



*GPR Global Top 100 ESG Index  
Construction & Maintenance Procedures*

July 2021

## *General Information*

In order to ensure the highest quality of each of its indices Global Property Research (GPR) exercise the greatest care when compiling and calculating indices on the basis of the rules set out in this GPR index methodology document.

However, GPR cannot guarantee that the various indices, or the various ratios that are required for index compilation and computation purposes, as set out in this GPR index methodology document, are always calculated free of errors. GPR accepts no liability for any direct or indirect losses arising from any incorrect calculation of such indices or ratios.

Decisions concerning the way its indices are calculated, as well as regarding their compilation, are always taken by GPR to the best of knowledge and belief. GPR will not be liable for any losses arising from such decisions.

The indices of GPR do not represent a recommendation for investment of whatever nature. In particular, the compilation and calculation of the various indices shall not be construed as a recommendation of GPR to buy or sell individual instruments, or the basket of instruments underlying a given index.

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## 1 INTRODUCTION

- 1.1 This document contains the rules for the construction and maintenance of the Global Property Research Global Top 100 ESG Index (GPR Global Top 100 ESG Index).
- 1.2 The GPR Global Top 100 ESG Index is a weighted index based on shares of 100 leading property companies in the world.
- 1.3 The GPR Global Top 100 ESG Index is composed in such a way that it is considered to be representative for the movements in the worldwide property stock market.
- 1.4 The GPR Global Top 100 ESG Index is designed to reflect the performance of the 100 leading property companies in the world while also separately included in regional index products reflecting these property companies engaged in the following regional areas in the world:
  - GPR Americas Top 40 ESG Index
  - GPR Asia Pacific Top 30 ESG Index
  - GPR EMEA Top 30 ESG Index

## 2 COMPOSITION OF THE GPR GLOBAL TOP 100 ESG INDEX

- 2.1 The GPR Global Top 100 ESG Index includes 40 property stocks classified to the Americas region (GPR Americas 40 ESG Index), 30 property stocks classified to the Asia Pacific region (GPR Asia Pacific 30 ESG Index) and 30 property stocks classified to the EMEA region (GPR EMEA 30 ESG Index). The underlying regional indices include the property stocks with the highest monthly trading volume, measured as the twelve month trading volume in US dollars over the previous twelve months.
- 2.2 Only stock exchange quoted companies without restrictions on foreign ownership are eligible for inclusion in the GPR Global Top 100 ESG Index.
- 2.3 Companies are eligible when the free float market capitalization, calculated as the share price times the number of outstanding shares available for trading, is over 50 million USD for two consecutive months, and when the free float percentage is at least 15%.
- 2.4 Companies included must have at least 75% of operational turnover derived from investment activities (property investment companies) or investment and development activities combined (hybrid property companies). In the latter case at least 25% of operational turnover needs to be derived from investment activities.
- 2.5 Operational turnover is determined using figures of the latest available financial statements of the property company. If operational turnover cannot be derived from these financial statements, property assets will serve as the criterion to determine inclusion.
- 2.6 The GPR Global Top 100 ESG Index includes office, residential, retail, industrial, diversified, hotel and healthcare property companies. Whenever a company derives at least 60% of operational turnover from one specific property type, the compiler considers this company to be specialized in this property sector. For companies in the hotel and healthcare sector, it must be certain they are an investor and not an operator. The financial information needs to be clear on how the income is derived, from which activities. In case of doubt, the company will not be included.
- 2.7 The property stocks included in the GPR Global Top 100 ESG Index are assigned a base weighting derived from (i) their free float market capitalization on the date of periodic adjustment and (ii) their GRESB score<sup>1</sup>. The methodology of the GPR Global Top 100 ESG Index as well as the GPR Americas 40 ESG Index, GPR Asia Pacific 30 ESG Index and GPR EMEA 30 ESG Index all conform to the UCITS investment directives set by the EU.
- 2.8 Country weights are the sum of weighting factors of individual constituents in every country.
- 2.9 If a company derives over 75% of the operational turnover from one country, not being the country of its primary stock listing, the company is placed in the index of the country in which the assets are located.
- 2.10 In case of exclusion of a company from the index, the compiler will not assign another company for inclusion.
- 2.11 Companies are included if the publication of audited annual reports and press releases on their website are all available in English. An annual report is defined as a current set of accounts consisting of a profit and loss statement, a balance sheet, a directors' review and full notes to the accounts.

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<sup>1</sup> See 8. Technical Appendix for more details on the GRESB score implementation

### 3 CALCULATION OF THE GPR GLOBAL TOP 100 ESG INDEX

- 3.1 The base date of the GPR Global Top 100 ESG Index is 19 March 2010 and the base value is 100.
- 3.2 The GPR Global Top 100 ESG Index is calculated in EUR.
- 3.3 The GPR Global Top 100 ESG Index reflects gross dividend payments.
- 3.4 Share prices are established during normal, regulated trading on the stock exchange of primary listing. If a property stock has multiple listings only the primary listing will be considered. Primary listing describes the quotation of the stock with the highest number of shares traded.
- 3.5 Share prices used are most recent closing trade prices.
- 3.6 Dividends are included in the index at the ex-dividend date.
- 3.7 Dividends paid out by a company are immediately reinvested at the first index calculation.
- 3.8 Foreign exchange rates are WM/Reuters London close rates.
- 3.9 If for any reason the stock price or a foreign exchange rate is not known or deemed to be unreliable the compiler will, after proper inquiries have been made with the relevant pricing source, calculate the index on the basis of the most recent price for that stock or foreign exchange rate which is known to the compiler.
- 3.10 Changes in free float will be implemented once a month, after close of trading on the third Friday of each month. The free float thresholds are determined by GPR.
- 3.11 Free float changes will be reported at least one week before occurrence.
- 3.12 The GPR Global Top 100 ESG Index or any of its regional counterparts as defined under Rule 1.4 may not invest more than 20% of their assets in shares issued by the same property company, provided however that for one property company (and one only) this limit may be raised to 35%. In consequence, a property company may not represent more than 20% of the index, provided however that one property company (and one only) may represent up to 35% of the index.

#### 4 PUBLICATION OF THE GPR GLOBAL TOP 100 ESG INDEX

- 4.1 The current value of the GPR Global Top 100 ESG Index will be published once a day.
- 4.2 Index values calculated will be published on the next trading day.
- 4.3 The compiler of the GPR Global Top 100 ESG Index reserves the right to delay publication of values of the index or to suspend or cease publication, if in its opinion circumstances prevail which prevent the proper calculation of the index.

## PERIODIC ADJUSTMENT OF THE GPR GLOBAL TOP 100 ESG INDEX

- 4.4 The aim of the compiler of the GPR Global Top 100 ESG Index when making a periodic adjustment is to ensure that the weighting and selection of the component countries and property stocks remains in accordance with the basic principles of the Index, as described in chapter 2.
- 4.5 Periodic adjustments to the selection and base weighting of stocks and countries in the GPR Global Top 100 ESG Index will occur semi-annually after trading hours on the third Friday of March and September.
- 4.6 Changes in the selection and base weighting of countries or in the selection of stocks will be announced one month before occurrence of the adjustment. The compiler will publish a main list as well as a replacement list. The replacement list is ranked in order of first substitute and serves as a backup in case companies on the main list do not meet the inclusion criteria in the time frame between publication and adjustment. Any exclusion from the main listing will be reported immediately.
- 4.7 Periodic adjustment to the selection and base weighting of stocks and countries included in the GPR Global Top 100 ESG Index may not change the historic value of the index.
- 4.8 The selection of stocks included in the GPR Global Top 100 ESG Index shall be adjusted semi-annually on the basis of monthly trading volume on an absolute basis over the past twelve months on the primary stock exchange. The property stocks trading the largest monthly volume on the relevant exchange will be selected.
- 4.9 If there has not been a publication of monthly trading volume throughout the entire period, adjustments will be based on the longest possible period within that twelve month period.
- 4.10 The weighting of property stocks included in the GPR Global Top 100 ESG Index shall be adjusted quarterly on the basis of free float market capitalization of these stocks on the date of periodic adjustment. The compiler will use the most recently published data of free float.
- 4.11 In cases, which are not explicitly defined in the rules for periodic adjustment, periodic adjustment will be carried out in spirit of the aims mentioned in article 1.3. All adjustments must meet the criteria mentioned in chapter 2.

### **Company Structure Changes**

- 5.1 In case of a merger or acquisition in which all of the companies involved are in the GPR Global Top 100 ESG Index, only one company will continue to be part of the GPR Global Top 100 ESG Index. The weight of this company is dependent on the free float market capitalization of the surviving company. Free float will be adjusted to publications following the offer. The compiler will not assign another company for inclusion. The final return will reflect the offer price.
- 5.2 In case of a merger or acquisition in which one of the companies involved is in the GPR Global Top 100 ESG Index and the other company does not meet the criteria as expressed in chapter 2, the company resulting from the activity will have to comply with these criteria in order for the company to remain included in the GPR Global Top 100 ESG Index. If the resulting company fails to meet these criteria, the company will be excluded. The final return will reflect the offer price.
- 5.3 After the occurrence of a de-merger of a company included in the GPR Global Top 100 ESG Index, both the original and/or the newly created entities will immediately become part of the index whenever the new entities meet the criteria of chapter 2.
- 5.4 After the occurrence of a spin-off of part of a company included in the GPR Global Top 100 ESG Index, only the original company will remain part of the index. The spin-off will be treated as an initial public offering.
- 5.5 In case of a suspension of trading in a company, the price of the share will remain the price of the last trade in the companies' shares, reflecting a zero return. The weight of the company in the GPR Global Top 100 ESG Index will remain unchanged. In case the suspension eventually leads to a bankruptcy, the loss of the investment will be taken on the filing date. Whenever the suspension continues for more than three consecutive months, the share price will be set at zero, assuming a total loss of the investment.

### **Company Capital Changes**

- 5.6 The amount of shares outstanding will be changed to reflect seasoned offerings and share repurchases at the day of occurrence.
- 5.7 If a company goes bankrupt, the index will reflect the return by setting the price at zero, in order to reflect a total loss of the investment.
- 5.8 In case of a stock split, a stock dividend, a poison pill, a rights issue or a bonus issue the number of shares will be adjusted. Furthermore, an adjustment factor is implemented to ensure continuity of return calculations.
- 5.9 In case of a merger or acquisition, whereby the target company remains listed on the stock exchange with a free float percentage of at least 15%, this target company will continue to be part of the Index when the offer has been declared unconditional. This article will be superior to articles 6.1 and 6.2.
- 5.10 In the event of a rights issue, an adjustment factor is implemented to ensure continuity of return calculations. If the rights issue is fully underwritten, then the newly issued shares will be included in the index at the closing price at the end of the ex-right date. If the rights issue is not fully underwritten, then the newly issued shares will be included in the index at the closing price at the end of the first day of trading. In case of doubt, the rights issue will be perceived as not fully underwritten.

## 6 FINAL PROVISIONS FOR THE GPR GLOBAL TOP 100 ESG INDEX

- 6.1 Global Property Research acts as the compiler of the GPR Global Top 100 ESG Index.
- 6.2 The compiler of the GPR Global Top 100 ESG Index is responsible for the daily administration of the index. The compiler of the GPR Global Top 100 ESG Index is also responsible for decisions regarding the interpretation of these rules.
- 6.3 In cases for which the rules make no provision, but which require immediate action, the compiler of the GPR Global Top 100 ESG Index shall decide to the best of his ability and within the spirit of and in accordance with the aim of the rules.
- 6.4 These rules may be amended, which may also lead to a change in the GPR Global Top 100 ESG Index. There must be a period of at least three months between the date of publication of a proposed amendment and the date on which it comes into effect, unless the amendment does not conflict with any interest of the parties involved. No responsibility is accepted for damages arising from an amendment to the rules of the GPR Global Top 100 ESG Index.
- 6.5 The compiler of the GPR Global Top 100 ESG Index shall make every effort to safeguard the accuracy of the composition, publication and adjustment of the GPR Global Top 100 ESG Index in accordance with the applicable rules. However, the compiler of the GPR Global Top 100 ESG Index accepts no responsibility whatsoever for any inaccuracy in the share prices, the calculation and publication of the index, the information used to make adjustments neither in the GPR Global Top 100 ESG Index nor in the adjustments themselves.
- 6.6 There might be circumstances pursuant to which the compiler can decide to terminate the GPR Americas Top 40 ESG Index. Before deciding to terminate the Index, the compiler shall consult with the client(s) using the GPR Americas Top 40 ESG Index. If the compiler, after the consultation, decides to terminate the GPR Americas Top 40 ESG Index the compiler shall give the client(s) using the GPR Americas Top 40 ESG Index at least two (2) years prior notice before the GPR Americas Top 40 ESG Index is terminated. Whenever possible, the compiler shall suggest alternative indices to the client(s) using the GPR Americas Top 40 ESG Index.

# *Appendix*

## 7 VERSION HISTORY

*January 1, 2018*

- 2.7 The property stocks included in the GPR Americas Top 40 ESG Index are assigned a base weighting derived from (i) their free float market capitalization on the date of periodic adjustment and (ii) their GRESB score. The methodology of the GPR Americas Top 40 ESG Index all conform to the UCITS investment directives set by the EU.
- From* The property stocks included in the GPR Americas Top 40 ESG Index are assigned a base weighting derived from their free float market capitalization on the date of periodic adjustment. The methodology of the GPR Americas Top 40 ESG Index all conform to the UCITS investment directives set by the EU.
- 6.6 There might be circumstances pursuant to which the compiler can decide to terminate the GPR 250 Index. Before deciding to terminate the Index, the compiler shall consult with the client(s) using the GPR 250 Index. If the compiler, after the consultation, decides to terminate the GPR 250 Index the compiler shall give the client(s) using the GPR 250 Index at least two (2) years prior notice before the GPR 250 Index is terminated. Whenever possible, the compiler shall suggest alternative indices to the client(s) using the GPR 250 Index.

### 8.1 Calculating returns for individual companies

The returns for individual companies are calculated as follows:

$$r_{i,t+1} = \frac{P_{i,t+1} + D_{i,t+1} - P_{i,t}}{P_{i,t}}, \text{ where}$$

$r_{i,t+1}$	Return of company i in period t, t+1
$P_{i,t+1}$	Price of company i at time t+1
$D_{i,t+1}$	Dividend on company i at time t+1
$P_{i,t}$	Price of company i at time t
t	Last trading day

### 8.2 Calculating weights of individual companies at rebalancing

The weight of companies in the index is derived as follows:

$$W_{i,t} = \frac{C_{i,t} * G_{i,t}}{\sum_{i=1}^{N_t} C_{i,t} * G_{i,t}}, \text{ where}$$

$W_{i,t}$	Weight of company i at time t
$C_{i,t}$	(Free float) market capitalization of company i at time t
$G_{i,t}$	GRESB score impact of company i at time t (see table below)
$N_t$	Number of companies that meet the inclusion criteria at time t

If a company participated in the full GRESB Real Estate Assessment.

GRESB Rating	GRESB score impact
5 stars	100%
4 stars	90%
3 stars	80%
2 stars	70%
1 star	60%

If a company did not participate in the full GRESB Real Estate Assessment the GRESB Public Disclosure grade is applicable.

GRESB Public Disclosure Level	GRESB score impact
A	50%
B	40%
C	30%
D	20%
E	10%

The GRESB Real Estate Assessment is developed by industry-for-industry and has become a well-known and frequently used ESG benchmark for the sector. Currently more than 100 institutional investors use the dataset, with currently over USD 22trn AUM, to monitor their investments. In 2019 more than 1,000 property companies, real estate investment trusts (REITs), funds, and developers participated in the GRESB Real Estate Assessment demonstrating its broad uptake by the industry. The GRESB Real Estate Assessment is

voluntary and all listed property companies whose core business includes owning, operating and developing property assets are able to participate and usually encouraged to do so by their investors. The GRESB website does disclose the participation fees associated with the GRESB Real Estate Assessment. Reference is made to <https://gresb.com/real-estate-fund-company-member-fee-schedule/>.

The GRESB Public Disclosure is based on ESG disclosure data from publicly available sources. GRESB collects currently data for more than 450 property companies with full coverage of the major developed property indices. The collected data is open for review and adjustment by listed property companies in the portal from 1st April through 1st July each year, in parallel to the GRESB Real Estate Assessment reporting period. Reference is made to <https://gresb.com/real-estate-public-disclosure/#FAQ>.

Combining the GRESB Real Estate Assessment and the GRESB Public Disclosure results in the full coverage of all listed property companies included in the GPR General Quoted (World) Index. As such, not only the companies that decide to participate in the GRESB Real Estate Assessment are eligible for inclusion in the GPR ESG+ Index.

As the GRESB Real Estate Assessment evaluates a more complete set of ESG indicators in addition to those covered in the GRESB Public Disclosure, it provides a more comprehensive view of ESG performance, which is reflected in weighting. All data reported to GRESB are subject to a standard validation process to ensure its reliability and accuracy and this is not charged separately, or on demand.

### 8.3 Calculating weights of individual companies after annual rebalancing

After the annual rebalancing company weights float on free float market cap on a daily basis:

$$W_{i,t} = \frac{W_{i,t-1} * C_{i,t}/C_{i,t-1}}{\sum_{i=1}^{NE} W_{i,t-1} * C_{i,t}/C_{i,t-1}}$$

### 8.4 Calculating Indices

#### Total Return Index

The total return is a quantity which adjusts the price for issuance of dividends. When a company issues a dividend, the price of the equity drops in the exact amount of the per share dividend amount. Leaving aside subsequent market movements of the equity price, the impact of a constituent equity dividend upon an index is a drop in the price of the index. A companion index which is based on the total return adjusts the price-only index for the issuance of dividends by its constituents. The total return index is computed as follows:

$$TRIndex Price_t = TRIndex Price_{t-1} = \frac{\sum_{i=1}^n [(p_{i,t} \times h_{i,t} \times r_{i,t}) + (div_{i,t} \times h_{i,t} \times r_{i,t})]}{\sum_{i=1}^n (p_{i,t-1} \times h_{i,t-1} \times r_{i,t-1})}$$

Where:  $p_{i,t}$  = price of equity  $i=1,2,\dots,n$  at time  $t=0,1,2,\dots, T$  and  $t=0$  means the initial time  
 $n$  = the number of equities in the index  
 $h_{i,t}$  = the number of shares in equity  $i$  at time  $t = q_{i,t}$  or  $s_{i,t}$ , depending on whether MC or EQ weighting is used respectively,  
 $r_{i,t}$  = exchange rate from local currency to USD at time  $t$   
 $div_{i,t}$  = per share dividend on ex-date

All quantities in the equation above are end-of-day quantities. The numerator is computed as per the ex-date for any dividends. A key point for this approach comes via the observation that the dividend is adjusted for solely on the ex-date and does not enter the computations (implicitly) after that date. To accomplish this on the day following the ex-date, a price-only version of the index's ex-date total value enters in the denominator (divisor) of the equation.

Corporate actions can be grouped in events that concern dividends, capital changes, mergers & acquisitions, exceptional market conditions, capital increases and capital returns. Some Corporate actions are treated via an Adjustment Factor.

Within the different groups the following different types of corporate actions are defined (Corporate Actions marked with an asterisk have impact on the Adjustment Factor):

	<b>GROUP</b>	<b>Corporate Action</b>
1	DIVIDEND	Cash Dividend
2	DIVIDEND	Special Dividend
3	DIVIDEND	Stock Dividend or Scrip Dividend*
4	DIVIDEND	Optional Dividend
5	DIVIDEND	Bonus Dividend*
6	CAPITAL CHANGE	Share Split*
7	CAPITAL CHANGE	Share Consolidation or Reverse Share Split*
8	CAPITAL CHANGE	Share Redenomination
9	MERGER & ACQUISITION	Merger
10	MERGER & ACQUISITION	Demerger
11	MERGER & ACQUISITION	Spin-off
12	MERGER & ACQUISITION	Takeover
13	MERGER & ACQUISITION	Acquisition
14	EXCEPTIONAL MARKET CONDITION	Bankruptcy
15	EXCEPTIONAL MARKET CONDITION	Change of Primary Listing
16	EXCEPTIONAL MARKET CONDITION	Suspension
17	EXCEPTIONAL MARKET CONDITION	Share Conversion
18	CAPITAL INCREASE	Seasoned Offering
19	CAPITAL INCREASE	Rights Issue*
20	CAPITAL RETURN	Capital Return or Capital Repayment
21	CAPITAL RETURN	Share Buy-Back

#### **Cash Dividend**

Referring to Rule 3.6 and Rule 3.7, Cash Dividends are payments made by a company to its shareholders. In case the Cash Dividend currency differs from the share price currency, the Cash Dividend will be converted using the prevailing foreign exchange rates. Treatment of Cash Dividend is described in more detail in Rule 3.6 and Rule 3.7.

#### **Special Dividend**

Referring to Rule 3.6 and Rule 3.7 Special dividends are those dividends that are outside of the normal payment pattern established historically by the company. Whether a dividend payment is funded from operating earnings or from other sources of cash does not affect the determination of whether it is a special dividend. Instead, it is considered a Special Dividend when the market perceives it as a special dividend with dividends outside the normal payment pattern. In case the Special Dividend currency differs from the share price currency, the Special Dividend will be converted using the prevailing foreign exchange rates. Treatment of Special Dividend is described in more detail in Rule 3.6 and Rule 3.7.

#### **Stock Dividend or Scrip Dividend**

Referring to Rule 5.8, the Stock Dividend is a distribution of shares to shareholders as an alternative to a cash payment. In some instances the Stock Dividend can be optional, whereby the shareholder may choose the shares instead of a cash dividend payment. In this case the shares are issued for the value. An adjustment to the price and the Adjustment Factor is done on the opening of the ex-dividend date, and the number of shares is adjusted (increased) on the ex-dividend date after close of trading. When there is no cash alternative, the Stock Dividend represents a script/bonus issue and the Adjustment Factor should be calculated in

the same way. Treatment of Stock Dividend or Scrip Dividend is described in more detail in Rule 5.8.

#### **Optional Dividend**

A company offers its shareholders the choice of receiving the dividend in cash or in stock. It is assumed that investors select the cash option a) on the ex-dividend date for those cases where a stated equivalent of stock is announced and b) on the pay-date for those cases where an undetermined amount of stock is announced based on earnings and profits to be distributed at a future date. Thus, the dividend is treated in the same way as Cash Dividend.

#### **Bonus Dividend**

A bonus is an offer of free additional shares to existing shareholders. A company may decide to distribute further shares as an alternative to increasing the dividend pay-out. An adjustment to the price and the Adjustment Factor is done on the opening of the ex- date, and the number of shares is adjusted (increased) on the ex-dividend date after close of trading.

#### **Stock Split**

Referring to Rule 5.8, existing shares are subdivided into larger number of shares with an equivalent reduction in the Nominal Value of each share (where applicable). A Stock Split increases the number of shares in a company. The price is adjusted so that before and after this corporate event the market capitalization of the company remains the same and dilution does not occur. The number of shares, dividends and the share price are adjusted by the split factor on the ex-date. The share split does impact the Adjustment Factor as at the ex-date. Treatment of Stock split is described in more detail in Rule 5.8.

#### **Share Consolidation or Reverse Share Split**

A Reverse Share Split or reverse split is a reduction in the number of shares and an accompanying increase in the share price. The reverse split does have impact on the Adjustment Factor as at the ex-date.

#### **Share Redenomination**

The nominal value of existing shares in issue changes due to the change of currency. Therefore, the amount is converted using a set exchange rate.

#### **Merger**

Referring to Rule 5.1 and Rule 5.2, a Merger generally means that two or more companies merge to form one larger company. Treatment of a Merger is described in more detail in Rule 5.1 and Rule 5.2.

#### **Acquisition**

Referring to Rule 5.1 and Rule 5.2, an Acquisition generally means the procurement of a controlling interest of more than 85% in one company by another company and the acquired company may continue to trade. Shareholders of the target company are offered cash and/or shares for their holding. Treatment of an Acquisition is described in more detail in Rule 5.1 and Rule 5.2.

#### **Spin-off**

Referring to Rule 5.3, a Spin-off is the distribution of shares in a wholly-owned or a partially-owned company to the parent company's existing shareholders. Treatment of a Spin-off is described in more detail in Rule 5.3.

#### **Carve-out**

Referring to Rule 5.4, a Carve-out is the distribution of shares in a wholly-owned or a partially-owned company to new shareholders. Treatment of a Carve-out is described in more detail in Rule 5.4.

#### **Takeover**

Referring to Rule 5.1 and Rule 5.2, a Takeover is also the acquisition of one company by another. However this term is normally – but not always – used to imply that the acquisition is made on the initiative of the acquirer and often without the full agreement of the acquired company. Shareholders of the target company are given cash and/or shares for their holding. A reverse takeover is the acquisition of a larger company by a smaller one, based on certain criteria such as turnover, profits or net assets. The mechanisms for carrying out an acquisition or takeover may be through a cash offer -fixed, open or tender-, a share exchange or a

combination of both. Treatment of a Takeover is described in more detail in Rule 5.1 and Rule 5.2.

### **Bankruptcy**

Referring to Rule 5.7, a company legally declares inability or impairment of ability to pay their creditors. Creditors may file a bankruptcy petition against a debtor in an effort to recoup a portion of what they are owed. However, in the majority of cases, bankruptcy is initiated by the debtor. After undergoing reorganization, a company is liquidated. Treatment of a Bankruptcy is described in more detail in Rule 5.7.

### **Change of Listing**

If a company is delisted from the stock exchange within the universe of eligible stock exchanges for the index, there are two different options to consider: (i) the company's primary stock exchange listing changes to another stock exchange that is considered eligible for the index. There is no change in the index. (ii) The company remains unlisted, or the primary stock exchange listing changes to a stock exchange that is not considered eligible for the index. The company is removed from the index at its last closing price as shares would not be eligible for inclusion in the index.

### **Suspension**

Referring to Rule 5.5, a security is removed at zero, assuming a total loss of the investment if a stock is suspended for full trading for at least three consecutive months. During those three months, the index calculation takes into account the last trading price for the security which is suspended. The Treatment of a suspension of trading is described in more detail in Rule 5.5.

### **Share Conversion**

Share Conversion is the exchange of one form of shares for another form of shares of the same company.

### **Seasoned Offering**

Referring to Rule 5.6, seasoned offerings are an offer of shares to new shareholders. The number of shares is adjusted when the offered shares are effectively admitted to trading on the stock exchange.

### **Rights Issue**

Referring to Rule 5.10, shareholders are offered the right to buy new shares in proportion to their existing holding at a set offer price usually (but not always) at a discount to the market price. Rights are an offer of additional shares to existing shareholders. A company may decide to distribute further shares as an alternative to increasing the dividend pay-out. The rights issue does have impact on the Adjustment Factor as at the ex-date. Treatment of a Rights Issue is described in more detail in Rule 5.10.

### **Capital Return or Capital Repayment**

Capital repayments to shareholders is the return of all or any portion of the issued capital of a company in the winding up of operations or the return of capital in excess of a company's requirements. A capital repayment refers to payments that exceed the growth (net income/taxable income) of a business back to "capital owners", such as shareholders, partners or unit holders. The Capital Repayment is a transfer of value from the company to the existing owners.

### **Share Buy-Back**

The repurchase by a company of its own shares, in order to reduce the number of shares in issue, usually at a set price either as a percentage of shares issued or ratio of shares held. A Share Buy-Back may be performed via a repurchase tender offer (to all shareholders), an open market purchase or a privately negotiated purchase. Share buybacks are implemented only under a tender offer form.

**Americas**

Americas  
 Argentina  
 Antigua and Barbuda  
 Belize  
 Bolivia  
 Brazil  
 Canada  
 Chile  
 Colombia  
 Costa Rica  
 Dominica  
 Dominican Republic  
 Eastern Caribbean States  
 Ecuador  
 El Salvador  
 Grenada  
 Guatemala  
 Guyana, Cooperative Republic of  
 Haiti  
 Honduras  
 Jamaica  
 Mexico  
 Nicaragua  
 Panama  
 Paraguay  
 Peru  
 St. Kitts and Nevis  
 St. Lucia  
 St. Vincent and Grenadines  
 Suriname  
 Trinidad and Tobago  
 United States  
 Uruguay  
 Venezuela, Republica Bolivariana de

**Asia Pacific**

Afghanistan  
 Australia  
 Bangladesh  
 Bhutan  
 Cambodia  
 China  
 Fiji  
 Hong Kong  
 India  
 Indonesia  
 Iran, Islamic Republic  
 Iraq  
 Japan  
 Kazakhstan  
 Kiribati  
 Korea, Republic of  
 Kyrgyz Republic  
 Lao PDR  
 Malaysia  
 Maldives  
 Marshall Islands  
 FS Micronesia  
 Mongolia  
 Myanmar  
 Nepal  
 New Zealand  
 Pakistan  
 Palau  
 Papua New Guinea  
 Philippines  
 Samoa  
 Singapore  
 Solomon Islands  
 Sri Lanka  
 Tajikistan  
 Thailand  
 Timor Leste (East Timor)  
 Tonga  
 Turkmenistan  
 Tuvalu  
 Uzbekistan  
 Vanuatu  
 Vietnam

**EMEA**

Albania	Kenya	Czech Republic
Georgia	Sierra Leone	Malawi
Norway	Burkina Faso	Tanzania
Algeria	Kosovo, Republic of	Denmark
Germany	Slovak Republic	Mali
Oman	Burundi	Togo
Angola	Kuwait	Djibouti
Ghana	Slovenia	Mauritania
Poland	Cameroon	Tunisia
Armenia	Latvia	Egypt
Greece	Somalia	Mauritius
Portugal	Cape Verde	Turkey
Austria	Lebanon	Equatorial Guinea
Guinea	South Africa	Moldova
Qatar	Central African Republic	Uganda
Azerbaijan	Lesotho	Eritrea
Guinea-Bissau	South Sudan	Montenegro
Romania	Chad	Ukraine
Bahrain	Liberia	Estonia
Hungary	Spain	Morocco
Russian Federation	Comoros	United Arab Emirates
Belarus	Libya	Ethiopia
Iceland	Sudan	Mozambique
Rwanda	Democratic Republic of Congo	United Kingdom
Belgium	Lithuania	Finland
Ireland	Swaziland	Namibia
São Tomé & Príncipe	Republic of Congo	West Bank and Gaza
Benin	Luxembourg	France
Israel	Sweden	Netherlands
Senegal	Côte d'Ivoire	Yemen
Bosnia and Herzegovina	FYR of Macedonia	Gabon
Italy	Switzerland	Niger
Serbia	Croatia	Zambia
Botswana	Madagascar	The Gambia
Jordan	Syrian Arab Republic	Nigeria
Seychelles		Zimbabwe
Bulgaria		

<b>GRESB</b>	
<b>EXPLANATION OF HOW ESG FACTORS ARE REFLECTED</b>	
<b>Item 1.</b> Name of the benchmark administrator.	GPR
<b>Item 2.</b> Type of benchmark or family of benchmarks. <i>Choose the relevant underlying asset from the list provided in Annex II.</i>	Listed equities (real estate)
<b>Item 3.</b> Name of the benchmark or family of benchmarks.	GPR Global Top 100 ESG Index
<b>Item 4.</b> Does the benchmark methodology for the benchmark or family of benchmarks take into account ESG factors?	Yes
Where the response to Item 4 is positive, please list below, for each family of benchmarks, those ESG factors that are taken into account in the benchmark methodology, taking into account the ESG factors listed in Annex II to Delegated Regulation (EU) 2020/1816. Please explain how those ESG factors are used for the selection, weighting or exclusion of underlying assets. The ESG factors shall be disclosed at an aggregated weighted average value at the level of the family of benchmarks.	
(a) List of environmental factors considered:	GRESB Environmental Score – the sum of the scores achieved for the indicators related to actions and efficiency measures undertaken in order to monitor and decrease the environmental footprint of the portfolio. A breakdown of the GRESB indicators per environmental, social, and governance factors can be found <a href="#">here</a> .
(b) List of social factors considered:	GRESB Social Score – the sum of the scores achieved for the indicators related to the entity’s relationship with and impact on its stakeholders and direct social impact of its activities. A breakdown of the GRESB indicators per environmental, social, and governance factors can be found <a href="#">here</a> .
(c) List of governance factors considered:	GRESB Governance Score – the sum of the scores achieved for the indicators related to the governance of ESG, policies and procedures, approach to ESG at entity level. A breakdown of the GRESB indicators per environmental, social, and governance factors can be found <a href="#">here</a> .
<b>Item 6.</b> Where the response to Item 4 is positive, please list below, for each benchmark, those ESG factors that are taken into account in the benchmark methodology, taking into account the ESG factors listed in Annex II to Delegated Regulation (EU) 2020/1816, depending on the relevant underlying asset concerned. Please explain how those ESG factors are used for the selection, weighting or exclusion of underlying assets. The ESG factors shall not be disclosed for each constituent of the benchmark, but shall be disclosed at an aggregated weighted average value of the benchmark. Alternatively, all of this information may be provided in the form of a hyperlink to a website of the benchmark administrator included in this explanation. The information on the website shall be easily available and accessible. Benchmark administrators shall ensure that information published on their website remains available for five years.	
(a) List of environmental factors considered:	GRESB Environmental Score – the sum of the scores achieved for the indicators related to actions and efficiency measures undertaken in order to monitor and decrease the environmental footprint of the portfolio. A breakdown of the GRESB indicators per environmental, social, and governance factors can be found <a href="#">here</a> .
(b) List of social factors considered:	GRESB Social Score – the sum of the scores achieved for the indicators related to the entity’s relationship with and impact on its stakeholders and direct social impact of its activities. A breakdown of the GRESB indicators per environmental, social, and governance factors can be found <a href="#">here</a> .

(c) List of governance factors considered:	GRESB Governance Score – the sum of the scores achieved for the indicators related to the governance of ESG, policies and procedures, approach to ESG at entity level. A breakdown of the GRESB indicators per environmental, social, and governance factors can be found <a href="#">here</a> .
Hyperlink to the information on ESG factors for each benchmark:	<a href="#">The 2020 Real Estate Assessment Reference Guide</a>
<b>Item 7. Data and standards used</b>	
(a) Data input. <i>(i) Describe whether the data are reported, modelled or sourced internally or externally. (ii) Where the data are reported, modelled or sourced externally, please name the third party data provider.</i>	GRESB uses a proprietary data collection, analysis, scoring and benchmarking methodology. This is publicly available on the GRESB website and can be accessed <a href="#">here</a> .
(b) Verification and quality of data. <i>Describe how data are verified and how the quality of those data is ensured.</i>	
(c) Reference standards. <i>Describe the international standards used in the benchmark methodology.</i>	

## **LIST OF STOCK EXCHANGES + MARKET IDENTIFIER CODES**

### **Africa**

Botswana	Botswana Stock Exchange	XBOT
Namibia	Namibian Stock Exchange	XNAM
South Africa	Johannesburg Stock Exchange	XJSE

### **Americas**

Argentina	Bolsa de Comercio de Buenos Aires	XBUE
Brazil	Bovespa (Sao Paulo SE)	BVMF
Canada	Toronto Stock Exchange	XTSE; XT SX
Chile	Santiago Stock Exchange	XSGO
Colombia	Bolsa De Valores De Colombia	XBOG
Mexico	Bolsa Mexicana de Valores	XMEX
United States	New York Stock Exchange	XASE; XGNS; XNAS; XNCM; XNMS; XNYS

### **Asia**

Hong Kong	Hong Kong Stock Exchange	XHKG
India	The Bombay Stock Exchange	XBOM
Indonesia	Indonesia Stock Exchange	XIDX
Japan	Tokyo Stock Exchange	XJAS; XTKS
Korea	Korea Exchange	XKOS; XKRX
Malaysia	Bursa Malaysia	XKLS
Pakistan	Pakistan Stock Exchange Limited	XKAR
Philippines	Philippine Stock Exchange	XPHS
Singapore	Singapore Exchange	XSES
Taiwan	Taiwan Stock Exchange	ROCO; XTAI
Thailand	The Stock Exchange Of Thailand	XBKF; XBKK
Vietnam	Ho Chi Minh Stock Exchange	XSTC

### **Europe**

Austria	Vienna Stock Exchange	XWBO
Belgium	Euronext Brussels	XBRU
Croatia	Zagreb Stock Exchange	XZAG
Denmark	Nasdaq Copenhagen A/S	XCSE
Finland	Nasdaq Helsinki	FNFI; XHEL
France	Euronext Paris	ALXP; XPAR
Germany	Deutsche Börse	XBER; XDUS; XETR; XFRA; XHAM; XMUN; XSTU
Greece	Athens Stock Exchange	XATH
Hungary	Budapest Stock Exchange	XBUD
Ireland	Euronext Dublin	XDUB
Israel	Tel Aviv Stock Exchange	XTAE
Italy	Italian Stock Exchange	XMIL
Malta	Malta Stock Exchange	XMAL
Netherlands	Euronext Amsterdam	XAMS
Norway	Oslo Stock Exchange	XOSL
Poland	Warsaw Stock Exchange	XWAR
Portugal	Euronext - Euronext Lisbon	XLIS
Romania	Spot Regulated Market - BVB	XBSE

Russian Federation	Moscow Exchange - All Markets	MISX
Slovenia	Ljubljana Stock Exchange (Official Market)	XLJU
Spain	Bolsas y Mercados Españoles	MABX; XMAD
Sweden	Nasdaq Stockholm	FNSE; SSME; XNGM; XSAT; XSTO
Switzerland	SIX Swiss Exchange	XSWX; XVTX
Turkey	Istanbul Stock Exchange	XIST
United Kingdom	London Stock Exchange	XLON

**Oceania**

Australia	Australian Stock Exchange	XASX
New Zealand	New Zealand Exchange	XNZE

## GLOSSARY

<i>Adjustment factor</i>	A multiplier to correct for changes in the intrinsic value of the stock not having return implications
<i>Bank fund</i>	A property company, managed by a bank, with an unlimited amount of shares. The company issues and buys back shares constantly at a price determined by the company itself
<i>Base</i>	Initial value of the index
<i>Compiler</i>	Party responsible for the management and maintenance of the indices
<i>De-merger</i>	Situation in which a company splits up in two or more entities, which may be floated
<i>Development activities</i>	Property holdings under construction
<i>Directors' holdings</i>	Shares held by the management and board of Directors of the company
<i>Ex-dividend date</i>	First trading date at which the holder of the stock is no longer entitled to receive the subsequent dividend
<i>Free float</i>	The number of shares outstanding considered to be available for trading on the stock market, excluding shares held by management, board of directors and blockholders owning more than 5% of the companies' shares outstanding.
<i>Gross dividends</i>	Dividends before taxes
<i>Indicative values</i>	Values subject to change
<i>Investment activities</i>	Income generating property holdings, including land
<i>Market capitalization</i>	Number of shares outstanding times the share price
<i>Nominee account</i>	A joint share account held by a financial institution aggregating various separate share holdings
<i>Operational turnover</i>	Recurrent income from activities
<i>Primary stock listing</i>	Quotation of the stock with the highest number of shares traded
<i>Spin-off</i>	Situation in which a company disposes part of its portfolio by creating a separate entity, which subsequently may be floated
<i>Suspension of trading</i>	A temporary deferral of regulated trading
<i>Trading volume</i>	Share turnover expressed as the number of shares traded times the price of the shares in US dollars

## CONTACTS

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