



**GROUND RULES FOR THE
MANAGEMENT OF THE

FTSE ENVIRONMENTAL
OPPORTUNITIES INDEX SERIES**

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SECTION 1

1.0 INTRODUCTION

1.1 This paper sets out the Ground Rules for the management of the FTSE Environmental Opportunities (EO) Index Series. Copies of the Ground Rules are available from FTSE on the website www.ftse.com.

1.2 The FTSE EO Index Series is designed to represent the performance of global environmental opportunities (EO) companies ranked by full market capitalisation, i.e. before the application of any investability weighting, whose activities provide value-added solutions to environmental problems. This includes companies with business activities over a specified threshold (50% for ET; 20% for EO) that is covered in the FTSE Environmental Markets Classification System, which includes the six environmental sectors below:

- a) Renewable & Alternative Energy
- b) Energy Efficiency
- c) Water Infrastructure & Technologies
- d) Pollution Control
- e) Waste Management & Technologies
- f) Environmental Support Services

The assessment to establish whether a technology, service or business qualifies as being within these sectors will be carried out by Impax Asset Management, and approved by the independent FTSE Environmental Markets Committee.

1.3 **Headline FTSE EO Index Series**

1.3.1 **FTSE EO All-Share Index**

This Index comprises all the companies that meet the stated eligibility requirements.

1.3.2 **FTSE EO 100 Index**

This Index comprises the largest 100 companies by full market capitalisation, selected from the constituents of the FTSE EO All-Share Index.

1.3.3 **FTSE EO Water Technology Index**

This Index comprises all the companies in 'Water Technology' Category that meet the stated eligibility requirements.

1.3.4 **FTSE EO Water Technology 30 Index**

This Index comprises the largest 30 companies by full market capitalisation, selected from the constituents of the FTSE EO Water Technology Index.

1.3.5 **FTSE EO Waste and Pollution Control Technology Index**

This Index comprises all the companies in 'Waste and Pollution Control Technology' Category that meet the stated eligibility requirements.

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1.3.6 FTSE EO Waste and Pollution Control Technology 30 Index

This Index comprises the largest 30 companies by full market capitalisation, selected from the constituents of the FTSE EO Waste and Pollution Control Technology Index.

1.3.7 FTSE EO Renewable and Alternative Energy Index

This Index comprises all the companies in 'Renewable and Alternative Energy' Category that meet the stated eligibility requirements.

1.3.8 FTSE EO Renewable and Alternative Energy 50 Index

This Index comprises the largest 50 companies by full market capitalisation, selected from the constituents of the FTSE EO Renewable and Alternative Energy Index.

1.3.9 FTSE EO Energy Efficiency Index

This Index comprises all the companies in 'Energy Efficiency' Category that meet the stated eligibility requirements.

1.3.10 FTSE EO Energy Efficiency 50 Index

This Index comprises the largest 50 companies by full market capitalisation, selected from the constituents of the FTSE EO Energy Efficiency Index.

1.4 FTSE EO Regional and Country Indices

1.4.1 FTSE EO USA Index

This Index comprises all the companies from the FTSE EO All-Share Index that are listed in USA as defined by their country classification in the Global Equity Index Series. For country classification, please refer to the FTSE Global Equity Index Series Ground Rules.

1.4.2 FTSE EO Asia-Pacific Index

This Index comprises all the companies from the FTSE EO All-Share Index that are listed in the Asian-Pacific region as defined by their country classification in the Global Equity Index Series.

1.4.3 FTSE EO Asia-Pacific ex-Japan Index

This Index comprises all the companies from the FTSE EO All-Share Index that are listed in the Asian-Pacific region in exclusion to Japan, as defined by their country classification in the Global Equity Index Series.

1.4.4 FTSE EO Japan Index

This Index comprises all the companies from the FTSE EO All-Share Index that are listed in Japan as defined by their country classification in the Global Equity Index Series.

SECTION 1

1.4.5 FTSE EO Europe Index

This Index comprises all the companies from the FTSE EO All-Share Index that are listed in Europe as defined by their country classification in the Global Equity Index Series.

1.4.6 FTSE EO USA & Alternative Energy Index

This index comprises all the companies in the EO USA Index with the largest 50 non-US constituents of the FTSE EO Renewable & Alternative Energy Index.

1.5 Price Index Values are calculated on a real time basis in US dollars. Total Return Index values are published at the end of each working day. The Total Return Index is based on ex-dividend adjustments. Currencies provided for both indices will include US Dollar, Euro, UK Pound Sterling and Japanese Yen on an end of day basis.

SECTION 2

2.0 STATUS OF INDICES

2.1 The FTSE EO Index Series is calculated on a real time basis and in US Dollars in exclusion to the FTSE EO Japan Index and FTSE EO Europe Index which are calculated in Japanese Yen and Euro respectively. All indices may exist in the following states.

a) **Firm**

- i. The indices are being calculated during Official Market Hours (see Appendix A). No message will be displayed against the index value.
- ii. The Official Closing Price for each FTSE EO Index will be the Exchange Official Closing Price for that Index.

b) **Closed**

The indices have ceased all calculations for the day. The message 'CLOSE' will be displayed against the index value calculated by FTSE.

c) **Held**

During Official Market Hours, an index has exceeded pre-set operating parameters and the calculation has been suspended pending resolution of the problem. The message 'HELD' will be displayed against the last index value calculated by FTSE.

d) **Indicative**

If there is a system problem or situation in the market that is judged to affect the quality of the constituent prices at any time when an index is being calculated, the index will be declared indicative (e.g. normally where a 'fast market' exists in the equity market). The message 'IND' will be displayed against the index value calculated by FTSE.

e) **Part**

If an index is being calculated during the normal Official Index Period hours, but there are less than 75% of the constituents by capitalisation available with firm prices, then the index will be displayed with the message 'PART' to indicate that only a proportion of the securities prices are included. With the exception of the message 'PART', the index will continue to be calculated and displayed as if it were firm.

2.2 The official opening and closing hours of the FTSE EO Index Series are set out in Appendix A. Variations to the official hours of the indices will be published by FTSE.

2.3 US Dollar, Euro, UK Pound Sterling and Japanese Yen values will be calculated on an end-of-day basis.

SECTION 3

3.0 INDEX MANAGEMENT

3.1 FTSE International Limited (FTSE)

3.1.1 FTSE is responsible for the operation of the FTSE EO Index Series. FTSE will maintain records of the market capitalisation of all constituents and reserve list companies and will make changes to the constituents and their weightings in accordance with the Ground Rules. FTSE will carry out reviews and implement the resulting constituent changes as required by the Ground Rules.

3.1.2 Changes to constituent weightings will be made by FTSE in accordance with the Ground Rules. FTSE is responsible for publicising and keeping a record of all changes to constituent weightings. The weightings of constituents in the real time indices shall be used in the calculation of the end of day indices.

3.1.3 FTSE is also be responsible for monitoring the performance of the FTSE EO Index Series throughout the day and will determine whether the status of the Index should be Firm, Held, Indicative or Part (see Rule 2.1).

3.2 Re-calculations

3.2.1 The FTSE EO Index Series is recalculated whenever errors or distortions occur that are deemed to be significant. Users of the FTSE EO Index Series are notified through appropriate media.

3.3 Status of these Ground Rules

3.3.1 These Ground Rules are a guide to the policies and procedures applying at the date of publication to the operation and maintenance to the FTSE EO Index Series. They have been prepared and approved by FTSE and Impax Asset Management. However, these policies and procedures, and their precise application, are subject to variation and periodic review.

3.3.2 The purpose of publishing this guide is to provide information about the general basis on which decisions relating to the calculation and publication of the FTSE EO Index Series are currently made.

3.3.3 In light of the intended purpose of this guide, and the likely variation and periodic review of the policies and procedures it contains, no liability whether as a result of negligence or otherwise is accepted by FTSE and Impax Asset Management (or any person concerned with the preparation or publication of this guide) for any losses, damages, claims and expenses suffered by any person as a result of:

- a) any reliance on this guide, and/or
- b) any errors or inaccuracies in this guide, and/or
- c) any non-application or misapplication of the policies or procedures described in this guide, and/or
- d) any errors or inaccuracies in the compilation or any constituent data.

SECTION 3

3.4 FTSE Environmental Markets Advisory Committee

3.4.1 The purpose of the Committee is to consider and advise on matters relating to the FTSE EO Index Series and proposed amendments to the Ground Rules governing the management of the FTSE EO Index Series to ensure that best practice is used in the construction and ongoing management of the Index. In particular the Committee will:

- a) ensure that appropriate global environmental technology standards are applied in the Ground Rules,
- b) advise on adjustments to the existing index methodology,
- c) oversee the ongoing management of the indices, corporate actions and changes to Ground Rules,
- d) advise on the design and methodology of new indices.

3.4.2 FTSE and Impax will appoint the Chairman, and members of the FTSE Environmental Markets Advisory Committee. The Chairman, will chair meetings of the Committee and will represent that Committee outside of meetings.

No member of the Advisory Committee is on the Advisory Committee to represent that member's employer but rather is there because of that person's specific expertise and to represent the interests of the industry generally.

3.4.3 A Secretary to the FTSE Environmental Markets Advisory Committee is appointed to support the work of the Committee.

3.4.4 A constituent or prospective constituent company (or advisor acting on behalf of the company) may appeal against the decisions of the FTSE Environmental Markets Advisory Committee on two grounds:

- a) that the Committee acted outside of the Ground Rules for the Management of the FTSE EO Index Series, or
- b) that the Committee, when reaching its decision, failed to take into consideration a substantial and material fact. A substantial and material fact is defined as a fact, which would have influenced the decision of the Committee if it had been considered.

A request for an appeal must be made in writing to the Secretary of the FTSE Environmental Markets Advisory Committee, within a reasonable time period from the announcement of the decisions. Appeals will be heard by a sub-committee appointed by FTSE and Impax Asset Management.

3.5 Amendments and Exceptions

3.5.1 In the event that the FTSE Environmental Markets Advisory Committee or any of those responsible for the operation and administration of the FTSE EO Index Series consider that an exception should be made to any of the Ground Rules, the issue must be brought to the attention of the Chairman of the FTSE Environmental Markets Advisory Committee, who will normally put the matter to the full FTSE.

Environmental Markets Advisory Committee for a decision. If, however, the matter is urgent, the Chairman is empowered to authorise an exception on behalf of the FTSE Environmental Markets Advisory Committee but must immediately notify, and subsequently refer the matter to the FTSE Environmental Markets Advisory Committee.

SECTION 3

- 3.5.2 Where an exception is granted to the Ground Rules under Rule 3.5.1, it shall not be deemed to create a precedent for future decisions of the FTSE Environmental Markets Advisory Committee.
- 3.5.3 Changes to the Ground Rules can only be made by the FTSE Environmental Markets Advisory Committee.
- 3.5.4 Significant changes to the Ground Rules are announced after being approved by the FTSE Environmental Markets Advisory Committee's meeting and will be announced to the market at least three months prior to their implementation.

SECTION 4

4.0 ELIGIBLE SECURITIES

- 4.1 All classes of the ordinary shares in issue are eligible for inclusion in the FTSE EO Index Series, subject to conforming to all other rules of eligibility, free float and liquidity.
- 4.2 The FTSE EO Index Series is based on the constituents in the FTSE Global Equity Index Series. Please refer to the FTSE Global Equity Index Series Ground Rules for the review dates on the FTSE website.
- 4.3 Companies that are considered by the FTSE Environmental Markets Advisory Committee as an EO company (where 'EO' is defined in Rule 1.2) will be eligible for inclusion in the FTSE EO Index Series.
- 4.4 Companies from countries that are included in the FTSE Global Equity Index Series are eligible for inclusion in the FTSE EO Index Series. For the list of countries that are eligible, please refer to the FTSE Global Equity Index Series Ground Rules which are available on www.ftse.com.
- 4.5 In order to ascertain whether a company is considered to exploit Environmental Opportunities (hence an "EO" company), the FTSE Environmental Markets Advisory Committee will consider the EO Analysis that is carried out by Impax Asset Management in line with the periodic reviews for each of the prospective EO companies. The EO Analysis will involve consideration of each of the following parameters:
- a) $\frac{\text{EO revenues}}{\text{total revenues}}$
 - b) $\frac{\text{EO invested capital}}{\text{total invested capital}}$
 - c) $\frac{\text{EO EBITDA}}{\text{total EBITDA}}$

EO invested capital will be analysed for pre-revenue companies using the book value for invested capital. Valuation of EO business is estimated by Impax Asset Management based on its own valuation analysis and that of other research analysts.

Exceptions to this calculation are as follows:

- a) Energy generating utilities; the company's energy generating capacity is assessed by the proportion of which are renewable. Renewable energy that is purchased by a utility rather than generated will not count towards this measure where the utility has a regulatory requirement to source renewable energy, unless the total amount of renewable power supplied is 20% greater than the legal requirement.
 - b) Manufacturers of recycled goods; where the proportion of the company's products that are produced from recycled content is assessed.
- 4.6 A company will be considered an Environmental Opportunities (EO) company if any of the three calculations is greater than 20%. The company would then be eligible for inclusion in the FTSE EO Index Series.

In order to reduce index turnover buffer thresholds will also be employed. At reviews of the index, companies will only be eligible for inclusion if they are over 22% in any one of the calculations. In addition, at reviews, current constituents will only be ineligible (on an EO basis) if they fall below 18% in any one of the calculations.

- 4.7 Convertible preference shares and loan stocks are excluded until converted.

SECTION 4

- 4.8 Companies whose business is that of holding equity and other investments (e.g. Investment Trusts) which are assumed by the Industry Classification Benchmark as Subsector equity investment instruments (8985) and Non-equity investment instruments which are assumed by the Industry Classification Benchmark as Subsector non-equity investment instruments (8995) will not be eligible for inclusion. For further details on the Industry Classification Benchmark (ICB), please visit the FTSE website.

SECTION 5

5.0 QUALIFICATION CRITERIA & PERIODIC REVIEW OF CONSTITUENTS

5.1 Review Dates

- 5.1.1 The FTSE EO Index Series will be reviewed semi-annually in June and December using data as at the close of business on the last day in May and November.
- 5.1.2 The semi-annual review will be implemented after the close of business on the third Friday in June and December.
- 5.1.3 Capping will be implemented quarterly after the close of business on the third Friday in March, June, September and December.
- 5.1.4 Details of the outcome of the semi-annual review will be announced as soon as possible after the semi-annual FTSE Environmental Markets Advisory Committee meeting has concluded.

5.2 Free Float

- 5.2.1 The FTSE EO Index Series is adjusted for free float and foreign ownership restriction. Free float restrictions include:

- Shares directly owned by State, Regional, Municipal and Local governments (excluding shares held by independently managed pension schemes for governments).
- Shares held by Sovereign Wealth Funds where each holding is 10% or greater. If the holding subsequently decreases below 10%, the shares will remain restricted until the holding falls below 7%.
- Shares held by directors, senior executives and managers of the company, and by their family and direct relations, and by companies that they control.
- Shares held within employee share plans.
- Shares held by public companies or by non-listed subsidiaries of public companies.
- Shares held by founders, promoters, former directors, founding venture capital and private equity firms, private companies and individuals (including employees) where the holding is 10% or greater. If the holding subsequently decreases below 10%, the shares will remain restricted until the holding falls below 7%.
- All shares where the holder is subject to a lock-in clause (for the duration of that clause).
- Shares held for publicly announced strategic reasons, including shares held by several holders acting in concert.

- 5.2.2 For clarity, holdings not considered as restricted free float include:

- Portfolio holdings (such as pension and insurance funds)
- Nominee holdings (unless they represent restricted free float as defined by Rule 5.2.1)
- Holdings by investment companies
- ETFs

If in addition to the above restricted holdings, the company's shareholders are subject to legal restrictions, including foreign ownership restrictions, that are more restrictive, the legal restriction will be applied.

SECTION 5

5.2.3 Free float restrictions will be calculated using available published information. The initial weighting of a constituent in the index will be applied in the following bands.

a) free float less than or equal to 15%	=	not eligible
b) free float greater than 15% but less than or equal to 20%	=	20%
c) free float greater than 20% but less than or equal to 30%	=	30%
d) free float greater than 30% but less than or equal to 40%	=	40%
e) free float greater than 40% but less than or equal to 50%	=	50%
f) free float greater than 50% but less than or equal to 75%	=	75%
g) free float greater than 75%	=	100%

5.2.4 A constituent's free float will also be reviewed and adjusted if necessary upon identification of information which necessitates a change in free float weighting following a corporate event. If the corporate event includes a corporate action which affects the index, any change in free float will be implemented at the same time as the corporate action. If there is not a corporate action, the change in free float will be applied as soon as practicable after the corporate event, subject to Rule 5.2.5.

5.2.5 Following the application of an initial free float restriction, a constituent's free float will only be changed if its actual free float moves to more than 5 percentage points above the minimum or 5 percentage points below the maximum of an adjacent new band. This 5 percentage points threshold does not apply if the change is greater than one band; therefore a movement of 10 percentage points for the bands between 20% and 50% and 25 percentage points for the bands between 50% and 100% will not be subject to the 5 percentage point threshold.

5.3 Liquidity

5.3.1 Each security will be tested for liquidity by calculating its median daily trading per month. Historical volume data will be taken one year prior to the review cut-off date to form 12 months of liquidity data. The median trade is calculated by ranking each daily trade total and selecting the middle ranking day. Daily totals with zero trades are also included in the ranking; therefore a security that fails to trade for more than half of the days in a month will have a zero median trade.

5.3.2 For eligibility for inclusion, securities must turnover at least 0.05% of their shares in issue (after the application of any investability weightings) based on their median daily trade per month for at least ten of the twelve months.

5.3.3 For existing constituents, securities must trade at least 0.04% of its shares in issue (after the application of any investability weightings) based on its median daily trade per month for at least eight of the twelve months.

5.3.4 Any period when a share is suspended will be excluded from the above calculations.

5.3.5 A security that is excluded because it fails the liquidity requirement will be excluded from all other indices for the period until the next review.

5.3.6 In exceptional market conditions, if trading volumes are very low, FTSE may reduce the percentage figure in order to avoid a large number of constituents being removed from the FTSE EO Index Series. This discretion may not be applied to individual securities. If FTSE intends to exercise this discretion, it must make a public statement to that effect at least two weeks prior to the periodic review.

SECTION 5

5.3.7 New issues, which do not qualify as early entrants will become eligible for inclusion at the next periodic review of constituents providing they have, since the commencement of Official non-conditional trading, a minimum trading record of at least 20 trading days prior to the date of the review and turnover of a minimum of 0.05% of their shares in issue based on its median daily trade, after the application of any free float and cross-holdings, per month in each month. For example, a new issue that did not qualify as an early entrant but has traded 21 days prior to the date of the review will need to have a turnover of a minimum of 0.05% of their shares in issue based on its median daily trade, after the application of any free float and cross-holdings for one month only. The inclusion of early entries (new issues) will not require a minimum trading record.

5.4 Rules for Insertion and Deletion at the Periodic Review

5.4.1 The rules for inserting and deleting securities at the periodic review are designed to provide stability in the selection of constituents of the FTSE EO Index Series while ensuring that the Index Series continues to be representative of the market by including or excluding those securities which have risen or fallen significantly.

5.4.2 A company will be inserted at the periodic review if it rises above the position stated below for the relevant index when the eligible securities for each FTSE EO Index are ranked by full market capitalisation, i.e. before the application of any investability weighting:

FTSE EO 100 Index	-	Risen to 90 th or above
FTSE EO Water Technology 30 Index	-	Risen to 25 th or above
FTSE EO Waste and Pollution Control Technology 30 Index	-	Risen to 25 th or above
FTSE EO Renewable and Alternative Energy 50 Index	-	Risen to 40 th or above
FTSE EO Energy Efficiency 50 Index	-	Risen to 40 th or above

5.4.3 A company will be deleted at the periodic review if it falls below the position stated below for the relevant index when the eligible securities for each FTSE EO Index are ranked by full market capitalisation, i.e. before the application of any investability weighting:

FTSE EO 100 Index	-	Fallen to 110 th or below
FTSE EO Water Technology 30 Index	-	Fallen to 35 th or below
FTSE EO Waste and Pollution Control Technology 30 Index	-	Fallen to 35 th or below
FTSE EO Renewable and Alternative Energy 50 Index	-	Fallen to 60 th or below
FTSE EO Energy Efficiency 50 Index	-	Fallen to 60 th or below

5.4.4 A constant number will be maintained for the FTSE EO 100 Index, the FTSE EO Water Technology 30 Index, the FTSE EO Waste and Pollution Control Technology 30 Index, the FTSE EO Renewable and Alternative Energy 50 Index and the FTSE EO Energy Efficiency 50 Index. Where a greater number of companies qualify to be inserted in an index than those qualifying to be deleted, the lowest ranking constituents presently included in the index will be deleted to ensure that an equal number of companies are inserted and deleted at the periodic review. Likewise, where a greater number of companies qualify to be deleted than those qualifying to be inserted, the securities of the highest ranking companies which are presently not included in the index will be inserted to match the number of companies being deleted at the periodic review.

SECTION 5

5.4.5 Where a company is deleted from the FTSE EO 100 Index, the FTSE EO Water Technology 30 Index, the FTSE EO Waste and Pollution Control Technology 30 Index, the FTSE EO Renewable and Alternative Energy 50 Index, and the FTSE EO Energy Efficiency 50 Index after FTSE and Impax Asset Management have approved periodic changes to the indices, but before the periodic changes have been implemented, the highest ranking company as from the new Reserve List at the day of the deletion (see Rule 5.4), excluding current index constituents, will replace the deleted company.

5.4.6 A constant number of constituents will not be maintained for the FTSE Environmental Opportunities All-Share Index, the FTSE EO Water Technology Index, the FTSE EO Waste Index, the FTSE EO Renewable and Alternative Energy Index, the FTSE EO Energy Efficiency Index and the FTSE EO Regional and Country Indices.

5.5 Monitoring of Eligible Companies

5.5.1 The market capitalisation of companies eligible for inclusion in the FTSE EO Index Series is monitored by FTSE. All listed securities that pass Impax Asset Management's EO criteria will be included in the periodic reviews.

5.6 Reserve List

5.6.1 FTSE will be responsible for publishing the ten highest ranking non-constituents of the FTSE EO 100 Index, five highest ranking non-constituents of the FTSE EO Water 30 Index, the FTSE EO Waste and Pollution Control 30 Index, the FTSE EO Renewable and Alternative Energy 50 Index, and the FTSE EO Energy Efficiency 50 Index at the time of the periodic review. The appropriate Reserve List will be used in the event that one or more constituents are deleted during the period up to the next periodic review.

5.7 Capping Methodology

5.7.1 The FTSE EO 100 Index, the FTSE EO Water Technology Index, the FTSE EO Water 30 Index, the FTSE EO Waste and Pollution Control Index, the FTSE Waste and Pollution Control 30 Index, the FTSE EO Renewable and Alternative Energy 50 Index, the FTSE EO Energy Efficiency 50 Index and FTSE EO Regional and Country Indices use a capping methodology every quarter to reduce concentration for constituents that are considered over-weighted in the index. The capping methodology is described in more detail in Section 9.

SECTION 6

6.0 CHANGES TO CONSTITUENT COMPANIES

6.1 New Issues

- 6.1.1 In line with the FTSE Global Equity Index Series Ground Rules, when a constituent is added to the universe it will be considered for inclusion subject to Impax Asset Management notifying FTSE as soon as possible if there are any new company issues expected. The new issue will have to pass the criteria detailed in Rule 4.1.3, before application of individual constituent investability weightings. FTSE will normally decide to include the new issue as a constituent of the FTSE EO Index Series after the close of business on the fifth day of official trading.
- 6.1.2 If a constituent of the FTSE EO Index Series is de-listed it will be removed from the index. The constituent of the FTSE EO 100 Index, the FTSE EO Water 30 Index, the FTSE Waste and Pollution Control 30 Index, the FTSE EO Renewable and Alternative Energy 50 Index, and the FTSE EO Energy Efficiency 50 Index will be replaced by the highest ranking company in the Reserve List by full market capitalisation five days prior to the event being implemented. The constituent of the FTSE All-Share Index, the FTSE EO Water Technology Index, the FTSE EO Waste Index, the FTSE EO Renewable and Alternative Energy Index, the FTSE EO Energy Efficiency Index and FTSE EO Regional and Country Indices will not be replaced.
- 6.1.3 If FTSE Environmental Markets Advisory Committee decides to include a new issue as a constituent security other than as part of the normal periodic review procedure, this decision must be publicly announced at the earliest practicable time.
- 6.1.4 For the purpose of this Rule 6.1, a company which is re-listed following suspension or is reorganised or renamed or which arises from a demerger or complex reorganisation of another company which is not an existing constituent, shall not be considered to be a new issue.
- 6.1.5 The new issue will also be subject to the free float, cross-holdings and foreign ownership restriction and other requirements detailed in Sections 4 and 5.

6.2 Deletions and Replacements

- 6.2.1 If a constituent is de-listed, ceases to have a firm quotation, is subject to a take-over or has, in the opinion of the Chairman of the FTSE Environmental Markets Advisory Committee (or their nominated deputies), ceased to be a viable constituent as defined by the Ground Rules, it will be removed from the FTSE EO Index Series.
- 6.2.2 When the company is removed from the FTSE EO 100 Index, the FTSE EO Water 30 Index, the FTSE EO Waste 30 Index, the FTSE EO Renewable and Alternative Energy 50 Index, or the FTSE EO Energy Efficiency 50 Index, the vacancy will be filled by selecting the highest ranking security by full market value in the Reserve List as at the close of the index calculation five days prior to the deletion and adjusted accordingly.
- 6.2.3 Constituents will be deleted from the index when confirmation is received that acceptance levels have reached a minimum of 85% and that any new shares of the bidding company (if applicable) are listed. A company deleted following a takeover, with a remaining free float of 15% or less, will not be re-considered for index inclusion until completion of a one year trading record.

SECTION 6

6.2.4 Constituents removed in accordance with Rule 6.2.2, but which continue to trade thereafter, will be considered for re-inclusion to the index at the next review, subject to Sections 4 and 5 and at least 6 months has passed between deletion and the implementation date of the changes arising from the review.

6.3 Mergers, Restructuring and Complex Takeovers

6.3.1 If the effect of a merger or takeover is that one constituent in the FTSE EO All Share Index, the FTSE EO Water Technology Index, the FTSE EO Waste Index, the FTSE EO Renewable and Alternative Energy Index, the FTSE EO Energy Efficiency Index, the FTSE EO Renewable and Alternative Energy 50 Index, the FTSE EO Energy Efficiency 50 Index, or FTSE EO Regional and Country Indices is absorbed by another constituent, the resulting company will remain a constituent of the Index, and a vacancy will be created.

6.3.2 If a constituent company in the FTSE EO 100 Index, the FTSE EO Water 30 Index, the FTSE EO Waste 30 Index, the FTSE EO Renewable and Alternative Energy 50 Index, or the FTSE EO Energy Efficiency 50 Index, is taken over by a non-constituent company for stock, the original constituent will be removed, and replaced by the highest ranking non-constituent in the Reserve List. Any eligible company resulting from the takeover, subject to Sections 4 and 5 will be eligible for the FTSE EO Index Series.

6.3.3 If a constituent company is split to form two or more companies, then the resulting companies will be eligible for inclusion as index constituents in the FTSE EO 100 Index, the FTSE EO Water 30 Index, the FTSE EO Waste 30 Index, the FTSE EO Renewable and Alternative Energy 50 Index, and the FTSE EO Energy Efficiency 50 Index, providing they are larger than the smallest constituent, based on their respective full market capitalisations, i.e. before the application of any investability weightings and if they qualify in all other respects. For example, a FTSE EO 100 Index constituent split into two companies may result in one or both of these companies remaining in the FTSE EO 100 Index. Where both of these companies remain in the FTSE EO 100 Index, the smallest FTSE EO 100 Index constituent will be removed from the index and included in the Reserve List.

6.4 Suspension of Dealing

6.4.1 Where a constituent is suspended it may remain in the FTSE EO Index Series, at the price at which it is suspended, for up to 10 business days. During this time on advice from FTSE and Impax Asset Management may agree to delete the constituent immediately either at its suspension price or at a value of zero. Replacement of constituents will be handled according to Rule 6.1. This change will be effected after the close of the index calculation and prior to the start of the index calculation on the following day. Removing a constituent at zero indicates that the stock is believed to be valueless.

6.4.2 When a suspension of a constituent lasts beyond noon on the tenth business day (and the option to remove the constituent has not been exercised), the constituent will normally be deleted from the index on the eleventh trading day, either at its suspension price or at zero. Where suspension is for a reason not to the detriment of the constituent, it may be retained or removed at its suspension price with the approval of the Chairman (or their nominated deputies) of the FTSE Environmental Markets Advisory Committee. Replacement of constituents will be handled according to Rule 6.1.

SECTION 6

6.5 Re-listing of Suspended Constituents

- 6.5.1 Securities shall be reinstated in the FTSE EO Index Series at the price at which they were removed. The reinstatement will happen after the close of business on the first day after the stock is re-listed.
- 6.5.2 Should a deleted constituent that has been suspended at a price other than zero (which would normally be the suspension price) be subsequently de-listed and deemed to be of nil value, this stock will be included for one day's calculation in the index from which it was removed to enable the fall in the stock's value to be reflected in the index value. In this situation, the stock will be re-included at the suspension price, and its price will be zero throughout that day's calculation, including the closing price.
- 6.5.3 If a company re-lists after a continuous period of suspension lasting more than a year, FTSE reserve the right to treat the company as a new issue for the purposes of index eligibility.

6.6 Changes to Constituent Weightings

- 6.6.1 For the purposes of computing the FTSE EO Index Series, the number of shares in issue for each constituent security is expressed to the nearest share and, to prevent a large number of insignificant weighting changes, the number of shares in issue for each constituent security is amended only when the total shares in issue held within the index system changes by more than 1% on a cumulative basis. Changes will become effective at open on the next trading day following the third Friday of March, June, September and December (subject to Rules 6.6.2 and 6.6.3).
- 6.6.2 If a corporate action is applied to an index constituent which involves a change in the number of shares in issue, the change in shares will be applied simultaneously with the corporate action.
- 6.6.3 If accumulated changes in the number of shares in issue add up to 10% or more or when an accumulated share change represents USD 2bn of a company's total market capitalisation, they are implemented between quarters. A minimum of 4 days notice will be given to users of the index. WM/Reuters Spot Rates will be used to convert the market capitalisation into USD. The USD 2bn threshold may be adjusted annually in December by FTSE. If an adjustment is made, it will be applied for the first time at the next review in March of the following year.
- 6.6.4 All adjustments are made before the start of the index calculation on the day concerned, unless market conditions prevent this.

SECTION 7

7.0 CHANGES TO THE CLASSIFICATION OF CONSTITUENT COMPANIES**7.1 Classification Structure**

7.1.1 In addition to the identification as an EO company, the FTSE EO Index Series constituents are classified into Industries, Supersectors, Sectors and Subsectors, as defined by the Industry Classification Benchmark (ICB).

7.1.2 Details of the Industry Classification Benchmark are available from FTSE and published on the FTSE website (www.ftse.com).

7.2 Classification Changes

7.2.1 Changes to the classification of a company within the FTSE EO Index Series will be advised by ICB and the necessary adjustments will be made to the relevant industry sectors at the same time that the constituent changes are implemented.

7.2.2 Where a constituent is the subject of a merger, restructure or complex takeover which results in a constituent (or part of a constituent) being absorbed by another, the industry classification of the resulting constituent(s) will be reviewed by ICB.

7.2.3 Any adjustment resulting from a change in a company's classification under Rule 7.2.2 will be implemented at the same time that any relevant constituent changes are implemented in the Index.

7.2.4 Periodic changes to the industry classification of a company are agreed and announced by ICB. Such changes will be implemented after the close of the third Friday in March, June, September and December.

SECTION 8

8.0 INDICES ALGORITHM AND CALCULATION METHOD

8.1 Prices

8.1.1 The FTSE EO Index Series will use actual last trade prices, where available, for securities.

8.1.2 Reuters real time exchange rates are used in the real-time index calculations.

8.2 Index Calculation

8.2.1 The FTSE EO Index Series is calculated using the following formula:

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

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 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 for each security in the underlying index.
- c_i is the Capping 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. This factor is published by FTSE for each security 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.

SECTION 9

9.0 CAPPING METHODOLOGY

- 9.1 The capping process aims to reduce any concentration levels that may exist. The capping process is applied after the close of business on the third Friday in March, June, September and December based on the starting constituents of the next working day. The underlying data used in the capping process is as follows:
- 9.1.1 The security's closing price adjusted for corporate events after the close of business on the second Friday of each quarter.
- 9.1.2 The security's starting shares in issue figure, its investability weight on the next working day following the third Friday of each quarter.
- 9.2 The algorithm is applied to each constituent of the FTSE EO 100 Index, the FTSE EO Water 30 Index, the FTSE EO Waste 30 Index, the FTSE EO Renewable and Alternative Energy 50 Index, and the FTSE EO Energy Efficiency 50 Index that requires capping, i.e. any constituent whose uncapped weight is greater than 10%.

The Constituent Capping Factor c_i is given by:

$$c_i = \frac{Z}{I \times (p_i \times s_i \times f_i)} \sum_{j \in J} (p_j \times s_j \times f_j)$$

Where,

- i denotes the security to be capped.
- j denotes an uncapped security.
- J is the subset of securities that are uncapped.
- p_k is the official closing price of the k^{th} security.
- s_k is the number of shares in of the k^{th} security.
- f_k is the free float factor of the k^{th} security.
- I is the percentage of the index represented by all uncapped constituents.
- Z is the percentage capping level.

Capping is applied to the constituents of the FTSE EO 100 Index, the FTSE EO Water 30 Index, the FTSE EO Waste 30 Index, the FTSE EO Renewable and Alternative Energy 50 Index, and the FTSE EO Energy Efficiency 50 Index by the following methodology:-

Stage 1

Any constituents whose weights are greater than 10% are capped at 10%. The weights of all lower ranking constituents are increased correspondingly. The weights of lower ranking constituents are then checked and if they exceed 10% they are also capped at 10%. This process is repeated until no constituent weight exceeds 10%.

SECTION 9

Stage 2

Following the application of Stage 1, if the total index weight of those constituents whose individual weights exceed 5% is greater than 40% in aggregate, the procedure moves onto Stage 3 below. Otherwise no further action is required.

Stage 3

- a) If more than one stock is capped at 10%, then weights of all subsequent constituents previously capped at 10% are changed in accordance with the rules detailed below. For example, if the second largest stock is capped at 10% its weight will be reduced to 9% as given in b) below. The process is then continued from the relevant point in the steps below. Thus, if it is necessary to apply the provisions of Stage 3, only one constituent will have a 10% weight in the index.
- b) If the weight of the second largest constituent is greater than 9% the constituent's weight is capped at 9% and the weights of the lower ranking constituents are increased correspondingly. Following this procedure if the total index weight of those constituents whose individual weights exceed 5%, is greater than 40% the procedure moves onto the next stage below.
- c) If the weight of the third largest constituent is greater than 8% the constituent's weight is capped at 8% and the weights of the lower ranking constituents are increased correspondingly. Following this procedure if the total index weight of those constituents whose individual weights exceed 5%, is greater than 40% the procedure moves onto the next stage below.
- d) If the weight of the fourth largest constituent is greater than 7% the constituent's weight is capped at 7% and the weights of the lower ranking constituents are increased correspondingly. Following this procedure if the total index weight of those constituents whose individual weights exceed 5%, is greater than 40% the procedure moves onto the next stage below.
- e) If the weight of the fifth largest constituent is greater than 6% the constituent's weight is capped at 6% and the weights of the lower ranking constituents are increased correspondingly. Following these procedures if the total index weight of those constituents whose individual weights exceed 5%, is greater than 40% the procedure moves onto the next stage below.
- f) If the weights of the sixth largest constituent and any lower ranking constituents are greater than 4% those constituents' weights are capped at 4% and the weights of lower ranking constituents are increased correspondingly.

Stage 4

Following the application of Stage 3, the weights of each constituent are checked. If the total index weight of those constituents whose individual weights exceed 5% is greater than 40% in aggregate, then further capping is required. Firstly, if the largest constituents' weight has risen above 10% the weight is again capped at 10% and the weights of other constituents are adjusted accordingly. Then Stage 3 is repeated.

APPENDIX A

INDEX OPENING AND CLOSING HOURS

Index	Open	Close
FTSE EO Index Series	00:30	21:10
FTSE EO Regional and Country Indices		
FTSE EO USA Index	14:30	21:10
FTSE EO Europe Index	08:00	16:30
FTSE EO Asia-Pacific Index	00:30	11:30
FTSE EO Asia-Pacific ex-Japan Index	00:30	11:30
FTSE EO Japan Index	00:30	06:45
FTSE EO USA & Alternative Energy Index	00:30	21:10

Notes:

Indices that disseminate until 21:10 will have the closing value disseminated at 21:30.

Timings are UK hours.

APPENDIX B

FURTHER INFORMATION

For further information on the FTSE Environmental Opportunities Index Series, please visit www.ftse.com or contact FTSE via e-mail at info@ftse.com.

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