



FTSE ESG Low Carbon Select Indexes

v1.2



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Section 1

Introduction

1.0 Introduction

1.1 These Ground Rules should be read in conjunction with the FTSE Global Factor Index Series Ground Rules which are available at www.ftserussell.com.

1.1.1 The FTSE ESG Low Carbon Select Index takes account of ESG factors in its index design. Please see further details in Section 5 and 6,

1.2 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.

1.3 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.

1.4 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 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

2.0 Management Responsibilities

2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the benchmark administrator of the indexes.¹

2.1.2 FTSE is responsible for the daily calculation, production and operation of the FTSE ESG Low Carbon Select Indexes 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 FTSE ESG Low Carbon Select Indexes and apply the changes resulting from the reviews as required by the Ground Rules;
- publish indicative additions to and deletions from the index ahead of the implementation of the periodic index reviews;
- disseminate changes to the constituent weightings resulting from their ongoing maintenance and the periodic reviews;
- publish the constituents of the indexes on an ex-post basis to assist index users with their requirements with respect to the [ESMA Guidelines for ETFs and other UCITS Issues](#);
- disseminate the indexes.

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. 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.

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).



Section 3

FTSE Russell Index Policies

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 Corporate Actions and Events Guide

- 3.2 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 Capitalisation Weighted Indexes using the following link:

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

3.3 Queries and Complaints

- 3.3.1 FTSE Russell's policy for the handling of challenges received from index users and constituent companies with respect to ESG based exclusions and ratings can be accessed using the following link:

[Business Activity Screening for Exclusion-Based Indexes Challenges and Appeals.pdf](#)

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

[Queries and Complaints Policy.pdf](#)

3.4 Index Policy for Trading Halts and Market Closures

- 3.4.1 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](#)

3.5 Index Policy in the Event Clients are Unable to Trade a Market

- 3.5.1 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](#)

3.6 Policy for Benchmark Methodology Changes

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

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

3.7 FTSE Russell Governance Framework

3.7.1 To oversee its indexes, 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 ensure compliance with the IOSCO Principles for Financial Benchmarks² and the European benchmark regulation³. The FTSE Russell Governance Framework can be accessed using the following link:

[FTSE_Russell_Governance_Framework.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



Section 4

Sustainable Investment Data Inputs

4.0 Sustainable Investment Data Inputs

The following Sustainable Investment datasets are used in the construction of the FTSE ESG Low Carbon Select Indexes

4.1 FTSE ESG Ratings

An introduction to the FTSE ESG Ratings can be found in the following guide:

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

4.2 Carbon data

Operational Carbon Emissions and Fossil Fuel Reserves 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 underlying data for significant changes in data values.

The carbon data does not currently utilize international standards in its construction.

Further details third party data can be found in the following guide:

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

4.3 Product involvement exclusions and UNGC controversies exclusions

Data for product involvement exclusions and UNGC controversies exclusions is sourced from Sustainalytics. This data subject to regular quality checks to identify discrepancies and ensure accuracy; these checks include trend analysis to assess data quality and detailed review of underlying data for significant score changes.

4.3.1 Further details third party data can be found in the following guide:

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



Section 5

ESG and Carbon Data Definitions

5.0 ESG ratings, Operational Carbon Emissions and Fossil Fuel Reserves

5.1 FTSE ESG Ratings (E)

Please see the [Guide to FTSE Sustainable Investment Data used in FTSE Indexes](#). for more information on FTSE ESG Ratings. The data cut-off date for the availability of ESG scores is the close of business on the last business day of the month prior to the September review month.

5.2 Operational Carbon Emissions Intensity (OE)

Operational Carbon Emissions Intensity is defined as the latest annual CO2 equivalent greenhouse gas (GHG) emissions in metric tons scaled by annual sales (in USD). CO2 equivalent GHG emissions data is defined as GHG Protocol Scope 1 and 2 emissions. Annual sales data is sourced from third party data providers. The data cut-off date for the availability of Operational Carbon Emissions Intensity is the close of business on the last business day of the month prior to the September review month.

5.3 Fossil Fuel Reserve Intensity (R)

Fossil Fuel Reserve Intensity is defined as the estimated CO2 equivalent GHG emissions in metric tons generated by the combustion of a company's fossil fuel reserves, divided by its full company market capitalisation (in USD). The data cut-off date for the availability of Fossil Fuel Reserve Intensity is the close of business on the last business day of the month prior to the September review month.

5.4 Z-Scores and Missing Data Treatment

Individual stock quantities are normalised cross-sectionally to create Z-Scores within each eligible universe according to:

$$Z_{F,i} = \frac{F_i - \mu_F}{\sigma_F} \quad \text{where} \quad F \in \{E, OE, \text{Log}(R)\} \quad (1)$$

where F_i is the F -quantity of the i^{th} stock 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. Missing data is excluded from this process.

- Missing ESG ratings and Operational Carbon Emissions Intensities are assigned a Z-Score of 0 at the end of the process described in 4.4.1.
- Companies identified as having non-zero Fossil Fuel Reserves Intensities but with no available reserves data are treated as having missing data when calculating the Z-Scores in 4.4.1. However at the end of the process they are assigned a Z-Score in accordance with the following rules:
 - Companies in the ICB sub-sector Coal Mining (1771) are assigned the average Z-score of companies in the Coal Mining sub-sector. If there are no companies in the Coal Mining sub-sector with reserve data, a Z-score of 0 is assigned.
 - Companies in the ICB sector Oil & Gas Producers (0530) and Oil & Gas Services & Distributions (0570) are assigned the average Z-score of companies in the Oil & Gas Producers sector and Oil & Gas Services & Distributions respectively. If there are no companies with reserve data in such a sector, a Z-score of 0 is assigned.
 - Companies in the ICB sub-sector General Mining (1775) which are identified via FTSE Sustainable Investment data to own coal reserves are assigned the average Z-score of companies in the General Mining sub-sector which own reserves and for which data is available. If there are no companies in the General Mining sub-sector with reserve data, a Z-score of 0 is assigned.
 - Companies outside ICB sub-sectors 1771, 1775 and 0530 which are identified via FTSE Sustainable Investment data to own coal reserves, are assigned the average Z-score of companies outside the ICB sub-sectors 1771, 1775 and 0530 which own reserves and for which data is available. If there are no companies outside the ICB sub-sectors 1771, 1775 and 0530 with reserve data, a Z-score of 0 is assigned.
- Companies with zero Fossil Fuel Reserve Intensities are treated as having missing data when calculating the Z-Scores in 4.4.1. At the end of the process they are assigned a Z-Score of -3.

5.4.1 Further details on the use of third party sustainable investment data used in FTSE Russell indexes can be found in the following guide:

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

Section 6

Index Construction

6.0 Index Construction

6.1 General Overview

- 6.1.1 At each September review the product involvement exclusion list (see Appendix A) and the UNGC controversies exclusion list (see Appendix B) is applied to an underlying universe of free-float adjusted market capitalization weights, W_{M_i} . 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 \widehat{W}_{M_i} .
- 6.1.2 The weights \widehat{W}_{M_i} are used as the starting point of a portfolio construction technique (see 6.2) that targets an Operational Carbon Emissions Intensity reduction of 50%, a Fossil Fuel Reserves Intensity reduction of 50% and an ESG uplift of 20% relative to the underlying. 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_{F_i} .
- 6.1.3 Finally, at each quarterly March, June, September and December review the UNGC controversies exclusion list (see Appendix B) is applied to the time-evolved September 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 Low Carbon Select Index 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 weights of each target exposure index satisfy:

$$W_{F_i} = \frac{S_{E,i}^n \times S_{OE,i}^p \times S_{R,i}^q \times C_i \times I_i \times \Phi_i \times \widehat{W}_{M_i}}{\sum_j S_{E,j}^n \times S_{OE,j}^p \times S_{R,j}^q \times C_j \times I_j \times \Phi_j \times \widehat{W}_{M_j}} \quad (2)$$

where $S_{E,i}^n$, $S_{OE,i}^p$ and $S_{R,i}^q$ are ESG, Operational Carbon Emissions Intensity and Fossil Fuel Reserve Intensity tilts of strengths n , p and q respectively, $S_{F,i} = \text{Exp}(Z_{F,i})$, C_i and I_i are country and industry tilts, Φ_i is a max capacity/max company weight tilt and \widehat{W}_{M_i} are the weights defined in 6.1.

The tilts in equation (2) are chosen so that the resultant target exposure weights W_{F_i} satisfy each of the following targets and constraints. The solution method is described in FTSE Global Factor Index Series Ground Rules.

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

$$\sum_i W_{F_i} OE_i = 0.5 * \sum_i W_{M_i} OE_i \quad \text{and} \quad \sum_i W_{F_i} R_i = 0.5 * \sum_i W_{M_i} R_i \quad (3)$$

where OE_i and R_i are the Operational Carbon Emissions Intensity and the Fossil Fuel Reserve Intensity of stock i .

This is equivalent to the requirement that the target exposure index has 50% of the weighted Operational Carbon Emissions Intensity and weighted Fossil Fuel Reserve Intensity of the underlying index.

6.2.4 The ESG rating target is given by:

$$\sum_i W_{F_i} E_i = 1.2 * \sum_i W_{M_i} E_i \quad (4)$$

where E_i is the ESG rating of stock i .

This is equivalent to the requirement that the target exposure index has a 20% uplift in the weighted ESG rating compared to the underlying index. Where a 20% uplift represents an increase of more than one market capitalization weighted standard deviation, a percentage increase corresponding to one market capitalization weighted standard deviation is targeted.

6.2.5 The aggregate stock weight of the target exposure index in the H^{th} ICB country C_H is identical to that in the underlying capitalization weights:

$$\sum_{i \in C_H} W_{F_i} = \sum_{i \in C_H} W_{M_i} \quad \text{where} \quad H = 1, \dots, K \quad (5)$$

This is equivalent to the requirement that the target exposure weights satisfy country neutrality.

6.2.6 The aggregate stock weight of the target exposure index in the H^{th} ICB industry J_H satisfies:

$$\sum_{i \in J_H} W_{F_i} = T_{J_H} \quad \text{where} \quad H = 1, \dots, J \quad (6)$$

where T_{J_H} is a target industry weight that sits between lower and upper bounds satisfying:

$$J_{HL} = \text{Max} \left[\sum_{i \in J_H} W_{M_i} + P_J, 0 \right] \quad \text{and} \quad J_{HU} = \text{Max} \left[\text{Min} \left[\sum_{i \in J_H} W_{M_i} + Q_J, 1 \right], 0 \right] \quad (7)$$

with $P_j = -0.05$ and $Q_j = 0.05$ for all ICB industries apart for Oil & Gas for which $P_j = -0.05$ (-0.2 for UK Index) and $Q_j = 0.0$ (-0.1 for UK Index).

This is equivalent to requiring that the industrial weightings of the target exposure index deviate by no more than +/-5% from the underlying industrial weightings, apart from those of Oil & Gas which is allowed to be as much as 5% (20% for UK Index) underweight but no greater than 0% (-10% for UK Index) overweight compared to the underlying.

6.2.7 A maximum capacity constraint is imposed so that:

$$\frac{W_{Fi}}{W_{Mi}} \leq 10 \quad \text{for all } i \quad (8)$$

along with the constraint that the maximum weight of a company is less than or equal to 10%.

6.2.8 The tilts in equation (2) are chosen so that all targets and constraints are satisfied simultaneously. The iterative method of solution, outlined in FTSE Global Factor Index Series Ground Rules, is allowed to loop 100 times before relaxation without the factor exposure stopping criteria being applied since no factor exposures are considered here.

6.2.9 Should relaxation be required the Carbon reduction and ESG uplift targets set out in 6.2.3 and 6.2.4 are reduced simultaneously and repeatedly by 2.5% of their original values until a solution satisfying the relaxed targets becomes feasible. This occurs up to a maximum of 40 times.

6.2.10 Once a solution is found, a minimum security level weight threshold is applied to each target exposure index. Any security level index weight that is less than the minimum weight threshold is treated as having a zero weight in the relevant target exposure index. The remaining weights are rescaled in proportion to their size so that they sum to one. This may cause small changes in the aggregate ESG rating, Operational Carbon Emissions Intensity, Fossil Fuel Reserve Intensity and breaches of constraints 6.2.5, 6.2.6 and 6.2.7 of the target exposure index.

6.2.11 Table 1 summarizes the weighted ESG rating, Operational Carbon Emissions Intensity and Fossil Fuel Reserve Intensity targets and constraints applied to each target exposure index.

Table 1: Targets and Constraints for Target Exposure Indexes

Target Exposure Index	Targets			Constraints				Review
	ESG Ratings Increase	Op. Carbon Emissions Reduction	Fossil Fuel Reserves Reduction	Country	Industry	Max Company Weight (%)	Min Stock Weight (b.p.)	
FTSE Developed Europe Target Exposure Index	20%	50%	50%	Neutral	Banded	10	0.5	S
FTSE Asia Pacific ex Japan Target Exposure Index	20%	50%	50%	Neutral	Banded	10	0.5	S
FTSE Japan Target Exposure Index	20%	50%	50%	-	Banded	10	0.5	S
FTSE USA Target Exposure Index	20%	50%	50%	-	Banded	10	0.5	S
FTSE Developed Target Exposure Index	20%	50%	50%	Neutral	Banded	10	0.5	S
FTSE Emerging Target Exposure Index	20%	50%	50%	Neutral	Banded	10	0.5	S
FTSE UK Target Exposure index	20%	50%	50%	-	Banded	10	0.5	S

Notes:

Neutral: As per rule 6.2.5.

Banded: As per rule 6.2.6.

Review: M=March, J=June, S=September and D=December.

6.3 UNGC Controversies Exclusions

- 6.3.1 FTSE Russell will apply the UNGC controversies exclusion list outlined in Appendix B to the Target Exposure Indexes on a quarterly basis after the close of business on the third Friday of March, June, September and December to create the FTSE ESG Low Carbon Select Indexes.
- 6.3.2 Existing constituents which appear on the list of UNGC controversies exclusions will be removed from the Target Exposure Indexes and the weight of excluded constituents will be distributed pro-rata among the remaining constituents so that the total weight sums to one. The resulting indexes are the FTSE ESG Low Carbon Select Indexes. This procedure may cause changes in the achieved levels of aggregate ESG Ratings, Operational Carbon Emissions Intensity and Fossil Fuel Reserve Intensity and breaches of the constraints set out in in Table 1.
- 6.3.3 Table 2 summarizes the FTSE ESG Low Carbon Select Indexes and their underlying Target Exposure indexes.

Table 2: FTSE ESG Low Carbon Select Indexes

FTSE ESG Low Carbon Select Index	Underlying Target Exposure Index
FTSE Developed Europe ESG Low Carbon Select Index	FTSE Developed Europe Target Exposure Index
FTSE Asia Pacific ex Japan ESG Low Carbon Select Index	FTSE Asia Pacific ex Japan Target Exposure Index
FTSE Japan ESG Low Carbon Select Index	FTSE Japan Target Exposure Index
FTSE USA ESG Low Carbon Select Index	FTSE USA Target Exposure Index
FTSE Developed ESG Low Carbon Select Index	FTSE Developed Target Exposure Index
FTSE Emerging ESG Low Carbon Select Index	FTSE Emerging Target Exposure Index
FTSE UK ESG Low Carbon Select Index	FTSE UK Target Exposure Index



Section 7

Periodic Review

7.0 Periodic Review

- 7.1 The underlying Target Exposure Indexes will be reviewed annually in September. The review will be implemented after the close of business on the third Friday of the review month.
- 7.2 The FTSE ESG Low Carbon Select Indexes will be reviewed quarterly in March, June, September and December when the exclusions outlined in Appendix B are applied to the underlying Target Exposure Indexes. The review will be implemented after the close of business on the third Friday of the review month.

Section 8

Changes to Constituent Companies

8.0 Changes to Constituent Companies

- 8.1 Additions to the FTSE ESG Low Carbon Select indexes will be considered for inclusion at the next quarterly review only if they exist in the underlying Target Exposure indexes.
- 8.2 A constituent will be removed from a FTSE ESG Low Carbon Select Index if it is also removed from the underlying Target Exposure index. The deletion will be concurrent with the deletion from the underlying Target Exposure index and its weight will be distributed pro-rata among the remaining constituents in the FTSE ESG Low Carbon Select Index.
- 8.3 Additions and deletions of an underlying Target Exposure index are set out in the Ground Rules for the Global Factor Indexes:

[FTSE Global Factor Index Series Ground Rules](#)

Section 9

Corporate Actions and Events

9.0 Corporate Actions and Events

- 9.1 The FTSE ESG Low Carbon Select Indexes will follow the same corporate actions and events treatment as the FTSE Global Factor Index Series Ground Rules.
- 9.2 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, the constituent's weighting in the FTSE ESG Low Carbon Select Indexes will remain unchanged pre and post such an event.
- 9.3 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 Capitalisation 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. 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 will provide notice advising of the timing of the change.

9.4 Suspension of Dealing

Suspension of Dealing rules can be found within the Corporate Actions and Events Guide for Non-Market Capitalisation Weighted Indexes.

9.5 Takeovers, Mergers and Demergers

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



Section 10

Treatment of Dividends

10.0 Treatment of Dividends

Declared dividends are used to calculate the FTSE ESG Low Carbon Select Total Return Indexes. All dividends are applied on the ex-div date.

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](#)



Appendix A: Core Exclusions

At each September review, FTSE Russell will exclude companies from the underlying eligible universe of each Target Exposure Index that meet the criteria in Table 3 (see Rule 6.1.1).

Table 3: Product Involvement 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 that are considered tailor-made and essential for these weapons.	Any involvement
Conventional weapons Companies providing tailor-made products and/or services that support military weapons or companies manufacturing military weapon systems and/or integral, tailor-made components for these weapons	Over 10% of revenues
Tobacco	
Companies manufacturing tobacco products	Any involvement
Companies involved in distribution or retail sales of tobacco products	Over 10% of revenues
Adult Entertainment	
Companies producing adult entertainment and/or owns/operates adult entertainment establishments.	Over 5% of revenues
Companies distributing adult entertainment materials.	Over 10% of revenues

Gambling	
Companies that own and/or operate a gambling establishment.	Over 5% of revenues
Companies manufacturing specialized equipment used exclusively for gambling.	Over 10% of revenues
Companies providing supporting products/services to gambling operations.	Over 10% revenues
Coal	
Thermal coal extraction	Over 10% revenues for thermal coal
Companies generating electricity from thermal coal	Over 10% revenues for thermal coal
Nuclear power	
Companies generating electricity from nuclear power	25% of generating capacity



Appendix B: UNGC Controversies Exclusions

FTSE Russell will apply the UN Global Compact (UNGC) controversies exclusion list outlined in Table 4 to each Target Exposure Index on a quarterly basis after the close of business on the third Friday of March, June, September and December to create the FTSE ESG Low Carbon Select Indexes.

Table 4: UNGC Controversies Exclusions

Exclusions	Threshold
UN Global Compact (UNGC) Controversies	
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 C: 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 ESG Low Carbon Select Indexes or the FTSE Target Exposure 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.ftserussell.com

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