

FTSE EPRA Nareit Japan REITs Green Focus Select Index

v1.3



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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 EPRA Nareit Japan REITs Green Focus Select Index.
- 1.2 The FTSE EPRA Nareit Japan REITs Green Focus Select Index is an extension of the FTSE EPRA Nareit Global Real Estate Index Series. This index consists of constituents in the FTSE EPRA Nareit Global Real Estate Index Series that are assigned a REIT status in Japan.
- For further details on eligible securities please refer to the [FTSE EPRA Nareit Global Real Estate Index Series Ground Rules](#).
- 1.3 The FTSE EPRA Nareit Japan REITs Green Focus Select Index is designed to provide exposure to listed REITs while incorporating a tilting methodology that adjusts index weights according to green building certification and energy usage.
- 1.4 The FTSE EPRA Nareit Japan REITs Green Focus Select Index takes account of ESG factors in its index design. Please see further details in Section 4 and 5.
- 1.4.1 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 EPRA Nareit Global Real Estate Index Series Ground Rules, the Corporate Actions and Events Guide for Non Market Capitalisation Weighted Indices, and the FTSE Global Factor Index Series Ground Rules which are available at www.lseg.com/en/ftse-russell/.
- 1.6 Price and Total Return Indices will be calculated on an end of day basis.
- Total return indices include income based on ex dividend adjustments. All dividends are applied as declared in the FTSE Total Return Index.
- The base currency of the index is Japanese yen (JPY) and the index may also be published in other currencies.
- 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 FTSE Fixed Income Europe Limited), FTSE Fixed Income LLC, FTSE (Beijing) Consulting Limited, Refinitiv Benchmark Services (UK) Limited, Refinitiv Limited and Beyond Ratings.

- 1.8 FTSE Russell hereby notifies users of the indices 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 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 series¹.

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;
- maintain the exclusion list based on the UN Controversies principles,
- publish changes to the constituent weightings resulting from their ongoing maintenance and the periodic reviews;
- disseminate the indices.

2.1.3 Real estate sustainability metrics including energy usage and green certification, are provided by a third party real estate data vendor.²

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).

² As at December 2018 data is provided by GeoPhy. Further detail can be found: [Guide to FTSE and Third Party ESG Data used in FTSE Russell Indices](#).

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 Corporate Actions and Events Guide

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](#)

3.2 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](#)

3.3 Queries and Complaints

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

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

3.4 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](#)

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

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 or a Security.pdf](#)

3.6 Recalculation Policy and Guidelines

3.6.1 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 EPRA Nareit Japan REITs Green Focus Select Index will be 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.

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

3.7 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](#)

3.8 FTSE Russell Governance Framework

3.8.1 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 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](#)

3.9 Real Time Status Definitions

3.9.1 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

Eligible securities

4. Eligible securities

4.1 The underlying universe of the FTSE EPRA Nareit Japan REITs Green Focus Select Index is the FTSE EPRA Nareit Developed REITs Japan Index, which is part of the FTSE EPRA Nareit Global Real Estate Index Series.

Please refer to the [FTSE EPRA Nareit Global Real Estate Index Series Ground Rules](#) available from FTSE Russell for more information and details on eligible securities and qualification criteria for the underlying index.

4.2 Securities that are on the conduct-related exclusion list are not eligible for this index.

Section 5

ESG data inputs

5. ESG data inputs

5.1 ESG data inputs

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

ESG data inputs	Details	Used for selection, weighting or exclusion ⁶
Conduct related data - FTSE Russell	FTSE exclusion lists on the activities of companies that are directly or indirectly linked to controversial conduct and/or diversity. More information can be found: Section 7 of the Guide to FTSE and Third Party ESG Data used in FTSE Russell Indices	Exclusion
GeoPhy	Geophy provide sustainability metrics regarding green certificate data and energy & carbon performance for REITs. More information can be found: Guide to FTSE and Third Party ESG Data used in FTSE Russell Indices.pdf	Weighting

5.1.2 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.

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.

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

[Sustainability and ESG data](#)

[ESG Disclosures Methodology and Calculation Guide](#)

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.

Section 6

Index construction

6. Index construction

6.1 Scores and missing data treatment

- 6.1.1 Green Certification (GC) is defined as the share of total net leasable area owned and/or managed by a constituent that is certified as part of an eligible green certification scheme.
- 6.1.2 Energy Usage (EU) is the average modeled energy consumption per square metre of net leasable area owned and/or managed by a constituent.
- 6.1.3 Carbon Emission Intensity is defined as the total operational emissions scaled by enterprise value including cash.
- 6.1.4 GC, EU and carbon emission intensity data are normalised cross-sectionally to create Z-Scores within each eligible universe according to:

$$Z_i = (F_i - \mu) / \sigma \quad (1)$$

where F_i is natural logarithm value of the i^{th} stock and μ and σ are the cross-sectional 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 renormalised 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.

- 6.1.5 Stocks with missing GC or EU data are allocated a neutral Z-Score of zero after the application of the normalisation procedure detailed in Rule 6.1.4. Stocks with missing carbon emission intensity are allocated the average score of its REIT sector or zero if the sector average score is not available.
- 6.1.6 Stocks with zero GC information will receive a Z-Score of -3, unless GC is not a widely adopted practice. Adoption is deemed not wide if the average GC within a country sector is less than the global sector mean and a Z-Score of zero is awarded.

6.2 Fixed tilt index construction

- 6.2.1 Normalised Z-Scores are mapped to a score $S_i^{GC} \in [0,1]$ and $S_i^{EU} \in [0,1]$, using the cumulative normal distribution with mean zero and standard deviation one, using GC and EU respectively.
- 6.2.2 The creation of S-scores and the application of consecutive tilts towards individual characteristics follows the process described in the FTSE Global Factor Index Series rules.

6.2.3 A set of index weights w_i , is calculated for the index:

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

Where:

$$v_i = w'_i \times A_i^{RSN}$$

and

- w'_i is the investable market capitalisation weight of stock i in the underlying universe.
- A_i^{RSN} is the geographic sector (either country sector or regional sector) tilt for stock i (see Rule 6.2.5)

The FTSE EPRA Nareit Japan REITs Green Focus Select Index employs a country sector split.

6.2.4 The FTSE EPRA Nareit Japan REITs Green Focus Select Index employs the following 11 property sectors: Health Care, Self Storage, Industrial, Office, Industrial/Office Mixed, Residential, Retail, Lodging/Resorts, Data Centers, Specialty and Diversified. The property sector definition follows the FTSE EPRA Nareit Global Real Estate Index Series.

6.2.5 The geographic sector tilt for stock i is defined as:

$$A_i^{RSN} = (S_i^{GC})^{P_{GC}} \times (S_i^{EU})^{P_{EU}} \times \frac{w_k^*}{w_k}$$

where k is the EPRA Nareit geographic sector of stock i , P_{GC} and P_{EU} is the tilt strength (see Table 1), w_k^* is the maximum geographic sector weight, determined in Rule **Error! Reference source not found.** and w_k is the geographic sector weight resulting from the application of consecutive tilts using the S-scores S_i^{GC} and S_i^{EU} to the underlying investable market capitalisation stock weights:

$$w_k = \sum_{i \in k} w'_i \times (S_i^{GC})^{P_{GC}} \times (S_i^{EU})^{P_{EU}}$$

Table 1: Tilt strength

FTSE EPRA Nareit Green Index	P_{GC}	P_{EU}
FTSE EPRA Nareit Japan REITs Green Focus Select Index	2	2

6.2.6 Let the weight of a geographic sector for a given index be w'_k of the underlying universe. Then the country or regional sector weight is bounded by:

$$\text{Max}(w'_k - \text{Bound}, 0) \text{ and } \text{Min}(w'_k + \text{Bound}, 100)$$

Where the bounds are defined in Table 2 for each index.

Table 2: Geographic sector bound (%)

FTSE EPRA Nareit Green Index	Bound
FTSE EPRA Nareit Japan REITs Green Focus Select Index	2

Any geographic sector that breaches the lower or upper bound is set to the relevant lower and upper bound. The weight is then re-assigned proportionately to the remaining geographic sectors. This process repeats iteratively until the weights for all geographic sectors lie between their lower and upper bounds. The resulting set of weights for each geographic sector constitutes the maximum geographic sector weights, w_k^*

6.2.7 A maximum stock level capacity ratio of 3x and a 5% stock active weight capping are applied. The capacity ratio of stock i is defined as $CR_i = w_i / w'_i$ where w_i and w'_i are the FTSE EPRA Nareit Japan REITs Green Focus Select Index weights after the application of geographic sector tilt and the investable market capitalisation weights of the underlying eligible universe respectively.

The constituent weight in the index is capped by below:

$$\text{Min}(w'_i + Q, 3*w'_i)$$

where Q is 5.

The resulting excess weight will be redistributed pro rata amongst the remaining constituents.

6.2.8 A minimum security level weight of 0.5 basis points is applied to the FTSE EPRA Nareit Japan REITs Green Focus Select Index. Any security level index weight that is less than the minimum weight threshold is treated as having a zero weight in the index. Any resulting excess weight will be redistributed amongst the remaining constituents and may cause breaches of the constraints in Rules 6.2.6-6.2.8.

6.3 Index back-histories

6.3.1 Green Certificate and Energy Usage data prior to September 2018 are lagged by six months for the FTSE EPRA Nareit Japan REITs Green Focus Select Index.

Section 7

Periodic review of constituents

7. Periodic review of constituents

7.1 Review dates

- 7.1.1 The FTSE EPRA Nareit Japan REITs Green Focus Select Index will be reviewed annually in September. FTSE Russell uses Geophy Green Certificate, Energy Usage, and carbon emissions data as of Q1 of the current year. All the calculations described in Appendix A will be recalculated at the annual review date. The data cut-off dates for other ESG data inputs are in the [Guide to FTSE and Third Party ESG Data used in FTSE Russell Indices](#).
- 7.1.2 The FTSE EPRA Nareit Japan REITs Green Focus Select Index is reviewed using stock prices available at the close of Wednesday before the first Friday of the review month (Price Cut-off Date) incorporating underlying index constituent changes.
- 7.1.3 Changes arising from the annual review will be implemented after the close of business on the third Friday of the review month.

7.2 Exclusion lists

- 7.2.1 FTSE Russell will apply the UNGC controversies exclusion list on a quarterly basis after the close of business on the third Friday of March, June, September and December.
- 7.2.2 The treatment of companies which have yet to be researched is set out in the Guide to the Construction and Maintenance of FTSE Exclusion Lists which can be accessed using the following link:
[Guide to the Construction and Maintenance of FTSE Exclusion Lists.pdf](#)

Section 8

Changes to constituent companies

8. Changes to constituent companies

8.1 Intra-review additions

8.2 The FTSE EPRA Nareit Japan REITs Green Focus Select Index will not accept intra-review additions.

8.3 Intra-review deletions

8.3.1 A constituent will be removed from the FTSE EPRA Nareit Japan REITs Green Focus Select Index if it is removed from the corresponding underlying universe. The deletion will be concurrent with the deletion from the underlying universe and its weight will be distributed pro-rata amongst the remaining constituents in the FTSE EPRA Nareit Japan REITs Green Focus Select Index.

8.4 Intra-review exclusion changes

8.4.1 A constituent will be removed from the FTSE EPRA Nareit Japan REITs Green Focus Select Index if it is in the exclusion list. The deletion will be concurrent with its addition to the exclusion lists.

8.4.2 A stock that is removed from the exclusion list between periodic reviews will be considered for inclusion to the FTSE EPRA Nareit Japan REITs Green Focus Select Index at the next annual review.

8.4.3 Further details on the treatment of events leading to intra-review exclusion status changes is set out in Guide to the Construction and Maintenance of FTSE Exclusion Lists which can be accessed using the following link:

[Guide to the Construction and Maintenance of FTSE Exclusion Lists.pdf](#)

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 FTSE EPRA Nareit Japan REITs Green Focus Select 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 EPRA Nareit Japan REITs Green Focus Select Index 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 EPRA Nareit Japan REITs Green Focus Select Index will be calculated on an end of day basis and displayed to eight decimal points.

10.3 Index calculation

10.3.1 The FTSE EPRA Nareit Japan REITs Green Focus Select Index 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.
- 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

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

[Glossary.pdf](#)

The FTSE EPRA Nareit Green Indices webpage can be accessed using the following link:

[epra-nareit-green](#)

The FTSE Russell ESG Metrics website can be found using the following link:

[ESG Metrics](#)

Further information on the FTSE EPRA Nareit Japan REITs Green Focus Select Index 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.lseg.com/en/ftse-russell/

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