

MSCI Custom ESG Climate Series A Indexes Methodology

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1. Introduction

The MSCI World Custom ESG Climate Series A Index, MSCI Emerging Markets Custom ESG Climate Series A Index and MSCI AC Asia ex Japan Custom ESG Climate Series A Index (the “Indexes”) aim to represent the performance of a strategy that is designed to exclude companies based on various ESG and climate change criteria. Additionally, the constituents are reweighted in proportion of their revenue from “Green” sources and the strength of their practices and strategies to manage climate related risks and opportunities.¹

¹ The Indexes are governed by a set of methodology and policy documents (“Methodology Set”), including the present index methodology document. Please refer to Appendix III for more details.

2. Constructing the MSCI Custom ESG Indexes

2.1 Underlying Universe

The Underlying Universe for the Indexes includes all the constituents of their respective MSCI parent indexes (the “Parent Index”), as shown in the table below.

Index Name	Parent Index
MSCI World Custom ESG Climate Series A Index	MSCI World Index
MSCI Emerging Markets Custom ESG Climate Series A Index	MSCI Emerging Markets Index
MSCI AC Asia Ex Japan Custom ESG Climate Series A Index	MSCI AC Asia Ex Japan Index

The Indexes use company ratings and research provided by MSCI ESG Research² to determine eligibility for index inclusion.

2.2 Custom ESG Screened Universe

The Custom ESG Screened Universe includes all existing constituents of the Underlying Universe which are not excluded by any of the screening criteria:

2.2.1 ESG Controversies Eligibility

The Indexes use MSCI ESG Controversies Scores to identify companies that are involved in very serious environmental, social or governance controversies related to their operations and/or products and services. Companies are required to have an MSCI ESG Controversies Score of 1 or above to be eligible for inclusion in the Indexes.

In addition, companies are also excluded based on the following criteria:

1. Environment Controversies (MSCI Environment Controversy Score of 0)
2. Governance Controversies (MSCI Governance Controversy Score of 0)
3. Human Rights Controversies (MSCI Human Rights Controversy Score of 0)
4. Labor Rights Controversies (MSCI Labor Rights Controversy Score of 0)

A Score of zero is a ‘red flag’ controversy, defined as an ongoing, Very Severe ESG controversy implicating a company directly through its actions, products, or operations.

² See section 4 for further information regarding ESG and climate data used in the Indexes that MSCI Limited and MSCI Deutschland GmbH source from MSCI ESG Research LLC, a separate subsidiary of MSCI Inc. MSCI ESG Research is solely responsible for the creation, determination and management of such data as a provider to MSCI Limited and MSCI Deutschland GmbH. MSCI Limited and MSCI Deutschland GmbH are the benchmark administrators for the MSCI indexes.

Companies not assessed by MSCI ESG Research on MSCI ESG Controversies are not eligible for inclusion in the Indexes.

2.2.2 Controversial Business Involvement Criteria

The Indexes use MSCI ESG Business Involvement Screening Research and MSCI Climate Change Metrics to identify companies that are involved in the following business activities. Companies that meet the business involvement criteria are excluded from the Indexes. Please refer to Appendix I for more details on the implementation of these criteria.

- Civilian Firearms
- Controversial Weapons
- Conventional Weapons
- Nuclear Weapons
- Tobacco
- For Profit Prisons
- Adult Entertainment
- Gambling

Companies are also evaluated on customized governance criteria for the MSCI Emerging Markets Custom ESG Climate Series A Index and the Emerging Markets region within the MSCI AC Asia ex Japan Custom ESG Index.

2.3 Eligible Universe

The Eligible Universe comprises all the constituents of the Custom ESG Screened Universe that are not excluded by any of the below screening criteria.

2.3.1 Carbon Emission Exclusions

The Carbon Emissions Exclusions aim to exclude 10% of the number of securities in the Parent Index in the following steps.

1. Companies that derive 30% or more of their total annual revenues (either reported or estimated) from thermal coal-based power generation are excluded from the Eligible Universe.
2. All companies that meet the below two-step conditional exclusions rule:
 - Step 1:** Identify all companies deriving 5% or more of their total annual revenues (either reported or estimated) from thermal coal-based power generation.
 - Step 2:** Exclude all companies flagged in Step 1 which either have a Low Carbon Transition (LCT) Management Score of 4 or below, or have a score belonging to the bottom half of the Low Carbon Transition Management Score Quartile (defined as scores 3 or 4)

3. The remaining constituents of the Eligible Universe, after the exclusion in Step 1, are ranked in descending order of Scope 1 + Scope 2 emissions intensity³. If two stocks have the same emissions intensity, the stock with the lower parent weight will be assigned a higher rank and will be excluded before the stock with the higher weight in the Parent Index.
4. Top ranked stocks are excluded till the total number of stocks excluded by the Carbon Emissions Exclusions (including the stocks excluded in Step 1) is not more than 10% of the number of stocks in the Parent Index.
5. Stocks are excluded from any given sector in step 3, only if the cumulative weight of all securities excluded by the Carbon Emission Exclusions (Section 2.3.1) from this sector is less than 30% of the weight of the sector in the Parent Index. In case this limit is reached for any sector, no further securities from that sector are excluded in Step 3.

2.3.2 Ownership of Fossil Fuels

Constituents which meet any of the screening criteria below are excluded from the Eligible Universe:

Fossil Fuel Reserves

- Companies with evidence of owning fossil fuel reserves used most likely for energy applications.

Thermal Coal Mining

- Companies that derive 1% or more of their total annual revenues from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties. It does not screen out: revenues from metallurgical coal; coal mined for internal power generation (e.g. in the case of vertically integrated power producers); intra-company sales of mined thermal coal; and revenue from coal trading.

Unconventional Oil & Gas (including Arctic Oil) Extraction

- Companies that derive 50% or more revenue from oil sands, oil shale (kerogen-rich deposits), shale gas, shale oil, coal seam gas, and coal bed methane, or derive 50% or more revenue from Arctic oil production.
- All companies that meet the below two-step conditional exclusions rule:
 - Step 1:** Identify all companies deriving 5% or more revenue from oil sands, oil shale (kerogen-rich deposits), shale gas, shale oil, coal seam gas, and coal bed methane, or 1% or more revenue from Arctic oil production.
 - Step 2:** Exclude all companies flagged in Step 1 which either have a Low Carbon Transition (LCT) Management Score of 4 or below, or have a score belonging to the bottom half of the Low Carbon Transition Management Score Quartile (defined as scores 3 or 4)

Potential Emissions

- Companies that derive any revenue from the potential carbon emissions of the fossil fuel reserves, excluding metallurgical coal reserves, owned by a company.

³ Please refer to Appendix II for more details on the calculation of carbon intensity

Energy GICS Sector

- Companies that belong to Energy GICS Sector (GICS Sector Code – 10)

2.4 Weighting of Securities in Eligible Universe

At each rebalancing, securities in the Eligible Universe are first weighted in proportion of their free-float adjusted market capitalization. Additionally, the active weight of stocks in the Eligible Universe, with respect to the Parent Index, is capped at 0.2%.

After the capping of active weights of stocks in the Eligible Universe, all the securities from the Eligible Universe are weighted in proportion of the product of their “capped weight” as defined above and the Combined Tilt Score

$$Security\ Weight=Capped\ Weight*Combined\ Tilt\ Score$$

The above weights are normalized to 100%.

2.4.1 Calculation of Combined Tilt Score

The Combined Tilt Score is calculated for each security in the Eligible Universe based on the percentage of revenues derived from “Green” sources and the Low Carbon Transition Risk Management (TRM) Score⁴:

$$Combined\ Tilt\ Score=Green\ Revenue\ Tilt\ Score*TRM\ Tilt\ Score$$

2.4.1.1 Calculation of Green Revenue Tilt Score

The Green Revenue Tilt Score is calculated based on the total “Green Revenue (%)” calculated as the aggregate percentage of revenue derived from the following revenue components:

1. Energy Efficiency
2. Alternate Energy
3. Green Building

$$Green\ Revenue\ Tilt\ Score= 1+ \frac{Green\ Revenue\ (\%)}{100}$$

For any security in the Eligible Universe, if the percentage of revenue derived from any component is unavailable, the revenue from that component is assumed to be 0%.

2.4.1.2 Calculation of Transition Risk Management (TRM) Tilt Score

The TRM Tilt Score is assigned to each security in the Eligible Universe based on the TRM Score as per the table below:

TRM Score	TRM Tilt Score
TRM Score Unavailable	1.00

⁴ The MSCI Low Carbon Transition Risk Management score is an assessment of companies based on how well a company manages risk and opportunities related to the Low Carbon Transition. For further details, please refer to <https://www.msci.com/climate-change-solutions>

TRM Score less than or equal to 6	1.00
TRM Score greater than 6 but less than or equal to 7	1.05
TRM Score greater than 7 but less than or equal to 8	1.10
TRM Score greater than 8 but less than or equal to 9	1.15
TRM Score greater than 9 but less than or equal to 10	1.20

2.5 Weighting of Securities in the Final Index

The final step is to apply an active cap relative to the Parent Index. At each rebalancing, the weight of an Index constituent at security level is, with respect to the Parent Index, capped at 1%.

2.6 Treatment of Unrated Companies

Companies not assessed by MSCI ESG Research on data for any of the following MSCI ESG Research products are not eligible for inclusion in the Indexes:

- MSCI ESG Controversies
- MSCI Climate Change Metrics
- MSCI Business Involvement Screening Research

3. Maintaining the Indexes

3.1 Quarterly Index Reviews

The Indexes are reviewed on a quarterly basis, coinciding with the February, May, August and November Index Reviews of the Parent Index. The pro forma Indexes are in general announced nine business days before the effective date.

In general, MSCI uses MSCI ESG Research data⁵ (including MSCI ESG Controversies, MSCI Climate Change Metrics and MSCI ESG Business Involvement Screening Research) as of the end of the month preceding the Index Reviews for the rebalancing of the Indexes. 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.

3.2 Ongoing Event-Related Changes

The general treatment of corporate events in the Indexes aims to minimize turnover outside of Index Reviews. 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. Further, changes in index market capitalization that occur as a result of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

Additionally, if the frequency of Index Reviews in the Parent Index is greater than the frequency of Index Reviews in the Indexes, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the Indexes.

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

No new securities will be added (except where noted below) to the Index between Index Reviews. 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 be added to the index at an estimated full market capitalization adjustment factor on the date of security inclusion.

Spin-Offs

All securities created as a result of the spin-off of an existing index constituent will be added to the Index at the time of event implementation. Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.

⁵ See section 4 for details of data sourced from MSCI ESG Research used in the Indexes.

Merger/Acquisition

For Mergers and Acquisitions, the acquirer’s post event weight will account for the proportionate amount of shares involved in deal consideration, while cash proceeds will be invested across the index.

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.

Further detail and illustration regarding specific treatment of corporate events relevant to this Index can be found in the MSCI Corporate Events Methodology book.

The MSCI Corporate Events methodology book is available at:
<https://www.msci.com/index/methodology/latest/CE>

4. MSCI ESG Research

The Indexes are products of MSCI Inc. that utilize information such as company ratings and research produced and provided by MSCI ESG Research LLC (MSCI ESG Research), a subsidiary of MSCI Inc. In particular, the Indexes use the following MSCI ESG Research products: MSCI ESG Controversies, MSCI ESG Business Involvement Screening Research and MSCI Climate Change Metrics. MSCI Indexes are administered by MSCI Limited and MSCI Deutschland GmbH.

4.1 MSCI ESG Controversies

MSCI ESG Controversies provide assessments of controversies concerning the potential 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.

The MSCI ESG Controversies methodology can be found at:
<https://www.msci.com/legal/disclosures/esg-disclosures>.

4.2 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:
<https://www.msci.com/legal/disclosures/esg-disclosures>.

4.3 MSCI Climate Change Metrics

MSCI Climate Change Metrics provide climate data & tools to support institutional investors seeking to integrate climate risk & opportunities into their investment strategy and processes. This includes investors seeking to achieve a range of objectives, including measuring and reporting on climate risk exposure, implementing low carbon and fossil fuel-free strategies, alignment with temperature pathways and factoring climate change research into their risk management processes, in particular through climate scenario analysis for both transition and physical risks.

The dataset spans across the four dimensions of a climate strategy: transition risks, green opportunities, physical risks and 1.5° alignment.

For more details on MSCI Climate Change Metrics, please refer to:
<https://www.msci.com/legal/disclosures/climate-disclosures>

Appendix I: Business Involvement Screening Criteria

- **Controversial Weapons**
 - All companies with any tie to Controversial Weapons (cluster munitions, landmines, depleted uranium weapons, biological/chemical weapons, blinding lasers, nondetectable fragments and incendiary weapons), as defined by the methodology of the MSCI Global Ex-Controversial Weapons Indexes available at <https://www.msci.com/index/methodology/latest/XCW>
- **Aggregate Weapons**
 - All companies deriving 5% or more aggregate revenue from weapons systems, components, and support systems and services.
- **Civilian Firearms**
 - All companies deriving 5% or more revenue from the manufacture and retail of civilian firearms and ammunition.
- **Nuclear Weapons**
 - Companies that produce essential intended or dual-use components for nuclear weapons and nuclear weapon delivery systems.
 - Companies that produce nuclear warheads, missiles, and delivery platforms capable of deploying nuclear weapons.
- **Tobacco**
 - All companies that manufacture tobacco products which include cigars, blunts, cigarettes, e-cigarettes, inhalers, kreteks, smokeless tobacco, snuff, snus, dissolvable and chewing tobacco. This also includes companies that grow or process raw tobacco leaves.
 - All companies deriving 5% or more revenue from the distribution of tobacco products.
 - All companies deriving 5% or more revenue from the retail sales of tobacco products.
 - All companies deriving 5% or more revenue from supplying products essential to the tobacco industry.
- **Governance**

In the MSCI Emerging Markets Custom ESG Climate Series A Index and the Emerging Markets region within the MSCI AC Asia ex Japan Custom ESG Climate Series A Index, Companies are evaluated based on three distinct rules. A company failing in any one of these rules is ineligible for inclusion in the Indexes

Rule 1 - Companies will be excluded from the index if they meet all of the following four criteria:

- Companies with individual holdings of 30% or more of the voting rights⁶

⁶ Companies with missing data on the percentage holdings of the dominant shareholder will be considered as 0%.

- Companies with less than half of independence on the board⁷
- Companies which do not have an audit committee or have less than half of independence on their audit committee⁷
- Companies which do not have a remuneration committee or have less than half of independence on their remuneration committee⁷

Rule 2 - Companies without an Unqualified auditors opinion⁸ will be excluded from the index

Rule 3 - Companies that are state owned entities, with either 85% or more of the voting rights held by the largest shareholder, or have a MSCI Human Rights Controversy Score of less than 5, and belong to countries⁹ that meet all of the following four criteria, are excluded from the index.

- Countries identified by Freedom House as having weak civil liberties in its Freedom in the World report.
- Countries identified by Freedom House as having weak political rights in its Freedom in the World report.
- Sovereign entities identified by 'Reporters Without Borders' as not good or satisfactory in its World Press Freedom Index.
- Countries on the U.S. Commission on International Religious Freedom's list of Tier 1 Countries of Particular Concern.

- **For Profit Prisons**

- Companies that derive 5% or more of their total annual revenues (either reported or estimated) from activities related to For Profit Prisons.

- **Adult Entertainment**

- All companies deriving 5% or more revenue from the production, distribution or retail of adult entertainment products or services

- **Gambling**

- All companies deriving 5% or more revenue from gambling operations, including online or mobile gambling, and supporting activities.

⁷ Companies with missing data on the percentage of independent members on the board / remuneration committee / audit committee, will be treated as "not independent".

⁸ Companies with missing data on the auditor's opinion will be excluded from the Index.

⁹ As defined by MSCI's Country of Classification framework.

Appendix II: Calculation of Target Metrics

Greenhouse Gas (GHG) Emissions Intensity

MSCI ESG Research collects company-specific direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions (GHG) data from company public documents and/or the Carbon Disclosure Project. If a company does not report GHG emissions, then MSCI ESG Research estimates Scope 1 and Scope 2 GHG emissions.

Calculation of GHG Intensity

Carbon emissions of a company are normalized for size by dividing annual carbon emissions by annual sales of the company. The Carbon Emissions Intensity is calculated using the latest Scope 1+2 carbon emissions and Sales of a company.

Security Level GHG Intensity (Scope 1+2) =

$$\frac{(\text{Scope 1 + 2 Carbon Emissions})}{\text{Sales (in M\$)}}$$

Estimation of missing Carbon Intensity data

For a security, if Scope 1+2 carbon emissions are not available but Sales are available, MSCI estimates emissions by multiplying the Sales of the security with the average Sales intensity (i.e., Scope 1+2 emissions / Sales) of all constituents of MSCI ACWI in the same GICS Industry Group that have both Scope 1+2 Emissions and Sales available.

If Sales are not available for a security but Scope 1+2 emissions are available, MSCI estimates Sales by dividing the security's Scope 1+2 emissions by the average Sales intensity (i.e., Scope 1+2 emissions / Sales) of all constituents of MSCI ACWI in the same GICS Industry group that have both Scope 1+2 emissions and Sales available.

In case both Scope 1+2 emissions and Sales are not available for a security:

- The Sales are estimated by dividing the security's Issuer market capitalization by the average Issuer market capitalization to Sales ratio of all constituents of MSCI ACWI in the same GICS Industry Group that have Sales available.
- The emissions are estimated by multiplying the estimated Sales of the security by the average Sales intensity (i.e., Scope 1+2 emissions / Sales) of all constituents of MSCI ACWI in the same GICS Industry group that have both Scope 1+2 emissions and Sales available.

In case there are no securities in the GICS Industry Group with relevant data available for the estimation, then the estimation is applied at the level of the corresponding GICS Sector.

For a security, if Sales is zero, the emissions intensity will be set to zero.

Appendix III: Methodology Set

The Indexes are governed by a set of methodology and policy documents (“Methodology Set”), including the present index methodology document as mentioned below:

- Description of methodology set – <https://www.msci.com/index/methodology/latest/ReadMe>
- MSCI Corporate Events Methodology – <https://www.msci.com/index/methodology/latest/CE>
- MSCI Fundamental Data Methodology – <https://www.msci.com/index/methodology/latest/FundData>
- MSCI Index Calculation Methodology – <https://www.msci.com/index/methodology/latest/IndexCalc>
- MSCI Index Glossary of Terms – <https://www.msci.com/index/methodology/latest/IndexGlossary>
- MSCI Index Policies – <https://www.msci.com/index/methodology/latest/IndexPolicy>
- MSCI Global Industry Classification Standard (GICS) Methodology – <https://www.msci.com/index/methodology/latest/GICS>
- MSCI Global Investable Market Indexes Methodology – <https://www.msci.com/index/methodology/latest/GIMI>
- MSCI Global ex Controversial Weapons Indexes Methodology – <https://www.msci.com/index/methodology/latest/XCW>
- ESG Factors In Methodology*

The Methodology Set for the Indexes can also be accessed from MSCI’s webpage <https://www.msci.com/index-methodology> in the section ‘Search Methodology by Index Name or Index Code’.

* ‘ESG Factors in Methodology’ contains the list of environmental, social, and governance factors considered, and how they are applied in the methodology (e.g., selection, weighting or exclusion). It can be accessed in the Methodology Set as described above.

Appendix IV: Changes to this Document

The following sections have been modified as of August 2019 -

Section 3.1: Added MSCI Emerging Markets Custom ESG Climate Series A Index with Parent Index as MSCI Emerging Markets Index.

Section 3.2.1: Added screen for ESG Controversies for Emerging Markets region

Appendix I: Update to include the Governance screens specific to the MSCI Emerging Markets Custom ESG Climate Series A Index.

The following sections have been modified as of October 2021 -

Section 3.1: Added MSCI AC Asia Ex Japan Custom ESG Climate Series A Index with Parent Index as MSCI AC Asia Ex Japan Index.

The following sections have been modified as of November 2021 -

Section 3: Update to include the enhancements to the controversial business involvement screening criteria.

Appendix I: Update to include the definitions of the enhancements in the controversial business involvement screens

The following sections have been modified as of May 2022 -

Section 3.3.2: Update to reflect enhanced Fossil Fuel Screening Criteria for Arctic oil

The following sections have been modified as of August 2023 -

Section 2.2.1: Clarified the exclusion criteria for companies involved in ESG Controversies.

Section 2.3.2: Clarified the exclusion criteria for Thermal Coal.

Section 4: Moved section after the Section 3 and updated the descriptions of MSCI ESG Research Products.

Appendix I: Clarified the exclusion criteria for the 'Tobacco' screen.

The following sections have been modified as of February 2024:

Appendix I: Business Involvement Screening Criteria

- Screens descriptions were clarified.

Appendix II: Methodology Set

- Added details on the Methodology Set for the Index.

The following sections have been modified as of November 2024

Section 2.2.2 Controversial Business Involvement Criteria

- Added the new screening criteria for Adult Entertainment and Gambling.

2.3.1 Carbon Emission Exclusions

- Removed Nuclear Power Screens

2.3.2 Ownership of Fossil Fuels

- Updated threshold from 5% to 1% for the mining of thermal coal
- Added a new screen for Unconventional oil & gas (including Arctic oil) extraction

2.5 Weighting of Securities in the Final Index

- New section added

2.6 Treatment of Unrated Companies

- Added the treatment of companies when ESG controversies, business involvement screening research or climate change metrics research not available from MSCI ESG Research

Appendix I: Business Involvement Screening Criteria

- Updated description for Nuclear Weapons exclusion
- Added new footnotes and updated description for Governance Screen.
- Added details for new screening criteria for Adult Entertainment and Gambling

Appendix II: Calculation of Target Metrics

- New appendix added to provide clarification in the Carbon Emissions Intensity Exclusion Criteria

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