

# GUIDELINE Solactive Sustainability Index Europe

Version 2 dated November 24<sup>th</sup>, 2017



# CONTENTS

#### Introduction

# **1** Index Specifications

- 1.1 Index Name and Identifier
- 1.2 Initial Value
- 1.3 Distribution
- 1.4 Prices and Calculation Frequency
- 1.5 Weighting
- 1.6 Decision-Making Process
- 1.7 Publication
- 1.8 Historical Data
- 1.9 Licensing

#### 2 Composition of the Index

- 2.1 Selection of the Index Components
- 2.2 Ordinary Adjustment
- 2.3 Extraordinary Adjustment

# **3** Calculation of the Index

- 3.1 Index Formula
- 3.2 Accuracy
- 3.3 Adjustments
- 3.4 Dividends and Other Distributions
- 3.5 Corporate Actions
- 3.6 Calculation of the Index in the Event of a Market Disruption

# **4 Definitions**

### **5** Appendix

5.1 Contact Data

# 5.2 Calculation of the Index – Change in Calculation Method

This document contains the underlying principles and regulations regarding the structure and the operating of the Index. Solactive AG shall make every effort to implement regulations. Solactive AG does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the Index nor the Index value at any certain point in time nor in any other respect. The Index is merely calculated and published by Solactive AG and it strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for Solactive AG – irrespective of possible obligations to issuers – to advise third parties, including investors and/or financial intermediaries, of any errors in the Index. The publication of the Index by Solactive AG is no recommendation for capital investment and does not contain any assurance or opinion of Solactive AG regarding a possible investment in a financial instrument based on this Index.

# Introduction

This document is to be used as a guideline with regard to the composition, calculation and management of the Solactive Sustainability Index Europe. Any changes made to the guideline are initiated by the Committee specified in section 1.6. The Index is calculated and published by Solactive AG.

# **1** Index Specifications

The Solactive Sustainability Index Europe (the **"Index"**) is an Index of Solactive AG and is calculated and distributed by this provider.

The Index is designed to track the performance of ESG compliant companies based on the composition of the Arabesque S-Ray Europe Universe and, at the same time, construct a portfolio which aims to have low volatility. Moreover, the Index seeks to avoid excess sectoral and regional concentration.

The Index is calculated as Gross Total Return (GTR), Net Total Return (NTR) and Price Return (PR).

The Index is published in Euro (EUR).

# 1.1 Index Name and Identifier

Name	ISIN	RIC	Bloomberg Ticker	Currency	Return Type
Solactive Sustainability Index Europe GTR	DE000SLA4940	.SOLSUEUG	SOLSUEUG	EUR	GTR
Solactive Sustainability Index Europe NTR	DE000SLA4957	.SOLSUEUN	SOLSUEUN	EUR	NTR
Solactive Sustainability Index Europe PR	DE000SLA4965	.SOLSUEUP	SOLSUEUP	EUR	PR

# 1.2 Initial Value

The initial value of the Index is equal to 100 at the close of trading on the start date of December, 7<sup>th</sup> 2007.

#### 1.3 Distribution

The Index is published via the price marketing services of Boerse Stuttgart AG and is distributed to all affiliated vendors. Each vendor decides on an individual basis as to whether he will distribute/display the Index via his information systems.

### 1.4 Prices and Calculation Frequency

The price of the Index is calculated on each Business Day based on the prices on the respective primary Exchanges on which the Index Components are listed. The most recent prices of all Index Components are used. Prices of Index Components not listed in the Index Currency are translated using spot foreign exchange rates quoted by Reuters. Should there be no current price available on Reuters, the most recent price or the Trading Price on Reuters for the preceding Business Day is used in the calculation. The daily Index Closing Level is calculated using Reuters/WMCO closing spot rates as at 4pm London time.

The Index is calculated every Business Day from 9:00am to 7:00pm, CET. In the event that data cannot be provided to Reuters or to the pricing services of Boerse Stuttgart AG the Index cannot be distributed. Any incorrect calculation is adjusted on a retrospective basis.

# 1.5 Weighting

On each Adjustment Day, the Index Components are selected such that the index aims to have a lower volatility and a comparable dividend yield with respect to the Benchmark. The single steps are described in detail in Section 2.

#### **1.6 Decision-Making Process**

A Committee composed of staff from Solactive AG is responsible for decisions regarding the composition of the Index as well as any amendments to the rules (in this document referred to as the **"Committee"**). The future composition of the Index is determined by the Committee on the Selection Days according to the procedure outlined in Section 2.1 of this document. The Committee shall also decide about the future composition of the Index and, if any Extraordinary Events should occur, about the implementation of any necessary adjustments.

Members of the Committee can recommend changes to the guideline and submit them to the Committee for approval if there are regulatory reasons for changing the guideline.

#### 1.7 Publication

All specifications and information relevant for calculating the Index are made available on the

www.solactive.com web page and sub-pages.

#### 1.8 Historical Data

Back-tested data prior to the launch of the Index is available starting from December 7<sup>th</sup>, 2007. Historical data will be maintained from the Index launch date November 24<sup>th</sup>, 2017.

#### 1.9 Licensing

Licenses to use the Index as the underlying value for derivative instruments are issued to stock exchanges, banks, financial services providers and investment houses by Solactive AG.

# 2 Composition of the Index

# 2.1 Selection of the Index Components

The initial composition of the Index, as well as any ongoing adjustment, is established in line with the below rules:

The initial Selection Pool of securities eligible for inclusion in the Index is comprised by all components of the Arabesque Europe S-Ray Universe with a minimum Average Daily Value Traded of at least EUR 5.000.000 over the previous 60 Business Days and the previous 20 Business Days (min( $ADV_{60bd}, ADV_{20bd}$ ) > 5mn).

On each Selection Day, the final Index composition is determined following the steps below:

- Consider only the securities from the Selection Pool that have a higher Dividend Yield than zero and a lower Dividend Yield than 15%.
- 2. Based on the resulting *n* securities of the first selection step, an optimization algorithm determines the weights for those securities which lead to a minimal portfolio volatility, by solving the following minimization problem:

#### $\min w' V w$

Subject to the constraints:

Dividend Yield constraint	$\sum_{i=1}^{n} DY_i * w_i \ge 100\% * DY_{bench}$
Sector constraint	$\sum_{i \in S(j)} w_i \le 25\%$ , $i = 1,, n$
Country constraint	$\sum_{i \in R(j)} w_i \leq 30\%$ , $i = 1,, n$
Minimum and maximum weight cap	$0 \le w_i \le w_{max,i}$ , $i = 1,, n$

Where:

 $\min A$  = minimize A for w

*w* = n-dimensional vector of weights

V = n-by-n-dimensional variance-covariance matrix (using 125 daily returns from the Business Days immediately preceding the Selection Day) based on Trading Prices adjusted for splits, rights issues and spin-offs

- $\Sigma$  = Sum over all securities *i*
- *DY<sub>i</sub>* = Dividend Yield of security *i*
- DY<sub>bench</sub> = Historical Extrapolated Dividend Yield of the Benchmark
- S(j) = the set of securities belonging to sector j
- R(j) = the set of securities belonging to country j
- $w_{max,i}$  = the maximum weight of a security, set to 3%

If the optimizer fails to find a feasible solution to the above problem, the maximum weights are increased by 15% ( $w_{max,i} new = w_{max,i} old * 1.15$ ), and the dividend yield constraint is relaxed by 5% (e.g. from 100% to 95% in the first iteration). Subsequently the above problem is solved again. This procedure is iterated until the optimizer finds a feasible solution.

3. The resulting weights of the optimization are then dropped if they are smaller than 0.5%, this imposes a minimum weight of 0.5%. This procedure might cause the sum of weights to be smaller than one.

The missing weight is then distributed in the following manner: The remaining securities are ranked according to their Dividend Yield; starting with the highest Dividend Yield ranked security, the weights are filled up until it

reaches the maximum admissible weight of  $w_{max,i}$ ; if the sum of weights is still below one, the next ranked security is chosen and the procedure described above is repeated until the sum of weights equals to one.

The resulting weights after step 3. are the weights  $w_i^{target}$  for i=1,...,n.

#### 2.2 Ordinary Adjustment

The composition of the Index is ordinarily reviewed once a year on the Selection Day and rebalanced starting on the Adjustment Day. The Index is rebalanced over a dynamic period of M days. To ensure that the transactions do not have a significant impact on market prices, M increases with value of the assets under management (AUM) of all products linked to the respective Index, according to the following formula:

$$M = \max(5, \left|\frac{\text{AUM}}{10000000}\right|)$$

where

Μ	= Total number of Adjustment Business Days in the Adjustment Period
AUM	= Assets under Management of all products linked to the index as reported to Solactive by the Selection Date
Max(A,B)	= The larger value of A and B.
LI	= rounding to the next smaller integer value (floor).

The Target Weights for the entire Adjustment Period are determined on the Adjustment Day, after Close of Business, as follows:

$$w_i^{target}(t_0 + m) = w_i(t_0) + \frac{m * (w_i^{target} - w_i(t_0))}{M}, 0 < m \le M$$

where

$t_0$	= Adjustment Day
$w_i(t_0)$	= Percentage Weight of security i at the Adjustment Day. For the avoidance of doubt, if a security i is not an Index Component on the Adjustment Day, $w_i(t_0)$ is zero.
$w_i^{target}$	= Target Weight of security i after the completion of the Adjustment Period.
$w_i^{target}(t)$	= Target Weight of security i on Adjustment Business Day t.
т	= $m^{th}$ day of the Adjustment Period
Μ	= Total number of Adjustment Business Days in the Adjustment Period

The first adjustment will be made in December 2017 based on the Trading Prices of the Index Components on the Adjustment Day.

Solactive AG shall publish any changes made to the Index composition on the Selection Day and consequently with sufficient notice before the Adjustment Day.

For the calculation of the historic Index values before the launch of the Index, M was set to 1.

#### 2.3 Ordinary Review

In addition to the annual ordinary adjustment, there will be a quarterly ESG review. On each ESG Review Date the index composition will be reviewed for any "controversies with critical severity". In case such an event takes place, Arabesque informs Solactive in advance and the respective company will be removed at the upcoming quarterly ESG Adjustment Day over one day and its weight will be redistributed proportionally amongst the remaining companies in the Index.

# 2.4 Extraordinary Adjustment

If an Extaordinary Event occurs between two Adjustment Days, this will trigger a Committee meeting. The Committee will determine the new composition of the Index. The decision will be announced by Solactive AG after the close of business on the day of the Committee meeting. In the event that a company needs to be removed, the weight of the respective company will be split proportionally amongst the remaining companies and the Index is adjusted on the effective day of the event.

# **3** Calculation of the Index

#### 3.1 Index Formula

The Index is an index whose value on a Business Day is equivalent to the sum over all Index Components of the products of (a) the Number of Shares of the Index Component and (b) the Trading Price of the Index Component at the respective index currency.

$$UI_t = \sum_{i=1}^n x_{i,t} * p_{i,t}$$

with:

 $UI_t$ = Index on Business Day t rounded to 2 decimal places $p_{i,t}$ = Price of Index Component i on Business Day t converted into the Index Currency $x_{i,t}$ = Number of Shares of the Index Component i on Business Day t, calculated as follows

If t falls into the Adjustment Period, the Number of Shares  $x_{i,t}$  is calculated as follows

$$x_{i,t} = \frac{w_i^{target}(t) * UI_{t-1}}{p_{i,t-1}},$$

Otherwise, if no adjustment is required due to Corporate Actions

$$x_{i,t} = x_{i,t-1}.$$

#### 3.2 Accuracy

The value of the Index will be rounded to two decimal places. Trading Prices will be rounded to four decimal places.

#### 3.3 Adjustments

Indices need to be adjusted for systematic changes in prices once these become effective. This requires the new Number of Shares of the affected Index Component to be calculated on an ex-ante basis.

This procedure ensures that the first ex quote can be properly reflected in the calculation of the Index. This ex-ante procedure assumes the general acceptance of the Index calculation formula as well as open access to the parameter values used. The calculation parameters are provided by Solactive AG.

Any delay in calculating the new Number of Shares of an Index Component would create problems. Therefore, the procedure described above is the most appropriate.

# 3.4 Dividends and Other Distributions

Cash Dividends cause an adjustment of the Number of Shares of the corresponding Index Component in the Index. The new Number of Shares is calculated as follows:

$$x_{i,t} = x_{i,t-1} * \frac{p_{i,t-1}}{p_{i,t-1} - D_{i,t}}$$

#### with

x <sub>i,t</sub>	= Number of Shares of the Index Component i on Business Day t
D <sub>i,t</sub>	= Payment on Business Day t multiplied by the Dividend Correction Factor of the respective country; in case of the GTR index, the Dividend Correction Factor is zero
$p_{i,t}$	= Price of Index Component i on Business Day t

In the Price Return Index, only Special Cash Dividends are adjusted, while all Cash Dividends are adjusted in the Net and Gross Total Return version of the Index following the same formula described above. Dividend payments are adjusted in the Index on the respective ex-dividend date.

# **3.5 Corporate Actions**

# 3.5.1 Principles

Following the announcement by a company included in the Index of the terms and conditions of a corporate action, the Index Calculator determines whether such corporate action has a dilution, concentration or other effect on the price of the Index Component.

If this should be the case, the Index Calculator shall make the necessary adjustments to the affected Index Component and/or the formula for calculating the Index and/or to other terms and conditions of this document that he deems appropriate in order to take into account the dilution, concentration or other effect and shall determine the date on which this adjustment shall come into effect.

Amongst other things, the Index Calculator can take into account the adjustment made by an Affiliated Exchange as a result of the corporate action with regard to option and futures contracts on the respective security traded on this Affiliated Exchange.

#### 3.5.2 Capital Increases

In the case of capital increases (from the company's own resources or through cash contributions) the new Numbers of Shares are calculated as follows:

$$x_{i,t} = x_{i,t-1} * \frac{p_{i,t-1}}{p_{i,t-1} - rB_{i,t-1}}$$
 with:  $rB_{i,t-1} = \frac{p_{i,t-1} - B - N}{BV + 1}$ 

With:

x <sub>i,t</sub>	= Number of Shares of Index Component i on the day of the event
$x_{i,t-1}$	= Number of Shares of Index Component i on the day prior to the event
$p_{i,t-1}$	= Closing price on the day prior to ex date
$rB_{i,t-1}$	= Calculated value of rights issue
В	= Price of rights issue
Ν	= Dividend disadvantage
BV	= Subscription ratio

B = 0 if capital is increased from the company's own resources.

# 3.5.3 Capital reductions

In the case of capital reductions, the new Number of Shares is determined as follows:

$$x_{i,t} = x_{i,t-1} * \frac{1}{H_{i,t}}$$

With:

H <sub>i,t</sub>	= Reduction ratio of the company on day t
$x_{i,t}$	= Number of Shares of the affected Index Component on the day of the event
$x_{i,t-1}$	= Number of Shares of the affected Index Component on the day prior to the event

# 3.5.4 Share splits and par value conversions

In the case of share splits and par value conversions it is assumed that the prices change in ratio to the number of shares or to the par values. The new Number of Shares is calculated as follows:

$$x_{i,t} = x_{i,t-1} * \frac{N_{i,t-1}}{N_{i,t}}$$

With:

$N_{i,t-1}$	= Former par value of security class i (or new number of shares)
N <sub>i,t</sub>	= New par value of security class i (or former number of shares)
x <sub>i,t</sub>	= Number of Shares of the affected Index Component on the day of the event
$x_{i,t-1}$	= Number of Shares of the affected Index Component on the day prior to the event

#### 3.6 Calculation of the Index in the Event of a Market Disruption Event

In the event of a Market Disruption Event, Solactive AG calculates the Index value, taking into account the market conditions prevailing at this point in time, the last quoted Trading Price for each of the Index Components as well as any other conditions that it deems relevant for calculating the Index value.

# **4 Definitions**

"Adjustment Business Day" is a day on which all securities of the Index are tradable, i.e. all relevant exchanges are open for trading.

"Adjustment Period" is a period of *M* (as specified in Section 2.2) Adjustment Business Days starting on the Adjustment Day.

"Adjustment Day" is five Business Days after the Selection Date, or the immediately following Adjustment Business Day, in case of a holiday. This is the first day of the Adjustment Period.

An **"Affiliated Exchange"** is with regard to an Index Component an exchange, a trading or quotation system on which options and futures contracts on the Index Component in question are traded, as specified by the Index Calculator.

"Arabesque" is a specialist ESG Quant fund manager that uses self-learning quantitative models and big data to assess the performance and sustainability of globally listed companies. Its investment technology processes over 100 billion data points to select an investment universe of equities, integrating environmental, social, and governance (ESG) information with quantitative strategies.

The "Arabesque S-Ray Europe Universe" is determined by the following steps:

- 1. Initial Investment Universe: All tradable stocks in European developed markets are considered
- 2. Liquidity Filters: Stocks are selected if they have a market capitalization of more than USD 1bn, a free-float of more than 10% and an average daily turnover over the previous six months in excess of USD 3m
- 3. Arabesque S-Ray GC Score Filter: The 5% worst companies ranked by their GC score are excluded
- 4. Arabesque S-Ray ESG Score Filter: Within each sector, the 75% best companies ranked by their ESG scores are selected ("Best-in-class-screen"). In case several companies have an equal score at the 75% threshold, all of them are admitted to the investment universe.
- 5. Each company with a rising Arabesque S-Ray ESG Score over the previous six months is considered ("Momentum screen").
- 6. Arabesque S-Ray Preferences: Companies with revenues in excess of [5%] in nuclear power, weapons, tobacco, gambling and alcohol are excluded from the investment universe

#### Arabesque S-Ray platform:

Arabesque S-Ray is harnessing sustainability big data. It systematically combines over 450 environmental, social and governance (ESG) metrics with news analysis from over 50,000 sources across 15 languages.

#### Arabesque S-Ray GC Score:

For each GC Score, S-Ray analyses companies based on the four core principles of the United Nations Global Compact (GC): human rights, labour rights, the environment and anti-corruption. With more than 9,000 corporate signatories from over 160 countries, the UN Global Compact (GC) is the world's largest corporate sustainability initiative. It calls on companies and stakeholders to conduct business responsibly, and to pursue opportunities that advance sustainable development goals. With S-Ray, these principles are quantified for the first time on a daily basis.

#### Arabesque S-Ray ESG Score:

S-Ray incorporates sector-specific assessments of company performance across financially material environmental, social, and governance (ESG) criteria. Harnessing sustainability big data, S-Ray's unique matrix charts the financial relevance of over 450 ESG criteria per sector. Every company is scored against its sector peers only on those criteria

which seem to have a significant relationship with future financial performance. The result is a materiality driven ESG filter which provides an assessment of long-term financial performance.

### Arabesque S-Ray Preferences Filter:

S-Ray enables investors and consumers alike to research over 4,000 listed companies based on their own values, empowering everyone to make more informed decisions on how and where they use their money. The Preferences Filter offers selection tools based on the location, size and activities of a company, together with business involvements and faith compliance.

"Average Daily Value Traded" means, in respect of a security, the sum of Daily Value Traded in the Index Currency over a specified period divided by the number of Business Days that fall in the specified period.

"Benchmark" refers to the Solactive Europe Total Market 675 Index (PR) (SOLEUTMP Index). Both Price and Total Return Indices (SOLEUTMP Index and SOLEUTMG Index) were used for the calculation of the Historical Extrapolated Dividend Yield.

A "Business Day" is every weekday other than a Saturday or a Sunday unless a Market Disruption event occurs.

"Daily Value Traded" means, in respect of a security and of a Business Day, the product of (i) the Trading Price of the security in the Index Currency, and (ii) the volume traded (measured as a number of shares) of the security.

"Dividend Correction Factor" is calculated as 1 minus the applicable withholding tax rate and/or other applicable tax rate currently prevalent in the respective country. The table can be accessed on the Solactive corporate website using the following URL: http://www.solactive.com/news/documents

The **"Dividend Yield"** refers to the historical dividend yield calculated as the security level annual Dividends Per Share divided by the Close Price on the Selection Day as provided by FactSet.

"ESG Review Date" is the first Wednesday in March, June and September or the following Business Day or if that day is not a Business Day, the immediately following Business Day.

"ESG Adjustment Date" is five Business Days after the ESG Review Date or if that day is not a Business Day, the immediately following Business Day.

**"Exchange"** is, in respect of the Selection Pool and every Index Component, the respective primary exchange where the Index Component has its primary listing. The Committee may decide to declare a different stock exchange the "Exchange" for trading reasons, even if the company is only listed there via a Stock Substitute.

The **"Historical Extrapolated Dividend Yield of the Benchmark"** is calculated using the difference of the total return variant performance of the Benchmark against the price return time series performance. The formula can be written as

$$DY_{bench,t} = (Benchmark_{TR,t}/Benchmark_{TR,t-1})/(Benchmark_{PR,t}/Benchmark_{PR,t-1}) - 1$$

where:

DY <sub>bench,t</sub>	= value of the Historical Extrapolated Dividend Yield of the Benchmark on the Selection Day $t$
$Benchmark_{TR,t}$	= value of gross total return variant of the Benchmark on the Selection Day t

Benchmark <sub>TR,t-1</sub> Day t	= value of gross total return variant of the Benchmark on the day one year prior to the Selection
$Benchmark_{PR,t}$	= value of price return variant of the Benchmark on the Selection Day t
$Benchmark_{PR,t-1}$	= value of price return variant of the Benchmark on the day one year prior to the Selection Day $t$

# An "Extraordinary Event" is

# 1. Merger:

With regard to an Index Component a "Merger" is

- i. a change in the security class or a conversion of this share class that results in a transfer or an ultimate definite obligation to transfer all the shares in circulation to another legal person,
- ii. a merger (either by acquisition or through forming a new structure) or a binding obligation on the part of the issuer to exchange shares with another legal person (except in a merger or share exchange under which the issuer of this Index Component is the acquiring or remaining company and which does not involve a change in security class or a conversion of all the shares in circulation),
- iii. a takeover offer, exchange offer, other offer or another act of a legal person for the purposes of acquiring or otherwise obtaining from the issuer 100% of the shares issued that entails a transfer or the irrevocable obligation to transfer all shares (with the exception of shares which are held and controlled by the legal person), or
- iv. a merger (either by acquisition or through forming a new structure) or a binding obligation on the part of the issuer of the share or its subsidiaries to exchange shares with another legal person, whereby the issuer of the share is the acquiring or remaining company and it does not involve a change in the class or a conversion of the all shares issued, but the shares in circulation directly prior to such an event (except for shares held and controlled by the legal person) represent in total less than 50% of the shares in circulation directly subsequent to such an event.

# 2. Takeover bid

A **"Takeover bid"** is a bid to acquire, an exchange offer or any other offer or act of a legal person that results in the related legal person acquiring as part of an exchange or otherwise more than 10% and less than 100% of the voting shares in circulation from the issuer of the Index Component or the right to acquire these shares, as determined by the Index Calculator based on notices submitted to public or self-regulatory authorities or other information considered by the Index Calculator to be relevant.

# 3. Delisting

An Index Component is **"delisted"** if the Exchange announces pursuant to the Exchange regulations that the listing of, the trading in or the issuing of public quotes on the Index Component at the Exchange has ceased immediately or will cease at a later date, for whatever reason (provided delisting is not because of a Merger or a Takeover bid), and the Index Component is not immediately listed, traded or quoted again on an exchange, trading or listing system, acceptable to the Index Calculator,

# 4. Nationalisation

"Nationalisation" is a process whereby all shares or the majority of the assets of the issuer of the shares are nationalised or are expropriated or otherwise must be transferred to public bodies, authorities or institutions.

# 5. Insolvency

"Insolvency" occurs with regard to an Index Component if (A) all shares of the respective issuer must be transferred to a trustee, liquidator, insolvency administrator or a similar public officer as result of a voluntary or compulsory liquidation, insolvency or winding-up proceedings or comparable proceedings affecting the issuer of the Index Components or (B) the holders of the shares of this issuer are legally enjoined from transferring the shares.

The Trading Price for this Index Component on the day the event came into effect is the last available market price for this Index Component quoted on the Exchange on the day the event came into effect (or, if a market price is not available for the day the event came into effect, the last available market price quoted on the Exchange on a day specified as

appropriate by the Index Calculator), as determined by the Index Calculator, and this price is used as the Trading Price of the particular Index Component until the end of the day on which the composition of the Index is next set.

In the event of the Insolvency of an issuer of an Index Component, the Index Component shall remain in the Index until the next Adjustment Day. As long as a market price for the affected Index Component is available on a Business Day, this shall be applied as the Trading Price for this Index Component on the relevant Business Day, as determined in each case by the Index Calculator. If a market price is not available on a Business Day the Trading Price for this Index Component is set to zero. The Committee may also decide to eliminate the respective Index Component at an earlier point in time prior to the next Adjustment Day. The procedure in this case is identical to an elimination due to and Extraordinary Event.

The **"Index"** is the Solactive Sustainability Index Europe (see Section 1.1) which is based on the Universe. Its calculation is outlined in chapter 3.

The "Index Calculator" is Solactive AG or any other appropriately appointed successor in this function.

"Index Component" is each security currently included in the Index or, during a Adjustment Period, each security currently included in the Index and to be included in the Index during the Adjustment Period.

The "Index Currency" is Euro (EUR).

# A "Market Disruption Event" occurs if

1. one of the following events occurs or exists on a Business Day prior to the opening quotation time for an Index Component:

A) trading is suspended or restricted (due to price movements that exceed the limits allowed by the Exchange or an Affiliated Exchange, or for other reasons):

- 1.1. across the whole Exchange; or
- 1.2. in options or futures contracts on or with regard to an Index Component or an Index Component that is quoted on an Affiliated Exchange; or
- 1.3. on an Exchange or in a trading or quotation system (as determined by the Index Calculator) in which an Index Component is listed or quoted; or

B) an event that (in the assessment of the Index Calculator) generally disrupts and affects the opportunities of market participants to execute on the Exchange transactions in respect of a share included in the Index or to determine market values for a share included in the Index or to execute on an Affiliated Exchange transaction with regard to options and futures contracts on these shares or to determine market values for such options or futures contracts; or

2. trading on the Exchange or an Affiliated Exchange is ceased prior to the usual closing time (as defined below), unless the early cessation of trading is announced by the Exchange or Affiliated Exchange on this Business Day at least one hour before

(aa) the actual closing time for normal trading on the Exchange or Affiliated Exchange on the Business Day in question or, if earlier.

(bb) the closing time (if given) of the Exchange or Affiliated Exchange for the execution of orders at the time the quote is given.

"Normal exchange closing time" is the time at which the Exchange or an Affiliated Exchange is normally closed on working days without taking into account after-hours trading or other trading activities carried out outside the normal trading hours; or

3. a general moratorium is imposed on banking transactions in the country in which the Exchange is resident if the above-mentioned events are material in the assessment of the Index Calculator, whereby the Index Calculator makes his decision based on those circumstances that he considers reasonable and appropriate.

**"Number of Shares"** is in respect of an Index Component and any given Business Day the number or fraction of shares included in the Index. During the Adjustment Period, the number of shares is calculated for any Index Component as the ratio of (A) the Percentage Weight of an Index Component multiplied by the Index value and (B) its Trading Price. For days that do not fall in the Adjustment Period, the Number of Shares is changed only due to corporate actions.

"Percentage Weight" of an Index Component is the ratio of its Trading Price multiplied by its Number of Shares divided by the Index value.

**"Sector"** is one of the following ten classifications: Consumer Goods, Industrials, Basic Materials, Oil & Gas, Health Care, Utilities, Consumer Services, Financials, Technology, and Telecommunications as defined by the FactSet Economy Classification.

"Selection Day" is the first Wednesday in December or if that day is not a Business Day, the immediately following Business Day.

"Stock Substitute" includes in particular American Depository Receipts (ADR) and Global Depository Receipts (GDR).

With regard to an Index component (subject to the provisions given above under "Extraordinary Events") the **"Trading Price**" in respect of a Business Day is the closing price on this Business Day determined in accordance with the Exchange regulations. If the Exchange has no closing price for an Index Component, the Index Calculator shall determine the Trading Price and the time of the quote for the share in question in a manner that appears reasonable to him.

# **5** Appendix

# 5.1 Contact Data

Solactive AG Guiollettstr. 54 60325 Frankfurt am Main Tel.: +49 69 719 160 00 Fax: +49 69 719 160 25 indexing@solactive.com

# 5.2 Calculation of the Index – Change in Calculation Method

The application by the Index Calculator of the method described in this document is final and binding. The Index Calculator shall apply the method described above for the composition and calculation of the Index. However it cannot be excluded that the market environment, supervisory, legal, financial or tax reasons may require changes to be made to this method. The Index Calculator may also make changes to the terms and conditions of the Index and the method applied to calculate the Index, which he deems to be necessary and desirable in order to prevent obvious or demonstrable error or to remedy, correct or supplement incorrect terms and conditions. The Index Calculator is not obliged to provide information on any such modifications or changes. Despite the modifications and changes the Index Calculator will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.