
 - Russell 3000 ESG Risk-Adjusted Index
 - Russell 1000 Growth ESG Risk-Adjusted Index
 - Russell 1000 Value ESG Risk-Adjusted Index
 - Russell Midcap ESG Risk-Adjusted Index
 - Russell 2500 ESG Risk-Adjusted Index
- 1.4 The FTSE ESG Risk-Adjusted Index Series takes account of ESG factors in its design.
- If a tilting approach is used for an ESG data input, the objective is for the index methodology to overweight and/or underweight constituents according to specific ESG criteria. This approach will not remove all companies with exposure to a specific ESG activity or sector.
- 1.5 **These Ground Rules should be read in conjunction with the:**
- FTSE UK Index Series Ground Rules
 - Russell U.S. Equity Indices Construction and Methodology
 - FTSE Global Factor Index Series Ground Rules
 - FTSE Russell Corporate Actions and Events Guide for Non Market Capitalisation Weighted Indices
- which are available at www.lseg.com/en/ftse-russell/

- 1.6 The Indices are calculated on an end of day basis.
- 1.7 The Indices are calculated in local currency and may be published in other currencies.
- 1.8 A Price and Total Return Index will be available. Total Return Indices include income based on ex dividend adjustments

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.

1.9 Statement of Principles for FTSE Russell Equity Indices (the Statement of Principles)

Indices 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 FTSE Russell's Index Governance Board.

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

[Statement_of_Principles.pdf](#)

- 1.10 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.
- 1.11 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, and/or
 - any 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 inaccuracies in the compilation of the index series or any constituent data.

Section 2

Management responsibilities

2. Management responsibilities

2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the benchmark administrator of the index series.¹

2.1.2 FTSE is responsible for the daily calculation, production and operation of the 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 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 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.

¹ 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

3. 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](#)

3.2 Index Policy for Trading Halts and Market Closures

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](#)

3.3 Index Policy in the Event Clients are Unable to Trade a Market or a Security

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 or a Security](#)

3.4 Recalculation Policy and Guidelines

3.4.1 Where an inaccuracy is identified, FTSE Russell will follow the steps set out in the FTSE Russell Index Recalculation Guidelines when determining whether an index or index series should be recalculated and/or associated data products reissued. Users of the FTSE ESG Risk-Adjusted Index Series will be notified through appropriate media.

For further information please refer to the FTSE Russell Recalculation Policy and Guidelines document which is available on the FTSE Russell website using the link below:

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

3.5 Recalculation Policy and Guidelines – ESG Data

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

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

3.6 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](#)

3.7 FTSE Russell Governance Framework

3.7.1 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 Benchmarks², the European benchmark regulation³ and the UK benchmark regulation⁴. The FTSE Russell Governance Framework can be accessed using the following link:

[FTSE Russell Governance Framework.pdf](#)

3.8 Real Time Status Definitions

3.8.1 Please refer to the following guide for details of real time status definitions for indices that are calculated in real time.

[Real Time Status Definitions.pdf](#)

² IOSCO Principles for Financial Benchmarks Final Report, FR07/13 July 2013.

³ 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.

⁴ The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019.

Section 4

Eligible securities

4. Eligible securities

4.1 The eligible securities of each FTSE ESG Risk-Adjusted Index are the constituents of the corresponding underlying universe.

4.2 Securities that are members of the applicable exclusion list are not eligible for membership of the relevant FTSE ESG Risk-Adjusted Index.

4.3 Multiple lines

4.3.1 All lines of the same company that are eligible securities are eligible for inclusion in the index.

4.4 Underlying Indices and exclusion lists

FTSE ESG Risk-Adjusted Indices consist of constituents in the corresponding underlying index universe in the table below which meet the index requirements as outlined in Section 5.

Table 1: Underlying Indices and exclusions

Index Name	Index Type	Underlying Index	Exclusions Applied
FTSE 100 ESG Risk-Adjusted Index*	Target Exposure	FTSE 100	
FTSE 250 ESG Risk-Adjusted Index*	Target Exposure	FTSE 250	
FTSE 350 ESG Risk-Adjusted Index*	Target Exposure	FTSE 350	
FTSE All-Share ESG Risk-Adjusted Index	Target Exposure	FTSE All-Share	
Russell 1000 ESG Risk-Adjusted Index	Target Exposure	Russell 1000	
Russell 1000 Growth ESG Risk-Adjusted Index	Target Exposure	Russell 1000 Growth	
Russell 1000 Value ESG Risk-Adjusted Index	Target Exposure	Russell 1000 Value	See Appendix A
Russell 2000 ESG Risk-Adjusted Index	Target Exposure	Russell 2000	
Russell 2500 ESG Risk-Adjusted Index	Target Exposure	Russell 2500	
Russell 3000 ESG Risk-Adjusted Index*	Target Exposure	Russell 3000	
Russell Midcap ESG Risk-Adjusted Index	Target Exposure	Russell Midcap	

*Due to the application of product and conduct exclusions, the number of companies in the FTSE ESG Risk-Adjusted Index Series may be fewer than the number of companies in the corresponding underlying indexes

- 4.4.1 Exclusion lists are reviewed quarterly in March, June, September, and December. Any changes to the exclusion lists are applied using data as at the last business day two months prior to review..
- 4.4.2 Exclusion based on missing product and activity involvement data
 - 4.4.2.1 Stocks with missing product and activity involvement data are excluded from the index.
 - 4.4.2.2 Investment Trusts are exempt from Rule -4.4.2.1 for the specific indices in the FTSE ESG Risk-Adjusted Index Series which use the FTSE UK Index Series as the underlying index.
 - 4.4.2.3 The FTSE UK Index Series includes securities classified in the ICB Subsector Closed End Investments (30204000). Investment Trusts are not covered by FTSE Russell's ESG research. Accordingly, the UK indices in FTSE ESG Risk-Adjusted Index Series do not exclude Investment Trusts if there is missing product and activity involvement data.

Section 5

ESG data inputs

5. ESG data inputs

The following ESG datasets are used in the construction of indices in the indices.

ESG data inputs	Details	Used for selection, weighting or exclusion ⁵
FTSE ESG Scores	FTSE Russell's ESG Scores and data model allows investors to understand a company's exposure to, and management of, ESG issues in multiple dimensions. More information can be found here: https://www.ftserussell.com/data/sustainability-and-esg-data/esg-ratings	Weighting
Refinitiv ESG Scores	Refinitiv ESG scores measure a company's ESG performance based on publicly reported data. More information can be found: https://www.refinitiv.com/en/sustainable-finance/esg-scores#methodology . Please note that the Refinitiv ESG Controversies Scores are not used.	Weighting
FTSE Carbon Reserves	FTSE Carbon Reserves data model provides granular coverage of fossil fuel reserve ownership among publicly listed companies in developed markets and emerging economies. More information can be found here: Guide to FTSE and Third Party ESG Data used in FTSE Russell Indices.pdf	Weighting
FTSE Carbon Emissions	The FTSE Carbon Emissions Dataset provides reported and estimated 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.pdf	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
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 for Sustainable Investment Indices	The minimum set of exclusions is applied to this Index Series. Details of the minimum exclusions can be found in Section 8 of the Guide to the Construction and Maintenance of FTSE Exclusion Lists.pdf .	Exclusion

⁵ 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.

- 5.1.1 Further information on ESG data provided by FTSE Russell and third parties used in this 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.

5.2 ESG Metrics

- 5.2.1 Please see the FTSE Russell [ESG Metrics](#) website for the scores and values of the environmental, social and governance (ESG) factors listed in Annex II to Delegated Regulation (EU) 2020/1816 which are taken into account in the benchmark methodology for the benchmarks within this index series.

Further details on the metrics methodology and calculation are available using the following links:

[Sustainability and ESG Data](#)

[ESG Disclosures Methodology and Calculation Guide](#)

Section 6

Index construction

6. Index construction

6.1 General overview

6.1.1 At each June and December review the exclusion list (see Appendix A) is applied to an underlying universe of free float adjusted market capitalisation weights, W_{Mi} . The weights of the remaining stocks are rescaled in proportion to their size so that they sum to one, yielding stock weights which will be referred to as \hat{W}_{Mi} .

6.1.2 The weights \hat{W}_{Mi} are used as the starting point of a portfolio construction technique (see 6.2) that targets an Operational Carbon Emissions Intensity reduction of $c\%$, a Fossil Fuel Reserves Intensity reduction of $r\%$ and an ESG uplift of $e\%$ relative to the underlying, where c , r and e are defined in table 2 for corresponding indices. All of this is subject to country, industry, maximum stock capacity, maximum company weight and minimum diversification constraints. These “target exposure” weights will be referred to as W_{Fi} .

6.1.3 Finally, at each quarterly March, June, September and December review the exclusion list (see Appendix A) is applied to the time-evolved June and December target exposure weights described in 6.1.2. The remaining weights are rescaled in proportion to their size so that they sum to one to yield the FTSE ESG Risk-Adjusted Index series weights.

6.2 Target Exposure Index construction

6.2.1 The detailed construction methodology for Target Exposure indexes is set out in the FTSE Global Factor Index Series Ground Rules.

6.2.2 The table below summarises the targets and constraints applied to each FTSE ESG Risk-Adjusted Index:

Table 2: Targets and Constraints for FTSE ESG Risk-Adjusted Indices

Index	Active Factor Exposure Targets								Constraints							
	V	Q	S	M	LV	Y	ESG uplift (e)	Carbon Emission Intensity reduction (c)	Carbon Reserves reduction (r)	Beta Banding	Country	Industry	Max 2-Way T/O (%) [*]	Max Stock Weight (%) [*]	Min Stock Weight (b.p.)	Review
FTSE 100 ESG Risk-Adjusted Index	0	0	0	0	0	-	5%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	10	0.5	JD
FTSE 250 ESG Risk-Adjusted Index	0	0	0	0	0	-	5%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	10	0.5	JD
FTSE 350 ESG Risk-Adjusted Index	0	0	0	0	0	-	5%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	10	0.5	JD
FTSE All-Share ESG Risk-Adjusted Index	0	0	0	0	0	-	5%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	10	0.5	JD
Russell 1000 ESG Risk-Adjusted Index	0	0	0	0	0	-	10%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	5	0.5	JD

Index	Active Factor Exposure Targets									Constraints						
	V	Q	S	M	LV	Y	ESG uplift (e)	Carbon Emission Intensity reduction (c)	Carbon Reserves reduction (r)	Beta Banding	Country	Industry	Max 2-Way T/O (%) [*]	Max Stock Weight (%) [*]	Min Stock Weight (b.p.)	Review
Russell 1000 Growth ESG Risk-Adjusted Index	0	0	0	0	0	-	10%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	10	0.5	JD
Russell 1000 Value ESG Risk-Adjusted Index	0	0	0	0	0	-	5%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	5	0.5	JD
Russell 2000 ESG Risk-Adjusted Index	0	0	0	0	0	-	5%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	5	0.5	JD
Russell 2500 ESG Risk-Adjusted Index	0	0	0	0	0	-	5%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	5	0.5	JD
Russell 3000 ESG Risk-Adjusted Index	0	0	0	0	0	-	5%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	5	0.5	JD
Russell Midcap ESG Risk-Adjusted Index	0	0	0	0	0	-	5%	>=50%	>=50%	Neutral	Neutral	Banded [*]	30	5	0.5	JD

* Stocks with fossil fuel reserves will be capped min (x, benchmark weight), where x is corresponding max stock weight listed in Table 2.

** The approach to Industry banding is set out in the FTSE Global Factor Index Series Ground Rules.

6.2.3 The ESG targets are given by:

$$\sum_i W_{F_i} E_i = (1 + e) * \sum_i W_{M_i} E_i \quad (1)$$

where E_i is the ESG rating, W_{F_i} is the underlying index weight, and W_{M_i} are the free float adjusted market capitalisation benchmark weights. e is 5% for UK series and 10% for Russell series as defined in Table 2.

6.2.4 The Operational Carbon Emissions Intensity and Fossil Fuel Reserve Intensity targets are given by:

$$\sum_i W_{F_i} OE_i \leq c * \sum_i W_{M_i} OE_i \text{ and } \sum_i W_{F_i} R_i \leq r * \sum_i W_{M_i} R_i \quad (2)$$

where OE_i and R_i are the Operational Carbon Emission Intensity by revenue and Fossil Fuel Reserve Intensity, W_{F_i} is the underlying index weight, and W_{M_i} are the free float adjusted market capitalisation benchmark weights. c and r are 50% as defined in Table 2.

6.3 Index back-histories

6.3.1 The ESG data used in the FTSE ESG Risk-Adjusted Index series histories prior to index launch are lagged by 6 months.

6.3.2 FTSE carbon data, the Operational Carbon Emissions data and Fossil Fuel Reserve Intensity data is using a 1-year lag for the December review and 2 years lag for the June review before April 1, 2022.

Section 7

Periodic review of constituents

7. Periodic review of constituents

7.1 Review dates

- 7.1.1 The UK Indices in the FTSE ESG Risk-Adjusted Index Series will be reviewed semi-annually according to the FTSE UK Index Series implementation dates in June and December.
- 7.1.2 The Russell Indices in the FTSE ESG Risk-Adjusted Index Series will be reviewed semi-annually in June and December. The June review will follow the Russell index series review implementation dates. The December review will be implemented after close of the third Friday of the review month.
- 7.1.3 The status of “Excluded Companies” is assessed and updated quarterly in March, June, September and December using data as at the last business day of the prior month. The FTSE ESG Risk-Adjusted Index Series will check and remove stocks from the exclusion list on quarterly basis.

7.2 Data dates

- 7.2.1 The June and December index reviews will use Factor data as at the last business day of the month prior to the review month (the data cut-off date). The data cut-off dates for ESG data inputs are in the [Guide to FTSE and Third Party ESG Data used in FTSE Russell Indices](#).
- 7.2.2 UK indices in the FTSE ESG Risk-Adjusted Index series will use stock prices available as at the close of business on the Wednesday before the first Friday of the review month for the reviews.
- 7.2.3 Russell indices in the FTSE ESG Risk-Adjusted Index series will use stock prices available as at the close of business on the Wednesday before the second Friday of June and as at the close of business on the Wednesday before the first Friday of December for the reviews.
- 7.2.4 Index reviews will incorporate constituent changes associated with semi-annual index reviews in June and December of the underlying universe.
- 7.2.5 Changes of the underlying universe due to the March and September reviews will be considered intra-review changes for the FTSE ESG Risk-Adjusted Index Series and following the rules in Section 8.

Section 8

Changes to constituent companies

8. Changes to constituent companies

8.1 Intra-review additions

8.1.1 The FTSE ESG Risk-Adjusted Index Series will not accept intra-review additions.

8.1.2 A stock that is removed from the corresponding exclusion list outlined in Appendix A will be considered for inclusion (if eligible) at the next periodic review.

8.2 Intra-review deletions

8.2.1 A constituent will be removed from the relevant FTSE ESG Risk-Adjusted Index if it is removed from its corresponding underlying universe outlined in Table 1. The deletion will be concurrent with the deletion from the underlying universe and its weight will be distributed pro-rata amongst the remaining constituents of the relevant FTSE ESG Risk-Adjusted Index.

Section 9

Corporate actions and events

9. Corporate actions and events

9.1 If a constituent in the underlying 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 (with the exception of tender offers), the constituent's weighting in the corresponding FTSE ESG Risk-Adjusted Index will remain 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 Indices using the following link:

[Corporate Actions and Events Guide for Non Market Cap Weighted Indices.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. The index will be adjusted in line with 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, 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 Suspension of dealing

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

9.4 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 Indices.

Section 10

Indices algorithm and calculation method

10. Indices algorithm and calculation method

10.1 Prices

10.1.1 The FTSE ESG Risk-Adjusted 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 FTSE ESG Risk-Adjusted Index Series will be calculated on an end of day basis and displayed to eight decimal points.

10.3 Index calculation

10.3.1 The FTSE ESG Risk-Adjusted Indices are 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. The Weight Adjustment Factor maps the investable market capitalisation of each stock to a notional market capitalisation for inclusion in the index.
- 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

Exclusions

Exclusions	Threshold
Weapons: Anti-personnel mines, nuclear weapons, cluster weapons, biological and chemical weapons, depleted uranium, and white phosphorus munitions	
Companies providing core weapon systems or components/services of the core weapon system for these weapons.	Greater than 0% of revenues
Tobacco	
Companies manufacturing tobacco products.	Greater than 0% of revenues
Companies owning 10-50% of another company with any involvement (greater than 0% of revenues) in manufacturing tobacco products.	Not applicable
Companies supplying tobacco-related products/services.	Equal to or greater than 10% of revenues
Companies involved with distribution and/or retail sales of tobacco products.	Equal to or greater than 10% of revenues
Oil Sands	
Companies that extract oil sands.	Equal to or greater than 5% of revenues
Shale Energy	
Companies involved in shale energy exploration and/or production.	Equal to or greater than 5% of revenues
Arctic Exploration	
Companies involved in extraction of oil and gas in Arctic regions	Equal to or greater than 5% of revenues
Thermal Coal	
Thermal coal extraction	Equal to or greater than 5% of revenues
Companies generating electricity from thermal coal	Equal to or greater than 5% of revenues
Controversial Conduct	
Companies involved in controversial conduct related to the UN Global Compact principles and related international norms and standards. Controversies are classified into four categories: Human Rights, Labor, Environment and Anti-corruption.	All companies deemed to be non-compliant with relevant international norms

Extra Exclusions for the UK indices in the series

Arctic Exploration	
Companies involved in extraction of oil and gas in Arctic regions	Equal to or greater than 5% of revenues

Extra Exclusions for the Russell indices in the series

Small Arms	
Companies producing and selling assault weapons to civilian customers.	Greater than 0% of revenues
Companies producing and selling small arms (non-assault weapons) to civilian customers.	Greater than 0% of revenues
Companies producing and selling small arms (non-assault weapons) to military/law enforcement.	Greater than 0% of revenues
Companies producing and selling key components of small arms.	Greater than 0% of revenues
Companies involved in the retail and/or distribution of small arms (non-assault weapons).	Greater than 0% of revenues
Companies involved in the retail and/or distribution of assault weapons.	Greater than 0% of revenues

Appendix B

Further information

A Glossary of Terms used in FTSE Russell's Ground Rule 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 ESG Risk-Adjusted 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.

Website: www.lseq.com/en/ftse-russell/

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