

METHODOLOGY BOOK FOR:

- **MSCI WORLD SELECT ESG RATING AND TREND LEADERS INDEX**
- **MSCI EM SELECT ESG RATING AND TREND LEADERS INDEX**
- **MSCI USA SELECT ESG RATING AND TREND LEADERS INDEX**
- **MSCI EMU SELECT ESG RATING AND TREND LEADERS INDEX**

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CONTENTS

- 1 Introduction 3
- 2 MSCI ESG Research 4
 - 2.1 MSCI ESG Ratings 4
 - 2.2 MSCI ESG Controversies 4
 - 2.3 MSCI ESG Business Involvement Screening Research..... 4
- 3 Constructing the Indexes..... 5
 - 3.1 Applicable Universe..... 5
 - 3.2 Determination of Combined ESG Score 5
 - 3.3 Eligible Universe 6
 - 3.4 Index Construction 7
- 4 Maintaining the MSCI EM Select ESG Rating and Trend Leaders Index..... 9
 - 4.1 Annual Index Review 9
 - 4.2 Quarterly Index Reviews 10
 - 4.3 Ongoing Event-Related Maintenance 10
- Appendix 1: Guidelines on achieving the target sector coverage of 50%..... 13
- Appendix 2: Controversial Business Screening Criteria 15

1 INTRODUCTION

The MSCI World Select ESG Rating And Trend Leaders Index, MSCI EM Select ESG Rating And Trend Leaders Index, MSCI USA Select ESG Rating And Trend Leaders Index and MSCI EMU Select ESG Rating And Trend Leaders Index (MSCI Select ESG Rating and Trend Leaders Indexes) are free float-adjusted market capitalization weighted indexes designed to represent the performance of companies that have a robust ESG profile as well as a positive trend in improving that profile. These Indexes aims to target sector weights that reflect the relative sector weights of the underlying index to limit the systematic risk introduced by the ESG selection process. Overall the Indexes target coverage of 50% of the underlying MSCI parent indexes (the ‘Parent Indexes’).

2 MSCI ESG RESEARCH

The Indexes use company ratings and research provided by MSCI ESG Research. In particular, these indexes use the following MSCI ESG Research products: MSCI ESG Ratings, MSCI ESG Controversies and MSCI Business Involvement Screening Research.

For details on MSCI ESG Research’s full suite of ESG products, please refer to: http://www.msci.com/products/esg/about_msci_esg_research.html

2.1 MSCI ESG RATINGS

MSCI ESG Ratings provides research, analysis and ratings of how well companies manage environmental, social and governance risks and opportunities.

MSCI ESG Ratings provides an overall company ESG rating - a seven point scale from ‘AAA’ to ‘CCC’. In addition, the product provides scores and percentiles indicating how well a company manages each key issue relative to industry peers.

For more details on MSCI ESG Ratings, please refer to <https://www.msci.com/esg-ratings>

2.2 MSCI ESG CONTROVERSIES

MSCI ESG Controversies (formerly MSCI Impact Monitor) provides assessments of controversies concerning the negative environmental, social, and/or governance impact of company operations, products and services. The evaluation framework used in MSCI ESG Controversies is designed to be consistent with international norms represented by the UN Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and the UN Global Compact. MSCI ESG Controversies Score falls on a 0-10 scale, with “0” being the most severe controversy.

For more details on MSCI ESG Controversies Score, please refer to: <https://www.msci.com/esg-integration>

2.3 MSCI ESG BUSINESS INVOLVEMENT SCREENING RESEARCH

MSCI ESG Business Involvement Screening Research (BISR) aims to enable institutional investors to manage environmental, social and governance (ESG) standards and restrictions reliably and efficiently.

For more details on MSCI ESG Business Involvement Screening Research, please refer to http://www.msci.com/resources/factsheets/MSCI_ESG_BISR.pdf

3 CONSTRUCTING THE INDEXES

3.1 APPLICABLE UNIVERSE

The applicable universe includes all existing constituents of the Parent Index.

3.2 DETERMINATION OF COMBINED ESG SCORE

Each company in the applicable universe is assigned a Combined ESG score, which is calculated by taking into account the company’s MSCI ESG Rating and its MSCI ESG Rating Trend.

3.2.1 ESG RATING SCORE

Using the MSCI ESG Rating, we group companies so as to assign an ESG Rating score to each company in the applicable universe as illustrated in the table below.

Rating Group	ESG Rating	ESG Category	ESG Rating Score
1	AAA	Leaders	2
2	AA		2
3	A	Neutral	1
4	BBB		1
5	BB		1
6	B	Laggards	0.5
7	CCC		0.5

3.2.2 ESG RATING TREND SCORE

The MSCI ESG Rating Trend shows the ESG rating change from the prior period/assessment to the current period/assessment: it is expressed as the number of levels between the current rating and the previous rating. The rating trend is positive for a ratings upgrade (for example, the company’s ESG rating changed from BBB to AAA), negative for ratings downgrade (for example a company’s ESG rating changed from AA to A) and zero for no change in the rating.

An ‘ESG Rating Trend Score’ is assigned to each company based on its ESG Rating Trend as per the following table:

Trend group	ESG Rating Trend*	ESG Rating Trend Score
1	Upgrade	1.25
2	Neutral	1
3	Downgrade	0.75

* ESG Rating Trend

- Upgrade – Company’s latest ESG Rating has increased by at least one level compared to its previous assessment.
- Neutral – Company’s latest ESG Rating has stayed the same as its ESG Rating from previous assessment or MSCI ESG Research has initiated coverage on the company.
- Downgrade – Company’s latest ESG Rating has decreased by at least one level compared to its previous assessment.

3.2.3 COMBINED ESG SCORE

The Combined ESG Score is calculated for each company as follows:

$$\text{Combined ESG Score} = \text{ESG Rating Score} * \text{ESG Trend Score.}$$

3.2.4 COMBINED ESG SCORE CAPPING

The Combined ESG Score of a security is capped between the ESG Rating Scores corresponding to MSCI ESG Rating of ‘AAA’ (best rating) and ‘CCC’ (worst rating). Capping ensures that all AAA and CCC companies have same Combined ESG Score irrespective of their ESG Rating Trend.

3.3 ELIGIBLE UNIVERSE

The eligible universe is constructed by excluding securities from the applicable universe based on following criteria:

3.3.1 COMBINED ESG SCORE ELIGIBILITY

- Securities with Combined ESG Score < 0.75 are excluded.
- If the security is also an existing constituent of the Index, then it is excluded if the security’s Combined ESG Score < 0.625.

3.3.2 ESG CONTROVERSIES SCORE ELIGIBILITY

- Securities with an ESG Controversy Score ≤ 2 are excluded.
- If the security is an existing constituent of the Index, then it is excluded if constituent's ESG Controversy Score = 0.

3.3.3 CONTROVERSIAL BUSINESS INVOLVEMENT CRITERIA

Companies that are involved in specific businesses which have high potential for negative social and/or environmental impact are ineligible for inclusion in the index. Please refer to Appendix 2 for more details on these criteria.

- Alcohol
- Tobacco
- Gambling
- Nuclear Power
- Conventional and Controversial Weapons
- Civilian Firearms

3.4 INDEX CONSTRUCTION

The MSCI World Select ESG Rating And Trend Leaders Index and the MSCI EM Select ESG Rating And Trend Leaders Index are constructed at a regional level. Each regional Select ESG Rating and Trend Leaders index ('regional Index') targets 50% of the free float-adjusted market capitalization within each Global Industry Classification Standard (GICS®) sector of the underlying MSCI Parent Index.

The following regional Indexes are aggregated to construct the MSCI World Select ESG Rating And Trend Leaders Index.

MSCI Regional Select ESG Rating and Trend Leaders Index	Region	Parent Index
MSCI Pacific Select ESG Rating and Trend Leaders Index	Developed Asia Pacific	MSCI Pacific Index
MSCI Europe & Middle East Select ESG Rating and Trend Leaders Index	Developed Europe & Middle East	MSCI Europe & Middle East Index
MSCI Canada Select ESG Rating and Trend Leaders Index	Canada	MSCI Canada Index
MSCI USA Select ESG Ratings and Trend Leaders Index	USA	MSCI USA Index

The following regional Indexes are aggregated to construct the MSCI EM Select ESG Rating And Trend Leaders Index.

MSCI Regional Select ESG Rating and Trend Leaders Index	Region	Parent Index
MSCI Emerging Markets Asia Select ESG Rating and Trend Leaders Index	Emerging Asia	MSCI Emerging Markets Asia Index
MSCI Emerging Markets Europe, Middle East & Africa Select ESG Rating and Trend Leaders Index	Emerging Europe, Middle East & Africa	MSCI Emerging Markets Europe, Middle East & Africa Index
MSCI Emerging Markets Latin America Select ESG Rating and Trend Leaders Index	Emerging Latin America	MSCI Emerging Markets Latin America Index

4 MAINTAINING THE MSCI EM SELECT ESG RATING AND TREND LEADERS INDEX

4.1 ANNUAL INDEX REVIEW

The Indexes are reconstituted on an annual basis in May to coincide with the May Semi-Annual Index Review of the Parent Index, and the changes are implemented at the end of May. In general, the pro forma indexes are announced nine business days before the effective date.

In general, MSCI uses MSCI ESG Research data (including MSCI ESG Ratings, MSCI ESG Rating Trend, MSCI ESG Controversies Scores and MSCI Business Involvement Screening Research) as of the end of the month preceding the Index Reviews for the rebalancing of the Index. For some securities, such data may not be published by MSCI ESG Research by the end of the month preceding the Index Review. For such securities, MSCI will use ESG data published after the end of month, when available, for the rebalancing of the Index.

4.1.1 ANNUAL INDEX RECONSTITUTION: RANKING AND SELECTION

At each annual index review, the composition of the indexes is reassessed in order to target 50% free float-adjusted cumulative market capitalization of each sector of their respective Parent Index.

4.1.1.1 RANKING

For each sector, eligible companies of the Parent Index as described in Section 3.3 are ranked based on the following criteria:

- Combined ESG Score
- Current index membership (existing constituents above non-constituents)
- Industry adjusted ESG scores
- Decreasing free float adjusted market capitalization

4.1.1.2 SELECTION

Constituents for the Parent Index are then selected from the ranked universe in the following order until 50% coverage by cumulative free-float adjusted market capitalization target is reached:

- Securities in the top 35%
- Securities in the top 50% having a Combined ESG Score of 2 or 1.5

- Current index constituents in the top 65%
- Remaining securities in the eligible universe

Please see Appendix 1 for additional details on the ranking and selection rules.

4.1.1.3 WEIGHTING

All securities selected for inclusion are included at their free-float market capitalization adjusted weight and the security weights are capped at 15% to mitigate concentration risk.

4.2 QUARTERLY INDEX REVIEWS

The regional Indexes are also reviewed on a quarterly basis to coincide with the regular Index Reviews of the Parent Indexes. The changes are implemented at the end of February, August and November. The pro forma indexes are in general announced nine business days before the effective date.

At the Quarterly Index Reviews, existing constituents are deleted from the Index if they do not meet the eligibility criteria described in Section 3.3. Existing constituents that meet the eligibility criteria are retained in the index.

Additions, from the eligible securities as per section 3.3, are made only to those sectors where the current market capitalization coverage is less than 45%, until the 50% target is reached.

Market price movements may cause small deviations in the sector coverage between two Index Reviews. Therefore, in order to minimize turnover, a buffer of 10% is used on the target coverage of 50% to define under-representation.

At each Quarterly Index review the security weights are capped at 15% to mitigate concentration risk.

4.3 ONGOING EVENT-RELATED MAINTENANCE

The general treatment of corporate events in the Indexes aims to minimize turnover outside of Index Reviews.

The following section briefly describes the treatment of common corporate events within the Index.

The methodology aims to appropriately represent an investor's participation in an event based on relevant deal terms and pre-event weighting of the index constituents that are involved, through an accounting of proportionate share inflows related to an event.

No new securities will be added (except where noted below) to the Index between Index Reviews. For cases where additions are noted below, securities will be added to the index only if added to the Parent Index.

There are no deletions from the Indexes between index reviews on account of a security becoming ineligible because of MSCI ESG Rating downgrade and/or decrease in MSCI ESG Controversies Score and/or change in business involvement.

Parent Index deletions will be reflected simultaneously.

EVENT TYPE

EVENT DETAILS

New additions to the Parent Index

A new security added to the parent index (such as IPO and other early inclusions) will not be added to the Index.

Spin-Offs

All securities created as a result of the spin-off of an existing index constituent will not be added to the Index at the time of event implementation.

Merger/Acquisition

For M&A events, if an existing index constituent acquires another company (constituent/non-constituent) then the acquiring company will be maintained in the Index at the weighted average of the constraint factors taking into account the share and cash considerations involved in the deal.

For M&A events, if an existing index constituent is acquired by a non-index constituent, the existing constituent will be deleted from the Index and the acquiring non-constituent will not be added to the index.

Changes in Security Characteristics

A security will continue to be an index constituent if there are changes in characteristics (country, sector, size segment, etc.) Reevaluation for continued inclusion in the index will occur at the subsequent index Review.

APPENDIX 1: GUIDELINES ON ACHIEVING THE TARGET SECTOR COVERAGE OF 50%

The Indexes targets 50% of the free-float adjusted market capitalization of each Global Industry Classification Standard (GICS®) sector of their respective Parent Index. The underlying principle in the construction of the index is to achieve sector coverage closest to 50%, while aiming to maintain index stability.

The following guidelines are used in achieving the target sector coverage of 50%:

- For each sector, the eligible constituents of the Parent Index are first ranked based on the company level Combined ESG Score and then by decreasing free float adjusted market capitalization.
- In cases of two companies with the same Combined ESG Score, an existing index constituent is given preference to maintain index stability. Between two existing constituents with the same Combined ESG Score, the company with the higher industry adjusted ESG Score is given preference. For two existing index constituents with the same ESG score, the larger company by free-float adjusted market capitalization is given preference.
- The cumulative sector coverage (cumulative coverage of sector market cap weight) at each rank is calculated.
- In each sector, companies are selected as per the rules mentioned in section 4.1.1.2 until the cumulative sector coverage of the selected securities crosses 50% or there are no eligible securities left to be selected.
- MSCI defines the company that increases the cumulative sector coverage above 50% as the 'marginal company'.
- If the marginal company is a current Index constituent, then it is retained in the ESG Rating and Trend Leaders Index even though it may result in cumulative sector coverage significantly higher compared to the 50% target. This is aimed at ensuring better index stability and lower turnover.
- If the marginal company is a non-index constituent, then the marginal company will be included in the Index only if the absolute difference between the resulting coverage of including the marginal company and the 50% target is lower than the absolute difference between the resulting coverage of not including the marginal company and the 50% target.
- The minimum cumulative sector coverage is set to 45%.



- The marginal company will be added to the Index if its non-inclusion would result in cumulative sector coverage of less than 45%.
- Securities which are ineligible as per section 3.3 will not be added to increase the sector coverage to 50%

APPENDIX 2: CONTROVERSIAL BUSINESS SCREENING CRITERIA

Companies that are involved in certain controversial business activities are ineligible to be included in the Index because of the high potential for negative social and/or environmental impacts of these activities. The details for the ineligibility criteria are as follows –

- Alcohol
 - All companies classified as a “Producer” that earn either 50% or more revenue or more than \$1 billion in revenue from alcohol-related products
- Gambling
 - All companies classified as involved in “Operations” and “Support” that earn 50% or more in revenue, or more than \$1 billion in revenue, from gambling-related products
- Tobacco
 - All companies classified as a “Producer” that earn either 50% or more revenue or more than \$1 billion in revenue from tobacco-related products
- Nuclear Power
 - All companies with 6000 MW or more of installed capacity attributed to nuclear sources or with 50% or more of installed capacity attributed to nuclear sources
 - All companies involved in nuclear fuel enrichment for nuclear power generation
 - All companies involved in uranium mining for nuclear power generation
 - All companies involved in nuclear reactor design or construction for nuclear power generation
- Conventional Weapons
 - All companies that manufacture conventional weapons components or conventional weapons and weapons systems and earn 50% or more in revenue, or \$3 billion or more in revenue from these activities
- Controversial Weapons
 - Cluster munitions manufacturers
 - Landmines manufacturers
 - Depleted Uranium Weapons manufacturers
 - All companies involved in manufacturing of nuclear weapon components or nuclear weapon systems

- All companies involved in manufacturing of bio-chemical weapon components or bio-chemical weapon systems
- Civilian Firearms
 - All companies classified as a “Producer” that earn either 50% or more revenue or more than \$100 million in revenue from civilian firearms

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* = toll free

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