### **SEPTEMBER 2024**

# INDEX METHODOLOGY GUIDE





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## 1. INTRODUCTION TO THE STOXX INDEX GUIDES

The STOXX index guides are separated into the following sub-sets:

- The STOXX Calculation guide provides information on the calculation of the STOXX indices, the dissemination, the index formulas and adjustments due to corporate actions
- The STOXX Index Methodology guide contains the index specific rules regarding the construction and derivation of the portfolio-based indices, the individual component selection process and weighting schemes
- » The STOXX Strategy guide contains the formulas and description of all non-equity/strategy indices
- » The STOXX Dividend Points Calculation guide describes the dividend points products
- » The STOXX Distribution Points Calculation guide describes the distribution points products
- » The STOXX ESG guide contains the index specific rules regarding the construction and derivation of the ESG indices, the individual component selection process and weighting schemes
- The iSTOXX guide contains the index specific rules regarding the construction and derivation of the iSTOXX indices, the individual component selection process and weighting schemes
- The STOXX Reference Rates guide contains the rules and methodologies of the reference rate indices
- » The STOXX Statistical Calculations guide provides a detailed view of definitions and formulas of the statistical calculations as utilized in the reports, factsheets, indices and presentations produced by STOXX

All rule books are available for download on <a href="http://www.stoxx.com/indices/rulebooks.html">http://www.stoxx.com/indices/rulebooks.html</a>



### 2. CHANGES TO THE GUIDEBOOK

### 2.1 HISTORY OF CHANGES TO THE GUIDE

- » March 2023: Addition of iSTOXX Univest Emerging World Index
- » June 2023: Special treatment of stocks in HESS with CDP Scores: "Not scored", "Not available" and "Private score"
- » October 2023: Change in the STOXX logo
- » March 2024: Methodology update in the climate constraints of iSTOXX Univest Emerging World Index
- » September 2024: Replacing the decommissioned Sustainalytics Corporate Governance Risk Score attribute with Corporate Governance Score



### 3. GENERAL PRINCIPLES

### 3.1 INDEX RATIONALE

STOXX defines the index rationale as the basis for applying a certain methodology in order to achieve the index objective. STOXX performs intensive research and may conduct conversations with market participants and third parties for this purpose. STOXX discloses the index objective in every case.

### 3.2 METHODOLOGY REVIEW POLICIES

STOXX constantly monitors the execution of the index calculation rules in order to ensure the validity of the index methodology. STOXX also conducts general methodology reviews in a periodic and ad-hoc basis, to reflect economic and political changes and developments in the investment industry. As result of these activities, STOXX introduces changes to the methodology books. Material changes are notified to subscribers and the media through the usual communication channels. Clarifications of the methodology are updated in the rulebook. All changes are tracked in the section 2.1 History of changes to the guide.

#### 3.3 INDEX TERMINATION POLICY

For the termination of an index or index family for which outstanding products are present in the market to the knowledge of STOXX, a market consultation with the involved clients will be initiated by STOXX to consider their views and concerns related to the termination or transition. A consultation period will be opened. Its duration depends on the specific issue. After the consultation period and in case of further action needed, a notification will be issued and the process defined above will be followed. In the case of a transition, STOXX will launch the alternative index and will notify of its character as a suitable replacement for an existing index whose calculation should be discontinued in the future. This notification advices clients on the alternative recommended by STOXX as replacement. The timeframe in which both indices will be calculated in parallel will be disclosed in the notification's text and will be no shorter than three months.

For the termination of an index or index family for which, to the knowledge of STOXX, no listed financial products are issued in the market, a press release notification or e-mail notification to subscribers will be communicated at least three months before coming into force. Clients or third parties with interest in the index or index family are urged to communicate as soon as possible their concerns to STOXX. Based on the feedback collected, STOXX may alter the index termination decision. For the termination of an index without financial product issued on there will be no market consultation. Changes to the original notification will be communicated in the same manner.



### 4. INDEX METHODOLOGY

### 4.1 ISTOXX UNIVEST EMERGING WORLD INDEX

#### 4.1.1 OVERVIEW

The iSTOXX Univest Emerging World Index is designed to achieve sustainable carbon reduction in terms of greenhouse gas emissions and intensities over time, while tracking the STOXX Emerging Markets Index. The weighting of each constituent security is determined through an optimization process that is designed to minimize tracking error to the benchmark while improving the ESG and Carbon exposures. The iSTOXX Univest Emerging World Index tilts away from companies that are laggards in corporate governance, and other social criteria. In addition, the Index aims to reduce its greenhouse gas emissions and intensity at least by half by December 2024 (versus the baseline values of STOXX Emerging Markets Index in December 2019) and aims to track the STOXX Emerging Markets Index with a tracking error close to 0.50%.

Parent Index: iSTOXX Emerging Markets Index

**Weighting scheme**: The index is price-weighted with weighting factors determined according to an optimization process.

Base value and date: 100 on Mar 19, 2018

Index types and currencies: Price, Net and Gross return in EUR and USD

Dissemination calendar: STOXX Global calendar.

#### 4.1.2 INDEX REVIEW

#### Constituent selection and weighting:

The iSTOXX Univest Emerging World Index is constructed by solving an optimization problem using Axioma's portfolio optimization software and the Axioma World-wide medium horizon fundamental factor risk model.

The objective of the optimization problem is to minimize tracking error to the parent index. Minimize:  $(w-b)^TQ$  (w-b)

where

b = Parent Index weights

w = Index weights

Q = covariance matrix from the Axioma Risk Model



The following constraints are applied during the optimization:

Target	Constraint
Active Risk	Within 0.5% as measured against the Parent Index
Minimum weight	0.5 bps
Maximum weight	Max (Parent Index Weight, Min (8%, 20 * Parent Index Weight))
Weight of stocks with zero or missing Trading Volume	Parent Index Weight
UCITS bounds	Apply tighter UCITS style 4.5/8/35% constraints
Active sector (ICB Level 3) exposures	Within 0.1% of Parent Index
Active country exposures	Within 0.1% of Parent Index
Active style factor exposures	Within 0.25 standard deviations of Parent Index
Limit turnover	7.5% one-way on a quarterly basis
Percentile days to trade/liquidity constraint	Maximum bound using Percentile=10%, Strength=20 parameters
Social & Governance Constraints	Further details are available to stakeholders via stoxx.com/indices
Climate Constraints	Further details are available to stakeholders via stoxx.com/indices
Scope 1 + 2 GHG emission reduction (Carbon Trajectory)	Minimum GHG emission reduction of the index is specified using an annual pathway; further details are available to stakeholders via stoxx.com/indices
GHG Intensity reduction (Carbon Trajectory)	Minimum GHG intensity reduction of the index is specified using an annual pathway; further details are available to stakeholders via stoxx.com/indices

**Active Risk**: The active risk of the index relative to the Parent Index is constrained to a maximum of 0.5%

**Minimum weight:** The minimum weight of each constituent not held at parent benchmark weight is limited to 0.5 bps.

**Maximum weight:** The maximum weight of each constituent is limited to the greater of the Parent Index weight and the lesser of 8% and twenty times the Parent Index weight. Weight of stocks with zero or missing Trading Volume: Stocks with zero or missing 60-Day Median Daily Trading Volume data are forced to be held at their Parent Index weight.

**UCITS bounds:** The maximum weight of each issuer in the index is 8%. The sum of the weights of those issuers above 4.5% cannot exceed 35%. By applying tighter constraints (4.5% / 8% / 35%) than the standard UCITs bounds (5% / 10% / 40%), we reduce the likelihood of breaching UCITs thresholds, and reduce the gravity of the breaches if they occur.

**Active sector exposures:** The exposure to each ICB Sector is summed up for the Parent Index, and the exposure of the index must be within +/- 0.1% from the Parent Index exposures.



**Active country exposures:** The exposure to each country is summed up for the Parent Index, and the exposure of the index must be within +/- 0.1% from the Parent Index exposures.

**Active style factor exposures:** The exposures to each of the style factors should be within 0.25 standard deviations of the Parent Index's factor exposures.

**Limit turnover:** The Index has a quarterly one-way turnover limit of 7.5%<sup>1</sup>.

Percentile days to trade/liquidity constraint: The maximum weight of each component in the Index is limited to twenty times its 60-day median daily trading volume multiplied by the ratio of benchmark weight and 60-day median daily trading volume of the representative stock p. The representative asset is the 10th percentile of all constituents in the Parent Index when sorted by the ratio of 60-day median trading volume divided by the Parent Index weight.

$$W_k \leq S V_k b_p / V_p$$

where:

 $W_k$  = the weight of the k-th asset in the portfolio

p = the asset with the 10-th percentile of  $^{V_{k}\,/\,b_{k}}$ 

 $b_{\scriptscriptstyle k}$  = the weight of the k-th asset in the benchmark

 $\frac{V_k}{S}$  = the daily trading volume for the k-th asset S = 20 (Strength)

**Social & Governance Constraints:** Constraints are applied against several Social and Governance criteria; further details are available in the supplement section.

**Climate Constraints:** Constraints are applied against several Climate criteria; further details are available in the supplement section.

**Scope 1 + 2 GHG emission reduction (Carbon Trajectory):** Stock level emissions from ISS ESG defined as (Scope 1 + Scope 2 Emissions) rescaled by Enterprise Value Including Cash (EVIC) are used to compute the total Index emissions. The minimum GHG emission reduction of the index is specified using an annual pathway; further details are available in the supplement section.

**GHG Intensity reduction (Carbon Trajectory):** Stock level GHG Intensities from ISS ESG defined as (Scope 1 + Scope 2 Emissions)/(Revenues in USD), are used for this constraint. The minimum GHG intensity reduction of the index is specified using an annual pathway; further details are available in the supplement section.



<sup>&</sup>lt;sup>1</sup> The Turnover constraint is disabled for the Sep 2021 rebalance, prior to Index launch

**Infeasibility Handling:** If a solution that satisfies the above constraints cannot be found, the following constraints are relaxed iteratively minimizing constraint violations at each iteration in the following order: 1) Limit Turnover 2) Active Country exposures 3) Certain climate and liquidity constraints are relaxed; further details are available in the supplement section.

**Weighting factors:** Weighting factors are based on the closing prices in EUR (pi) of the second Friday of the review month:

Weighting factor =  $(1,000,000,000,000 \times \text{wi/pi})$ , rounded to the nearest integer value.

#### Where

 $p_i$  = closing price of stock i in EUR  $w_i$  = weight of stock i in the index

**Review frequency:** The index is reviewed on a quarterly basis in March, June, September and December. The parent index rebalances semi-annually, in March and September. The review cut-off date for risk model data is the second Friday of the review month.

#### 4.1.3 INDEX REVIEW SUPPLEMENT

#### **Social & Governance Constraints**

Target	Constraint
Controversy Rating	Do not hold stocks that have Severe Controversy Rating (Category 5) from Sustainalytics
Human Rights*	Include negligible, low risk and medium risk stocks identified by Sustainalytics in Human Rights and Human Rights Supply Chain
Human Capital Risk Score*	Reduce Human Capital Score by at least 5% against Parent Index
Corporate Governance Score	Reduce Corporate Governance Score by at least 5% against Parent Index
Controversial Weapons Screen	Do not hold stocks that Sustainalytics identifies to be involved in anti-personnel mines, cluster weapons, depleted uranium

<sup>\*</sup> These constraints have been applied to the backtest starting from 2021 as the underlying data from Sustainalytics are available from May 2021.

**Controversy Rating:** STOXX will exclude companies that have Severe Controversy Rating (Category 5) from Sustainalytics.

**Human Rights:** STOXX will include companies that Sustainalytics identifies to have negligible, low risk or medium risk in Human Rights or Human Rights Supply Chain.



**Human Capital Risk Score:** The weighted average score of the Human Capital Risk MEI Score from Sustainalytics is constrained to be at least 5% less than the weighted average score of the Parent index.

**Corporate Governance Score:** The Corporate Governance Score is constructed by aggregating the Sustainalytics Corporate Governance MEI Risk Score with the Stakeholder Governance MEI Risk Score. It is then is z-scored and the weighted average z-score of the Index is constrained to be less than 0.25 standard deviations compared to the Parent Index.

**Controversial Weapons Screen:** STOXX will exclude the companies that Sustainalytics identifies to be involved in anti-personnel mines, cluster weapons, depleted uranium. The criteria for involvement are:

- » Internal production or sale
- » The ultimate holding company owns >50% of voting rights of an involved company
- » >50% of voting rights of a company is owned by the involved company

The cut-off date for Sustainalytics data is the last dissemination day of the month preceding the review month.

#### **Climate Constraints**

Target	Constraint
Thermal Coal Mining or Power Generation	Do not hold stocks that derive more than 35% of revenues from thermal coal mining or power generation from coal.
Maximum weight of stocks in HESS with CDP F, missing carbon emissions or emissions intensity or EVIC data	0.75 x Parent Index weight
Weight of stocks missing carbon emissions or emissions intensity or EVIC data	Hold at Parent Index weight
Minimum weight of SBTI Approved or CDP A rated stocks in HESS	Parent Index weight
Minimum weight of SBTI Ambitious/Committed or CDP A-/B rated stocks in HESS	0.5 x Parent Index weight
Maximum weight of CDP F rated stocks in HESS	0.75 x Parent Index weight
Maximum weight of stocks in HESS missing CDP rating or Not available or Private score	Parent Index weight
Maximum weight of stocks in HESS with CDP Score "Not scored"	Do not hold if last year's CDP rating = F Parent Index weight if last year's CDP > F

<sup>\*</sup> HESS = High Emitting Super Sectors

Exclude companies with significant proportion of revenues coming from thermal coal: Do not hold companies that ISS identifies to have more than 50% of revenues coming from thermal



coal mining or from generation of electric power using coal. The maximum percentage of recent year's revenues for the company's involvement is being used.

Weight of CDP F rated stocks missing or zero carbon emissions or emissions intensity or EVIC data: Do not hold companies in High Emitting Super Sectors with CDP rating F, that are missing carbon emissions or emissions intensity or Enterprise Value Including cash (EVIC) data. The EVIC data is based on the fiscal year data for the end of the last calendar year.

Weight of stocks missing carbon emissions or emissions intensity or EVIC data: Any stocks missing carbon emissions or emissions intensity or Enterprise Value Including cash (EVIC) data are forced to be held at their Parent Index weight.

**Minimum weight of SBTI Approved or CDP A rated stocks:** The minimum weight of each stock in High Emitting Super Sectors that has Approved verified science-based targets in accordance with SBTI or CDP Performance band of A is limited at Parent Index weight.

Minimum weight of SBTI Ambitious or Committed, or CDP A- or B rated stocks: The minimum weight of each stock in High Emitting Super Sectors that has Ambitious or Committed verified science-based targets in accordance with SBTI, or CDP Performance bank of A- or B, is limited at half of the Parent Index weight.

**Maximum weight of CDP F rated stocks:** The maximum weight of each stock in High Emitting Super Sectors with a CDP Performance band of F is capped at 75% of the Parent Index.

**Maximum weight of stocks missing CDP Rating data:** The maximum weight of stocks in High Emitting Super Sectors with CDP Rating missing or "Not available" or "Private score" is the benchmark weight.

**Maximum weight of stocks with CDP Score "Not scored":** The maximum weight of stocks in High Emitting Super Sectors with CDP Score 'Not scored' will depend on the previous year CDP Score. If the previous year's score was an F or "Not scored", the company is excluded. If the previous year's score was higher than F, the company is held at most benchmark weight.

The above asset bounds are applied sequentially, stopping at the first category that applies.

High Emitting Super Sectors are considered the following ICB Super Sectors, Basic Resources (5510), Chemicals (5520), Construction & Materials (5010), Energy (6010), Utilities (6510) and the ICB Subsector Airlines (40501010).

### **Carbon Trajectory**

Outpoil Trajectory				
Target	Constraint			
Scope 1 + 2 GHG emission	Minimum GHG emission of:			
reduction	1) 3.406% reduction each quarter against the baseline			
	index GHG emission level in December 2019			



	<ol><li>3.406% reduction each quarter against the Parent Index GHG emission level.</li></ol>
	3) previous quarter index emissions
GHG Intensity reduction	Minimum GHG intensity of:
	1) 3.406% reduction each quarter against the baseline
	index GHG intensity level in December 2019
	2) 3.406% reduction each quarter against the Parent
	Index GHG intensity level
	3) previous quarter index GHG intensity

**Scope 1 + 2 GHG emission reduction:** The GHG emissions of the Index are the minimum emissions between 1) 3.406% reduction each quarter against the index Scope 1 + 2 GHG emission baseline level as of Dec 2019, 2) 3.406% reduction each quarter against the Parent Index Scope 1 + 2 GHG emission level, and 3) previous' quarter constraint value, effectively achieving 50% reduction by the end of 2024. Stock level emissions from ISS ESG defined as (Scope 1 + Scope 2 Emissions) rescaled by Enterprise Value Including Cash (EVIC) are used to compute the total Index emissions.

**GHG Intensity year-on-year reduction:** The GHG Intensity of the Index is the minimum intensity value between 1) 3.406% reduction each quarter against the index GHG Intensity baseline level as of Dec 2019, 2) 3.406% reduction each quarter against the Parent Index GHG Intensity level, and 3) previous' quarter constraint value, effectively achieving 50% reduction by the end of 2024. Stock level GHG Intensities from ISS ESG defined as (Scope 1 + Scope 2 Emissions)/(Revenues in USD), are used for this constraint.

The cut-off date for ISS ESG data is the last dissemination day of the month preceding the review month. The cut-off date for CDP Ratings information updated annually, is the last day of the previous year.

**Infeasibility Handling:** If a solution that satisfies the above constraints cannot be found, the following constraints are relaxed in a pre-defined order, minimizing constraint violations at each stage. A constraint is only relaxed if necessary to find a solution. The order is the following, starting with the constraint most likely to be relaxed: 1) Limit Turnover 2) Active country exposures (hard constraint of -0.40%) 3) Active sector exposures 4) Percentile days to trade/liquidity constraint.

In case of violations, a notification with the list of constraint violations shall be sent to Univest.

#### 4.1.4 ONGOING MAINTENANCE

**Replacements**: Deleted companies are not replaced.

Fast exit: Not applicable.

Fast entry: Not applicable.



Spin-offs: Spin-offs are not added permanently

**Corporate Actions**: All components are maintained for corporate actions as outlined in the STOXX calculation guide available on stoxx.com

