MORNINGSTAR Indexes

Construction Rules for the Morningstar Transatlantic Paris Aligned Benchmark Select 80 Index

August 2026

Overview

The Morningstar Transatlantic Paris Aligned Benchmark Select 80 Index is designed to achieve minimum standards laid out in the European Union delegated acts. The index supports investors seeking to reduce their exposure to carbon risk and pursue opportunities arising from the transition to a low-carbon economy. The index also seeks to reward companies that have credible carbon-reduction targets while achieving a modest tracking error with respect to the parent index. The index makes use of carbon emissions, carbon rating, product involvement, and ESG controversy data provided by Sustainalytics, a Morningstar company that provides sustainability research. The Index follows the Intergovernmental Panel on Climate Change's (IPCC) '1.5°C with no or limited overshoot temperature scenario. For further information on ESG data used in the Indexes, please see the Morningstar ESG Index Glossary.

Index Inception and Performance Start Date

Performance inception and inception dates can be found in Appendix 8.

Index Construction

Methodology Summary

Investable Universe	Selection Criteria	Portfolio Construction	
• Select all Large-Mid US and Eurozone securities as classified under the Morningstar Target Market Exposure Index Family. Reweight these securities so that US makes up 30% of the portfolio and Eurozone makes up the remaining 70%	• Apply baseline exclusions. • Apply activity-based exclusions. • A liquidity filter of ADTV EUR 10 million is applied. • Exclude null and "severe" ESG Risk companies.	• Select the top 80 securities based on highest custom float market capitalization. • Apply a region constraint of 70% and 30% for Eurozone and US, respectively. • Apply the active sector constraint region-wise (US and Eurozone) where the overall high impact sector cannot be underweight w.r.t. the custom benchmark. • Apply a security capping of 5%. • Apply a minimum security weight of 1bps.	Morningstar Transatlantic Paris Aligned Benchmark Select 80 Index

Starting Universe

At each reconstitution, securities for the Morningstar Transatlantic Paris Aligned Benchmark Select 80 Index are derived from a custom Morningstar Eurozone and US Benchmark Index which is a 70/30 split by weight between the Eurozone and the US, respectively. For more details on benchmark construction, refer to the Construction rules for the Morningstar Target Market Exposure Indexes.

Eligibility

To be eligible, all constituents must meet the following criteria.

Baseline Exclusions

- The company must not have any revenue involvement in controversial weapons, essential or nonessential.
- The company must not be noncompliant with the principles of the United Nations Global Compact.
- The company must not have a null or severe controversy rating (or a level of 5).
- The company must not have a null or Severe ESG Risk Rating

Activity-Based Exclusions (Applies Only to Paris-Aligned Indexes)

- The company must not have any revenue involvement in thermal coal extraction, tobacco production/cultivation, oil sands extraction, coal power generation, Arctic oil extraction and shale extraction and thermal coal related products / services.
- The company must not have 10% or more of its revenue involvement from, oil and gas production and oil & gas related products / services.

- The company must not have 50% or more of its revenue involvement from, oil and gas generation.
- The company must not have 50% or more of its combined revenue from oil and gas generation and coal power generation.

The securities must have a three-month average daily traded volume (ADTV) of at least EUR 10 million.

The climate sector impact groups are divided within high impact and low impact. The target number of securities within individual sectors are calculated as follows:

- Target number of securities from the high impact sector group = Round Up (Total benchmark weight of securities belonging to the high impact sector group * 80)
- Target number of securities from the low impact sector group = 80 – Number of securities from the high impact sector group.

Portfolio Construction

The target number of securities within each group are selected based on the custom benchmark float market capitalization in descending order.

More details can be found in Appendix 5.

Portfolio Constraints

At each semiannual review, the indexes are constructed using a tilt-weighting methodology that aims to achieve replicability and investability while keeping the tracking error with respect to the parent index low subject to the following conditions and constraints.

Parameter	PAB
Minimum reduction in greenhouse gas intensity (scope 1 + 2 +3) relative to parent index	50%
Minimum average reduction (per year) in greenhouse gas intensity relative to the greenhouse gas intensity of the PAB portfolio at base date	7%
Sector Constraint	Cumulative weight of the High Impact sectors should not be less than 1.05x their weight in the benchmark
Region Constraint	US should be 30% and Eurozone should be 70% by weight
Security Capping	5%
Minimum security weight	1 bps

The objectives are achieved by using a tilt-weighting approach as mentioned below.

$$W_{PORT} = W_P * SCI^{\alpha} * F_{RC} * F_{SC} * F_{CP}$$

- W_{PORT} : Weight of the security in the PAB Index
- W_P: Weight of the security in the parent index
- SCI: Carbon Intensity Standard Score (refer to Step1 of process below)

- F_{RC} : Region constraint control factor
- F_{SC} : Sector constraint control factor
- F_{CP} : Security constraint control (refer to the parameter table above)
- α: Exponential tilt powers determined at each index rebalance to achieve the design objectives. The power has a sensitivity of 0.01.

The Process

Step 1: The carbon intensity standard scores for the 80 securities selected are determined by first calculating the respective Z scores over the entire universe and then using a cumulative distribution function to determine the S scores. To reflect the inverse correlation of carbon intensity with portfolio weights, the S scores are changed to 1 – S scores.

Step 2: The parent index weights are tilted by the carbon intensity S score, subject to the exponential power α. The minimum tilt weight for a security is set to 1 bps. The α is set to 0.01 for the first iteration.

Step 3: Calculate the tilt weight for all securities.

Step 4: The region tilt factors are applied to achieve the region constraints.

Step 5: Within each region, the sector tilt factors are applied to achieve the sector constraints.

Step 6: The individual security capping of 5% and the minimum security weight of 1 bps is applied without distorting the region and sector constraints.

At the end of Step 6, we check whether all constraints are being satisfied or not. If they are not, then we move on to the next iteration, increase the α by 0.01 and repeat steps 4 to 6.

Number of Stocks

The indexes target a fixed number of stocks (80) based on a transparent ranking system subject to selection and eligibility criteria at reconstitution. However, if securities fall short of the selection and eligibility criteria, or if securities are added or deleted as a result of corporate actions after reconstitution, the indexes can have more or fewer than the targeted number. During reconstitution, if the number of securities is less than the target, all eligible securities would be selected, and the weight of the constituents will be determined based on the index weighting scheme. The schedule for reconstitution and corporate actions is available in the "Index Maintenance and Calculation" section.

Index Weighting

The index is float market capitalization weighted. For more details, refer to the Morningstar Indexes Calculation Methodology rulebook.

Index Maintenance and Calculation

Scheduled Maintenance

The indexes are reconstituted semiannually. Adjustments are made on the Monday following the third Friday of June and December. If the Monday is a holiday, reconstitution occurs on the Tuesday immediately following. Market data used for reconstitution is as of the last trading day of May and November. During quarterly reviews, constituents with a controversy rating of 5 are deleted from the index and parent index eligibility is maintained. The weights of the remaining stocks are readjusted in proportion to their existing weights so that they sum up to 1.

The index is rebalanced quarterly and implemented after the close of business on the third Friday of March, June, September, and December and is effective the following Monday. If Monday is a holiday, rebalance is effective on the immediately following business day. The market data used for rebalancing is as of the last trading day of February, May, August, and November.

Corporate Actions

The treatment of corporate actions will be as per the float market capitalization weighted indexes. For more details, please refer to the "Treatment for float market capitalization indexes" section in the Morningstar Indexes Corporate Actions Methodology rulebook (if calculated by SPDJI or MI Tools)

Index Calculation and Price Data

Details about index calculations and price data can be found in their respective rulebooks: Morningstar Indexes Calculation Methodology and Equity Closing Prices Used for Index Calculation.

Methodology Review and Index Decommissioning Policy

The index methodology is continually reviewed to ensure it achieves all stated objectives. These reviews consider corporate action treatment, selection, and maintenance procedures. Subscribers to the index will be notified before any methodology changes are made. For more details, refer to the Morningstar Index Methodology Change Policy.

Morningstar also notifies all subscribers and stakeholders of the index that circumstances might arise that require a material change to the index or a possible cessation of the index. Circumstances that could lead to an index cessation include, but are not limited to, market structure change, product definition change, inadequate supply of data, insufficient revenue associated with the index, insufficient number of clients using the index, and/or other external factors beyond the control of the Morningstar Index Methodology Committee.

Because the cessation of the index or benchmark index could disrupt subscriber products that reference this index, all subscribers are encouraged to have robust fallback procedures if an index is terminated. For more details, refer to the Morningstar Index Decommissioning Policy.

Data Correction and Precision

Intraday Index Data Corrections

Commercially reasonable efforts are made to ensure the accuracy of data used in real-time index calculations. If incorrect price or corporate action data affects index calculations, corrections are applied prospectively.

Index-Related Data and Divisor Corrections

Incorrect pricing and corporate action data for individual issues in the database will be corrected upon detection. In addition, an incorrect divisor of an index, if discovered within two days of its occurrence, will always be fixed retroactively on the day it is discovered to prevent an error from being carried forward. Commercially reasonable efforts are made to correct an older error subject to its significance and feasibility.

For more details, refer to the Recalculation Guidelines.

Exceptions

While Morningstar will seek to apply the methodology as described within this document, the market environment, supervisory, legal, financial, or tax reasons may require an alternative approach to be adopted. A decision to take an alternative approach will be made by the Morningstar Index Methodology Committee, and in all instances, the application of a nonstandard process will be reported to the Morningstar Index Oversight Committee.

Appendixes

Appendix 1: Modifications to the Rulebook

Section	Description of Change	Update Date
Entire Rulebook	Updated to the new template.	February 2023
Corporate Actions	Transitioned Index to the standard Morningstar Corporate Action Methodology.	July 2024
Data Correction and Precision	Computational and Reporting Precision Section removed	June 2025
Data Correction and Precision	Exceptions section added	June 2025
Calculation of Carbon, or Greenhouse Gas, Intensity	Clarified exceptions handling language	January 2026
Appendix 5	Updated high-climate-impact NACE section references from Section L to Section M for real estate activities and added clarification regarding historical NACE classification treatment.	August 2026

Appendix 2: Glossary

Terms	Description
Reconstitution	During each reconstitution, the steps mentioned in the index construction process are performed, resulting in membership reset.
Rebalance	During each rebalancing, the weights are adjusted for updated free-float and shares outstanding data.

Appendix 3: Calculation of Target Metrics

Calculation of Carbon, or Greenhouse Gas, Intensity

The total emission of a security is defined as the sum of scope 1, scope 2, and scope 3 emissions. Enterprise value including cash (or EVIC) is the sum, at fiscal year-end, of the market capitalization of ordinary shares, the market capitalization of preferred shares, and the book value of total debt and noncontrolling interests, without the deduction of cash or cash equivalents. The carbon intensity of a security is defined as the ratio of the total emissions (in metric tons) adjusted for the inflation in EVIC and the EVIC of the company (in millions of U.S. dollars).

For parent index constituents where the scope 1+2+3 emissions intensity is not available, the average scope 1+2+3 emissions intensity of all the constituents of the Morningstar Global Target Market Exposure Large Mid Index in the same NACE section in which the constituent belongs is used. Securities with null NACE section are additionally excluded. A valid carbon intensity value can only be calculated if both the emissions and EVIC values are available for the company.

$$Total\ Emissions = (Scope\ 1 + Scope\ 2 + Scope\ 3)\ Emissions$$

$$Security\ Level\ Carbon\ Intensity = \frac{Total\ Emissions\ (1 + EVIAF)}{Enterprise\ Value\ Including\ Cash\ (in\ Mn\ USD)}$$

$$*\ Enterprise\ Value\ Inflation\ Factor\ (EVIAF) = \frac{Average\ Enterprise\ Value\ Inclusing\ Cash}{Previous\ Average\ Enterprise\ Value\ Including\ Cash} - 1$$

$$Enterprise\ Value\ Including\ Cash\ (EVIC) = (MktCapOrdinary_{Shares} + MktCap_{Preferred\ Shares} + BV_{Debt} + NCI$$

$$Weighted\ Average\ Carbon\ (GHG) Intensity = \sum (Index\ Weight * Security\ Level\ GHG\ Intensity)$$

*The Inflation adjustment factor is calculated at the parent index level.
*Carbon Intensity of securities is adjusted by the EVIAF factor only during those reconstitutions when we observe an increase in the average EVIC value as compared to the previous reconstitution. In case of a decrease, the EVIAF is set to 1.

Where a company's total reported emissions show a material deviation from the previous reconstitution, and this deviation is assessed through Morningstar Indexes' quality-assurance review to be driven by reporting timing issues or partial reporting (for example, delayed disclosure of Scope 3 financed emissions), the emissions value from the prior reconstitution may be carried forward for up to two subsequent reconstitution periods. This rule applies only to ongoing index maintenance and does not affect simulated index history.

Calculation of Target High Impact NACE Section Weights
The target weight of the High Impact Sector Group is set at 1.05x its cumulative weight in the Parent Index.

Calculation of Average Decarbonization
The climate transition and Paris-aligned indexes follow a 7% decarbonization trajectory since the base date. The weighted average greenhouse gas intensity of the portfolio at the base date is used to compute the target weighted average greenhouse gas intensity at any given semiannual index review, according to the following formula.

$CI_T = CI_0 * (0.93)^{(t-1/2)}$

Where *t* is the number of semiannual index reviews since the base date. The base date is set at June 21, 2021. CI_0 is the achieved carbon intensity of the portfolio on the base date.

We also aim to achieve a min 50% reduction in greenhouse gas intensity with respect to the custom benchmark index on each reconstitution date. The minimum of these two intensity targets is set as the target portfolio intensity.

Parent Index	**Base Date**	**Benchmark intensity (MT CO_2/Mn USD EVIC))**	**Portfolio intensity (MT CO_2/Mn USD (EVIC))**
Morningstar US and Eurozone Target Market Exposure 30/70	June 21, 2021	322.5	141.93

Appendix 4: Product Involvement-Based Exclusions

Detailed Criteria	Revenue Threshold for Paris-Aligned Indexes
Thermal Coal Extraction	0%
Thermal Coal Power Generation	0%
Thermal Coal Supporting Product/Services	0%
Oil & Gas Production	< 10%
Oil & Gas Generation	< 50%
Oil & Gas Supporting Product/Services	< 10%
Arctic Oil & Gas Exploration & Extraction	0%
Shale Energy Extraction	0%
Controversial Weapons Tailor Made & Essential	0%
Controversial Weapons Non-Tailor Made or Nonessential	0%
Oil Sands Extraction	0%
Tobacco Production	0%
Thermal Coal Power Generation Revenue	a%*
Oil & Gas Power Generation Revenue	b%*

* (a+b)% < 50%

*The *null* values for the below-mentioned data points have been backfilled in history for all Climate-Transition and Paris-Aligned Benchmark Indexes - Tobacco Production, Thermal Coal Production, Thermal Coal Supporting Products & Services, Oil & Gas Production, Oil & Gas Supporting Products & Services, Thermal Coal Power Generation, Oil & Gas Power Generation, Thermal Coal Extraction, Oil & Gas Generation, Arctic Oil & Gas Exploration & Extraction, Shale Energy Extraction and Oil Sands Extraction.

*In the backtest of Indexes listed in this methodology book, *null values post backfilling for activity-based screens have been removed from the universe with the exception of Oil & Gas Power Generation and Thermal Coal Generation, where null values have been treated as 0% revenue involvement.*

**The null values for Controversial Weapons Tailor Made & Essential and Controversial Weapons Non-Tailor Made or Non-Essential have been retained in the universe throughout history.*

** From Dec'22 onwards, any security with missing values for the above-mentioned data points (including Controversy score and GCC Status) will be removed from the universe.*

Appendix 5: Climate Impact Sectors

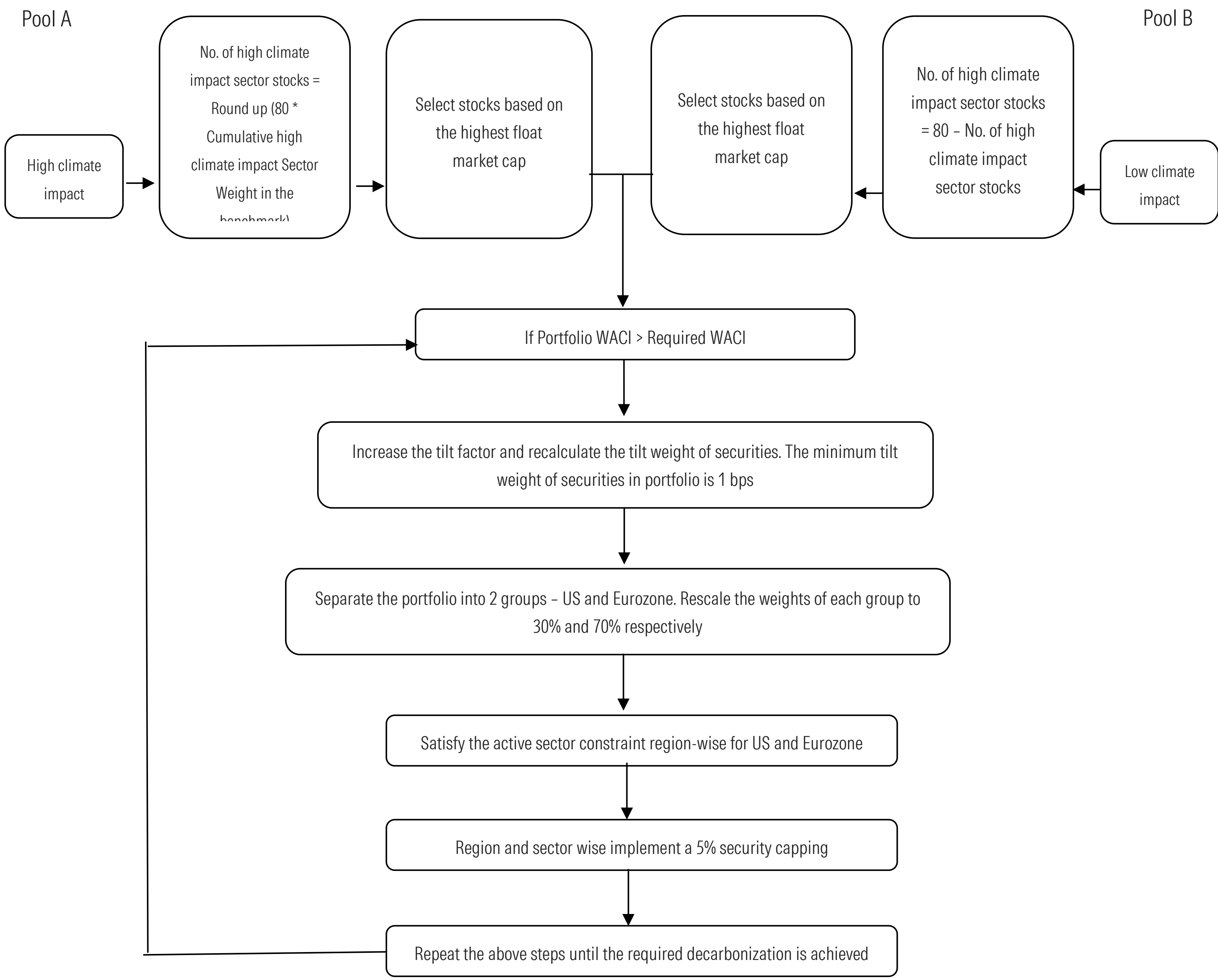
NACE is the European Union's classification of economic activities. According to EU regulation, the NACE sections A, B, C, D, E, F, G, H, and M are deemed high climate impact sectors that cannot be underweight relative to their respective weights in the parent index. However, for the Morningstar Transatlantic Paris Aligned Benchmark Select 80 Index, instead of not underweighting NACE Sections A, B, C, D, E, F, G, H and M individually, we ensure that the cumulative weight of these NACE Sections is not less than 1.05x their weight in the benchmark. The other sections are left unconstrained as a part of the tilt weighting methodology. Every company in the parent index is mapped to a particular NACE section and further aggregated to form the respective sector constraint cohorts. In the backtest, for companies that had a missing NACE section in their history, the NACE data has been back-propagated as NACE is a slow-changing data. Companies for which we did not have a valid NACE section even after back-propagating have been removed from the eligible universe. The references to NACE Sections A, B, C, D, E, F, G, H, and M in this methodology reflect amendments to the NACE classification under Commission Delegated Regulation (EU) 2023/137, under which real estate activities are represented under Section M. Prior to that date, real estate activities were represented under Section L for purposes of the high-climate-impact sector treatment. Historical backtested periods continue to use the NACE section data and classifications applied at the relevant time and are not restated to reflect the reassignment of real estate activities from Section L to Section M. The treatment of missing NACE section data remains unchanged.

For further details regarding NACE, please refer to https://ec.europa.eu/eurostat/statistics-explained/index.php?title=NACE_background.

Appendix 6: Index Treatment in Case of Inability to Meet Required Decarbonization Target

In the off chance that the Index is unable to achieve the target decarbonization in a particular year, the 5% security capping in the index will be relaxed. If we still are unable to meet the requirement, then we will relax the region constraints implemented as a part of the methodology. If this too is not sufficient, then we will relax the active sector constraint from being 5% of the benchmark weight for the High Impact NACE sections to 0%. This is in compliance with the EU Regulations, and we have implemented a stricter approach in our methodology.

Appendix 7: Securities Selection



Appendix 8: Index Inception Date and Performance Inception Date

Index Name	Parent Index	Base Value	Base Date	Performance Inception Date	Inception Date
Morningstar Transatlantic Paris Aligned Benchmark Select 80	Morningstar US and Eurozone Target Market Exposure 30/70	1,000	Jun 19, 2015	Jun 19, 2015	Feb 15 2023

Appendix 9: Decrement Variants

Index Name	Underlying Index	Base value	Base Date	Performance Inception Date	Inception Date
Morningstar Transatlantic Paris Aligned Benchmark Select 80 Decrement 5% NR EUR	Morningstar Transatlantic Paris Aligned Benchmark Select 80	1,000	19 Jun, 2015	Jun 19, 2015	Feb 15, 2023

Appendix 10: Decrement Levels

The index levels are adjusted by deducting a predetermined value of index points from the gross return (GR) or fixed percentage point from the net return (NR) levels of the base index. These constant markdowns are applied to the base Index daily.

Return Variant of the Base Index	Base Currency	Decrement Type	Decrement Frequency	Decrement Application	Decrement Value	Day Count Convention
Net Total Return Gross Total Return	EUR	Fixed Percentage Decrement or Fixed Point Decrement based on the index version.	Daily	Geometric application for both decrement types.	5% decrement based on the Net Total Return 50-point decrement based on Gross Total Return	*ACT/365

Formula for Fixed Point Decrement
Geometric Decrement Calculation

$IV_t = (IV_{t-1} \times (U_t \div U_{t-1})) - (D \times (Act(t-1,t) \div DayCount))$

Where:

IV_{t-1}/IV_{t-1} = The value of the Fixed Point Decrement Index for day t-1
U_t = The value of the base Index for calculation day t

Ut-1 = The value of the base Index for calculation day t-1
Act(t-1,t) = Number of calendar days between calculation day t-1 and calculation day t
D = The Decrement value expressed in Index points
DayCount = Set to 365

Geometric Decrement Calculation

$IV_t = IV_{t-1} \times ((U_t \div U_{t-1}) - (c \times (Act(t-1,t) \div DayCount)))$ $IVt = IVt-1 \times ((Ut \div Ut-1) - (c \times (Act(t-1,t) \div DayCount)))$

Where:

IV_t *IVt* = The value of the Fixed Percentage Decrement Index for calculation day t
Ut = The value of the base Index for calculation day t
Ut-1 = The value of the base Index for calculation day t-1
Act(t-1,t) = Number of calendar days between calculation day t-1 and calculation day t
c = The Decrement value expressed in Fixed Percentage
DayCount = Set to 365

About Morningstar Indexes

Morningstar Indexes was built to keep up with the evolving needs of investors—and to be a leading-edge advocate for them. Our rich heritage as a transparent, investor-focused leader in data and research uniquely equips us to support individuals, institutions, wealth managers, and advisors in navigating investment opportunities across major asset classes, styles, and strategies. From traditional benchmarks and unique IP-driven indexes to index design, calculation, and distribution services, our solutions span an investment landscape as diverse as investors themselves.

Morningstar Index Methodology Committee

The Morningstar Index Methodology Committee oversees all new index development, index methodology changes, and cessation of indexes for any indexes where Morningstar owns the intellectual property. This committee is also charged with ensuring that indexes align with Morningstar Research principles and values. The group comprises members of the index team with index research, product development, product management, client service, index implementation, and operation expertise who provide the first layer of governance over index design and methodology.

Morningstar Index Operations Committee

The Morningstar Index Operations Committee governs the processes, systems, and exception handling of the day-to-day management of all live indexes, including index rebalancing and reconstitution, restatements, market classification, and contingency management. The committee oversees the annual review of index methodology, as required by the European Benchmarks Regulation ("BMR"), ensuring that methodologies remain fit for purpose and continue to achieve their stated investment objectives. The group comprises members of the index team with data, operations, corporate actions, product development, index launch, client service, and index management experience who provide the first layer of governance over index operations.

Morningstar Index Oversight Committee

The Morningstar Index Oversight Committee is responsible for the index oversight function as per the requirements of the European Benchmarks Regulation ("BMR"), providing independent oversight of all aspects of the governance of benchmark administration as required by the BMR. Its remit extends to all calculation and administration-related business activities of Morningstar Indexes, including administration of Morningstar-owned benchmarks as well as client-owned benchmarks and index calculation. The oversight function is part of the organizational structure of Morningstar but is separate and independent from the index business, index management, and the other index committees.

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