

# GUIDELINE Solactive Green Bond EUR USD IG Hedged EUR Index

Version 1.0 dated May 5<sup>th</sup>, 2017



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This document contains the underlying principles and regulations regarding the structure and the operating of the Solactive Green Bond EUR USD IG Hedged EUR Index Index Canadian Dollar Hedged (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 Index. 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. The name "Solactive" is copyrighted.

### **1** Index specifications

The Solactive Green Bond EUR USD IG Hedged EUR Index (the "Index") is an Index of Solactive AG and is calculated and distributed by Solactive AG.

The index tracks the performance of the Solactive Green Bond EUR USD IG Hedged EUR Index and hedges the currency exposure to US Dollars on a monthly basis via FX forward contracts.

The Index is published in Euro [EUR].

#### 1.1 Short name and ISIN

The Index is distributed under ISIN DE000SLA3B66; the WKN is SLA3B6. The Index is published in Reuters under the code <- SGREENIH > and in Bloomberg under the code <- SGREENIH Index >.

#### 1.2 Initial value

The Index is based on 100 at the close of trading on the start date, March 31, 2014.

#### 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 Trading Day based on the prices on the respective 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 Trading Day is used in the calculation.

The Index is calculated every Trading Day from 9:00am to 10:58pm, European Time. 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

The currency weight determined based on the bond selection of the underlying index for the upcoming month, based on market data as of a day prior to Adjustment day.

#### **1.6 Decision-making bodies**

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" or the "Index Committee"). The future composition of the Index is determined by the Committee on the Selection Days according to the procedure outlined in 2.1 of this document. The Committee shall also decide about the future composition of the Index. if any Extraordinary Events should occur and the implementation of any necessary adjustments.

Members of the Committee can recommend changes to the guideline and submit them to the Committee for approval.

#### 1.7 Publication

All specifications and information relevant for calculating the Index are made available on the http://www.solactive.de web page and sub-pages.

#### 1.8 Historical data

Historical data is available from the index start date on 26<sup>th</sup> May 2017.

#### 1.9 Licensing

Licences 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 based on the calculation formula outlined in section 3.

#### 2.2 Ordinary adjustment

The composition of the Index is adjusted monthly on the Adjustment Day.

The first adjustment will be made in May 2017 based on the Prices of the Index Components on the Adjustment Day and the Trading Day immediately preceding the Adjustment Day.

### **3** Calculation of the Index

#### 3.1 Index formula

The Index Value on a Trading Day at the relevant time is calculated in accordance with the following formula:

$$HI_{t} = HI_{RT} \cdot \left(1 + \left(\frac{UI_{t}}{UI_{RT}} - 1\right) + HIM_{t}\right)$$

with:

 $HI_{t}$  = Hedged Index on Trading Day t

 $HI_{RT}$  = Hedged Index on the Adjustment Day RT immediately preceding Trading Day t

 $UI_t$  = Underlying Index on Trading Day t

 $UI_{RT}$  = Underlying Index on the Adjustment Day RT immediately preceding Trading Day t

 $HIM_t$  = Hedge Impact on Trading Day t, calculated according to the following formula:

$$HIM_{t} = AF_{RT} \cdot \sum_{i=1}^{n} W_{i,ST} \cdot S_{i,ST}^{m} \cdot \left(\frac{1}{F_{i,RT}^{m}} - \frac{1}{IF_{i,t}^{m}}\right)$$

with:

 $W_{i,ST}$  = weight of currency i on selection date ST

 $AF_{RT}$  = Adjustment Factor on Trading Day t, calculated according to the following formula:

$$AF_{RT} = \frac{HI_{RT-1}}{HI_{RT}}$$

with:

 $HI_{RT-1}$  = Hedged Index on the Trading Day immediately preceding Adjustment Day RT

 $S_{RT-1}^{m}$  = EUR/USD mid spot rate on the Trading Day immediately preceding Adjustment Day RT

 $F_{RT}^{m}$  = EUR/USD 1 month forward mid rate on the Adjustment Day RT

 $IF_t^m$  = EUR/USD 1 month interpolated forward mid rate on Trading Day t, calculated as

$$IF_t^m = S_t^m + \left(F_t^m - S_t^m\right) \cdot \frac{D - d}{D}$$

with:

 $S_t^m$  = EUR/USD mid spot rate on Trading Day t

 $F_t^m$  = EUR/USD 1 month forward mid rate on Trading Day t

*D* = number of calendar days between the last and the next Adjustment Day

d = number of calendar days between the last Adjustment Day and Trading Day t

#### 3.2 Accuracy

The value of the Index will be rounded to 4 decimal places.

#### 3.3 Calculation of the Index in the event of a Market Disruption Event

The Index is not calculated in the event of a Market Disruption Event. If the Market Disruption Event continues over a period of eight Trading Days, then the Committee will determine the necessary action (including but not limited to taking into account the market conditions prevailing at this point in time, the last quoted Prices for each of the Index Components as well as any other conditions that it deems relevant for calculating the Index value) such that the affected securities resulting from the Market Disruption Event are no longer causing such disruption to occur.

#### 4. Definitions

"Index Component" is each FX component currently included in the Index.

A **"Trading Day**" in relation to the index is any day other than a Saturday or Sunday or a day on which the Securities Industry and Financial Markets Association (SIFMA) recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities or a day that is a TARGET2 closing day. The SIFMA holiday recommendations are set out on the following URL (or any successor page): http://www.sifma.org/services/holiday-schedule/ The TARGET2 closing days are New Year's Day, Good Friday Easter Monday, Labour Day, Christmas Day and Boxing Day (https://www.ecb.europa.eu/press/pr/date/2000/html/pr001214\_4.en.html)

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

The "Index Currency" is EUR.

The "Underlying Index" is the Solactive Green Bond EUR USD IG Index.

"Adjustment Day" is the last Trading Day of each month.

#### A "Market Disruption Event" occurs if

- 1. the underlying index is not published on a Trading Day
- 2. the respective FX rates are not published on a Trading Day

# **5** Appendix

#### 5.1 Contact data

#### Information regarding the Index concept

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

#### 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.