

MSCI Climate Action Indexes Methodology

December 2024

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1. Introduction

The MSCI Climate Action Indexes (the 'Indexes') are designed to represent the performance of companies that have been assessed to lead their sector peers in terms of their positioning and actions relative to a climate transition.

Companies from the underlying parent index (the "Parent Index") are assessed relative to their sector peers based on their emissions intensity, emissions reduction commitments, climate risk management and revenue from greener businesses. The Indexes uses this assessment to select the top 50% of the companies from each GICS®¹ sector in the Parent Index. The Indexes target a coverage of 50% of the companies per sector from the Parent Index².

¹ GICS is the global industry classification standard jointly developed by MSCI and S&P Global Market Intelligence.

² The Indexes are governed by a set of methodology and policy documents ("Methodology Set"), including the present index methodology document. Please refer to Appendix VI for more details.

2. Constructing the Index

2.1 Applicable Universe

The Applicable Universe includes all the existing constituents of the Parent Index. This approach aims to provide an opportunity set with sufficient liquidity and investment capacity.

The Indexes use company ratings and research provided by MSCI ESG Research³ to determine eligibility for index construction.

2.2 Eligible Universe

The Eligible Universe is constructed from the Applicable Universe by excluding securities of companies based on the exclusion criteria below:

2.2.1 ESG Controversy Score Eligibility

- **ESG Controversies:** All companies assessed as having involvement in ESG controversies that are classified as Red Flags (MSCI ESG Controversy Score of 0). A Red Flag indicates an ongoing, Very Severe ESG controversy implicating a company directly through its actions, products, or operations.

2.2.2 ESG Business Involvement Eligibility

The MSCI Climate Action 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 MSCI Climate Action Indexes. Please refer to Appendix I for details on these criteria.

- Controversial Weapons
- Tobacco
- Thermal Coal Mining
- Oil Sands
- Nuclear Weapons

³ 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.

2.2.3 Emission Eligibility

Securities which either have higher Emission Intensity⁴ than the High Emission Threshold (defined below) or higher total potential emission⁵ than the High Potential Emission Threshold (defined below) and do not yet have approved science-based targets⁶ are excluded.

- High Emission Threshold – Emission Intensity of the constituent(s) of the MSCI ACWI Index at the 95th percentile based on Emission Intensity. This 95th percentile calculation excludes securities without emissions data.
- High Potential Emission Threshold – Total Potential Carbon Emissions excluding Metallurgical Coal of the constituent(s) of the MSCI ACWI Index at the 95th percentile based on Total Potential Carbon Emissions excluding Metallurgical Coal. This 95th percentile calculation only includes companies which are considered most likely to use their fossil fuel reserve for energy applications⁷. Securities without Total Potential Carbon Emissions data are not included in this calculation of 95th percentile.

2.2.4 Climate Risk Management Eligibility

All securities which are in the lowest quartile of their GICS sector based on their Climate Risk Management Score are excluded (broadly speaking, these are securities with the least favorable assessment of the issuer's approach to key issues related to Climate Change Risk and Environmental Opportunities). The calculation of the Climate Risk Management Score is described in Appendix II.

2.3 Selection of Eligible Securities

2.3.1 Security-Level Assessment

- Intensity Score - Each security is assigned to a quartile based on its sector relative Scope 1+2+3 Greenhouse Gas (GHG) Intensity⁸.

This quartile is labelled as the 'Intensity Score' and is thus an integer between 1 and 4. For example, securities which constitute the lowest 25% of their sector based on emissions intensity would be assigned an 'Intensity Score' of 1.

- Each security is assigned a final Assessment by adjusting the initial Intensity Score according to the following sequence:

⁴ The calculation of Emission Intensity is described in Appendix II

⁵ Total Potential Emission is calculated as the potential carbon emissions of the fossil fuel reserves, excluding metallurgical coal reserves, owned by a company. It is computed as the sum of the potential carbon emissions of the thermal coal, total oil and total gas reserves owned by the company.

⁶ Company level emission reduction targets which have been approved by Science Based Targets initiative (SBTi). More details on SBT are available at <https://sciencebasedtargets.org/companies-taking-action>

⁷ Companies with 'Fossil Fuel Reserves – Energy Application' set to True.

⁸ Prior to the May 2020 Semi-Annual Index Review (SAIR) of the Indexes, the Green House Gas (GHG) Intensity has been calculated based on Scope 1+2 Emissions. The Scope 3 Emissions used in the May 2020 Semi-Annual Index Review of the Indexes is as of Jun 30, 2020

- The Intensity Score is lowered by two quartiles for all securities that either have an approved science-based targets (SBTi) or are assessed to have Credible Track Record.
- For the remaining securities, the Intensity Score is lowered by one quartile for any securities in the fourth quartile based on sector-relative Climate Risk Management Weighted Average Score or Green Business Revenue⁹
 - The Intensity Score of fourth quartile companies based on sector relative Green Business Revenue is lowered only if the Green Business Revenue \geq 5%.
- The Security-Level Assessment is floored at 1. More details on calculation steps of Security-Level Assessment are described in Appendix II.

The calculation steps for Intensity Score, Credible Track Record, Climate Risk Management Weighted Average Score¹⁰, Green Business Score and Green Business Revenue¹¹ are also described in Appendix II

2.3.2 Ranked Universe

The Ranked Universe is constructed by sorting eligible securities of each GICS sector, in ascending order of Security-Level Assessment and descending order of float adjusted market capitalization.

2.3.3 Security Selection

For each GICS sector in the Ranked Universe, 50% of the number of securities in the Applicable Universe are selected in the following order –

- Securities are selected from the top until the number of selected stocks is less than or equal to 40%¹² of the number of securities in the Applicable Universe.
- Securities which are ranked between 40% and 60% of the number of securities in the Applicable Universe and are also current constituents of the Index are selected.
- Remaining securities which are ranked between 40% and 60% of the number of securities in the Applicable Universe are selected until the total number of selected securities is less than or equal to 50% of the number of securities in the Applicable Universe. Any security which takes the number of selected securities beyond 50% of the number of securities in the Applicable Universe is also selected.

⁹ The fourth quartile here corresponds in broad terms to strong climate risk management or high sector-relative green business revenues

¹⁰ See Appendix III for the definition

¹¹ See Appendix IV for the definition

¹² During the May 2022 Semi Annual Index review, securities are selected from the top until the number of selected stocks is less than or equal to the 50% of the number of securities in the Applicable Universe

2.4 Weighting Of Selected Securities

The Parent Index weights of selected securities are renormalized to 100%. Additionally, the max issuer weights are capped at 5%.

2.4.1 Active GICS Sector Weight Cap and Floor

The Active sector weights of selected securities are restricted between +/-5%. The active sector weights are capped in the following steps

- Active sector weights are calculated by aggregating the active weight of securities in the Parent Index. The active weight is calculated as the difference between the weight of securities calculated as per section 2.4 and their respective weight in the Parent Index.
- Active sector weights which are greater than +5% are capped at +5% and active sector weights which are smaller than -5% are floored at -5%.
- Sector weights of remaining sectors are renormalized so that aggregate weight of all sectors sum to 100%. • For each GICS sector, the sector weight as calculated above is distributed to the selected securities within the GICS sector in proportion of their weight calculated under section 2.4.

2.5 Treatment Of Unrated Companies

Companies not assessed by MSCI ESG Research on data for 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 (BISR)

Companies without Emission Intensity data described in section 2.2.3 (companies for which Emission Intensity cannot be calculated) are not eligible for inclusion in the Indexes.

For the treatment of unrated companies in the calculation of Climate Risk Management Weighted Average Score, please refer to Appendix III.

3. Maintaining the Indexes

3.1 Semi-Annual Index Reviews

The Indexes are rebalanced on a semi-annual basis¹³, as of the close of the last business day of May and November, coinciding with the May and November Index Review of the MSCI Global Investable Market Indexes. The pro forma Indexes are in general announced nine business days before the effective date.

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

3.2 Quarterly Index Reviews

The Indexes are rebalanced on a quarterly basis, as of the close of the last business day of February and August, coinciding with the February and August Index Review of the MSCI Global Investable Market Indexes. The pro forma Indexes are in general announced nine business days before the effective date. During quarterly reviews, the 'ESG Controversy Score Eligibility' and 'ESG Business Involvement Eligibility' of existing constituents are reviewed. Existing constituents that meet the exclusion criteria are deleted from the index and the weight of remaining constituents are renormalized to 100%.

In general, MSCI uses MSCI ESG Controversies data and MSCI Business Involvement Screening Research data as of the end of the month preceding the Index Reviews for the rebalancing of the Indexes.

3.3 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.

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

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 not be added to the index.

¹³ Prior to October 31, 2019, each periodic rebalancing of the Index applied the "Reporting Emission Reduction Targets" value as of October 31, 2019 and the "Approved Science Based Targets" value as of November 30, 2021.

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.

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 under the sections detailing the treatment of events in Capped Weighted and Non-Market Capitalization Weighted indexes.

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

4. MSCI ESG Research

The Indexes are a product 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 Ratings, MSCI Impact Solutions, MSCI Climate Change Metrics and MSCI ESG Controversies. MSCI Indexes are administered by MSCI Limited and MSCI Deutschland GmbH.

4.1 MSCI ESG Ratings

MSCI ESG Ratings aim to measure entities' management of environmental, social and governance risks and opportunities. MSCI ESG Ratings use a weighted average key issue calculation that is normalized by industry to arrive at an industry-adjusted ESG score (0-10), which is then translated to a seven-point scale from 'AAA' to 'CCC', indicating how an entity manages relevant key issues relative to industry peers.

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

4.2 MSCI Impact Solutions: Sustainable Impact Metrics

MSCI Impact Solutions' Sustainable Impact Metrics is designed to identify companies that derive revenue from products or services with positive impact on society and the environment. The Sustainable Impact Metrics are comprised of six Environmental Impact categories and seven Social Impact categories arranged by theme.

MSCI Sustainable Impact Taxonomy

Pillar	Themes	Categories
Environmental Impact	Climate Change	<ol style="list-style-type: none"> 1. Alternative energy 2. Energy efficiency 3. Green building
	Natural capital	<ol style="list-style-type: none"> 4. Sustainable water 5. Pollution prevention 6. Sustainable agriculture
Social Impact	Basic needs	<ol style="list-style-type: none"> 7. Nutrition 8. Major Disease Treatment 9. Sanitation 10. Affordable Real Estate
	Empowerment	<ol style="list-style-type: none"> 11. SME Finance 12. Education 13. Connectivity – Digital divide

Under each of the actionable environmental and social impact themes, MSCI ESG Research has identified specific categories of products and services that it has determined companies can offer as potential solutions to environmental and social challenges.

For more details on MSCI Sustainable Impact Metrics, please refer to <https://www.msci.com/legal/disclosures/esg-disclosures>.

4.3 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>.

4.4 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.

The MSCI Business Involvement Screening Research methodology can be found at: <https://www.msci.com/legal/disclosures/esg-disclosures>.

4.5 MSCI Climate Change Metrics

MSCI Climate Change Metrics provides 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.

4.5.1 Fossil Fuels and Power Generation Metrics

MSCI ESG Research identifies companies involved in fossil fuel-related assets and activities including fossil fuel reserves, resource extraction, power generation and generation capacity, revenue from such assets and activities and capital investments in such assets and activities. The metrics are based on disclosed activities, disclosed revenue and estimates of revenue that are extrapolated from company disclosures and eligible third-party sources (such as NGOs).

4.5.2 Greenhouse Gas (GHG) Emissions

MSCI ESG Research collects reported emissions and uses proprietary estimation methodologies that follows the GHG Protocol in including carbon dioxide (CO₂) and the five other principal GHGs: hydrofluorocarbons (HFCs), methane (CH₄), nitrous oxide (N₂O), perfluorocarbons (PFCs), and



sulfur hexafluoride (SF₆). Emissions of these other gases are accounted for in terms of the quantity of CO₂ that has an equivalent global warming potential.

For more details on MSCI Climate Change Metrics, please refer to:

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

Appendix I: ESG Business Involvement Eligibility

- **Controversial Weapons**

- All companies with any tie to Controversial Weapons (cluster munitions, landmines, depleted uranium weapons, biological/chemical weapons, blinding lasers, non-detectable fragments, and incendiary weapons), as defined by the methodology of the MSCI Global Ex-Controversial Weapons Indexes available at <https://www.msci.com/indexmethodology>.

- **Tobacco**

- All companies classified as a “Producer”.
- All companies deriving 5% or more aggregate revenue from the production, distribution, retail, supply, and licensing of tobacco related products.

- **Thermal Coal Mining**

- All companies deriving 1% or more revenue (either reported or estimated) from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties. It does not cover revenue 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 (either reported or estimated).

- **Oil Sands**

- All companies deriving 5% or more revenue from oil sands extraction, which own oil sands reserves and disclose evidence of deriving revenue from oil sands extraction. It does not cover revenue from non-extraction activities (e.g., exploration, surveying, processing, refining), ownership of oil sands reserves with no associated extraction revenue, or intra-company sales.

- **Nuclear Weapons**

- All companies that manufacture nuclear warheads and/or whole nuclear missiles. It includes assembly and integration of warhead and missile body, as well as companies with contracts to operate/manage government-owned facilities that manufacture nuclear warheads and missiles.
- All companies that manufacture components that were developed or are significantly modified for exclusive use in nuclear weapons (warheads and missiles). It includes companies with contracts to operate/manage government-owned facilities that manufacture components for nuclear warheads and missiles.
- All companies that manufacture or assemble delivery platforms that were developed or significantly modified for the exclusive delivery of nuclear weapons.
- All companies that provide auxiliary services related to nuclear weapons, such as repairing and maintaining nuclear weapons, providing overhaul and upgrade services, stockpiling and stewardship, R&D work, testing and simulations, etc. It also includes companies with contracts to operate/manage government-owned facilities that conduct R&D, testing, simulations, and other essential sciences on nuclear weapons.

- All companies that manufacture components that were not developed or not significantly modified for exclusive use in nuclear weapons (warheads and missiles) but can be used in nuclear weapons.
- All companies that manufacture or assemble delivery platforms that were not developed or not significantly modified for the exclusive delivery of nuclear weapons but have the capability to deliver nuclear weapons.
- All companies that manufacture components for nuclear-exclusive delivery platforms.

Appendix II: Calculation of Security Level Scores

Sector Relative Quartiles

For each security in the Applicable Universe, the following security level scores are calculated as sector relative quartiles:

Table 1

Score	Ranking Metric
1. Intensity Score	Emission Intensity
2. Green Business Score	Green Business Revenue
3. Climate Risk Management Score	Climate Risk Management Weighted Average Score
4. Track Record Score	Emission Track Record

- Emission Intensity
 - Security level Emission Intensity = Global Green House Gas (GHG) Emission / (Enterprise Value + Cash (\$))
 - GHG Emission = Emissions from Scope 1+2+3¹⁴
- Green Business Revenue - Security level cumulative % of revenue from a set of 'Clean Tech' themes described in Appendix IV.
- Climate Risk Management Raw Score - Security level weighted average of a set of climate change related key issue management scores which are described in Appendix III.
- Emission Track Record – Security level track record is calculated as follows:
 - Security level yearly (YoY) change in emission is calculated for last 4 years (3 yearly changes).
 - Average Yearly Emission Change – security level 'average yearly emission change' is calculated as a geometric average of last 3 yearly changes. Average Yearly Emission Change is not calculated for securities with less than 4 years of emission data.
 - Emission Track Record – For all securities which meet the following conditions their Emission Track Record is set to be equal to the Average Yearly Emission Change
 - Average Yearly Emission Change < - 2%
 - Reports Scope 1 and 2 emissions
 - Has published an emission reduction target

Emission Track Record is not assigned to securities which do not meet above conditions.

¹⁴ Prior to June 1, 2020, security level GHG Emission = Emissions from Scope 1+2

Calculation of Sector Relative Quartiles

- For each GICS sector, securities are ranked in descending order of their ranking metric and then descending order of float adjusted market capitalization.
- Ranked securities are divided into four equal groups (quartiles).
- Securities in the top group receive a score of 4 and securities in the bottom group receive a score of 1 within each sector.
- Securities that receive a quartile score of 4 based on Ranking Metrics described in Table 1 are, in broad terms, securities that have (compared to sector peers)
 - relatively higher values for their Emissions Intensity,
 - higher levels of Green Business Revenues,
 - more favorably assessed Climate Risk Management Weighted Average Scores, or
 - a weaker Emission Track Record¹⁵

Assessment of Credible Track Record

Security is assessed to have Credible Track Record if it is assigned a Track Record Score of 1.

Calculation of Security Level Assessment

Table 2 describes the calculation of Security Level Assessment through examples of 5 hypothetical companies.

- Company A and Company E do not receive any promotion and hence their Security Level Assessments are the same as their respective Intensity Score.
- Company B is assigned a Climate Risk Management Score of 4 and hence its Intensity Score is lowered by one quartile and the company is assigned a Security Level Assessment of 1.
- Company C is assigned a Climate Risk Management Score of 4 and its emission reduction targets are approved as science-based targets. Because of approved science-based targets, the company's Intensity Score is lowered by two quartiles. However, Security Level Assessment cannot be lower than 1 and hence the company is assigned a Security Level Assessment of 1
- Company D's emission reduction targets are approved as science-based targets, because of which the company's Intensity Score is lowered by two quartiles and the company is assigned a Security Level Assessment of 1.
- Company F is assigned a Green Business Score of 4 and hence its Intensity Score is lowered by one quartile and company is assigned a Security Level Assessment of 2

¹⁵ Since a favorable Track Record is negative, lower values of the Track Record indicate a stronger historic reduction in emissions

Table 2

	Companies					
	A	B	C	D	E	F
Intensity Score	1	2	2	3	4	3
Climate Risk Management Score*	2	4	4	2	2	2
Green Business Score*	3	2	1	2	2	4
Has Approved Science Based Targets	No	No	Yes	Yes	No	No
Has Credible Track Record	No	No	No	No	No	No
Promoted by Quartile(s)	0	1	2	2	0	1
Security Level Assessment	1	1	1	1	4	2

* Refers to Sector Relative Quartiles

Appendix III: Climate Risk Management Weighted Average Score

Climate Risk Management Weighted Average Score is calculated for securities in the Applicable Universe using following key issue management scores from MSCI ESG Ratings methodology related to management of Climate Change Risk and Environmental Opportunities.

- Carbon Emissions Management Score
- Product Carbon Footprint Management Score
- Climate Change Vulnerability Management Score
- Biodiversity and Land use Management Score • Opportunities in Clean Tech Management Score
- Opportunities in Green Building Management Score
- Opportunities in Renewable Energy Management Score

Security's Climate Risk Management Weighted Average Score is calculated by considering security's key issue management score and key issue weight.

If any of the above metrics is missing for a security then zero is used for the missing value during the weighted average score calculation. In case the weighted average score is zero or a value cannot be calculated and the key issue weight for carbon emissions management score is zero, then the 'Climate Risk Management Weighted Average Score' is set to be equal to the 'Carbon Emissions Management Score'.

Appendix IV: Calculation of Green Business Revenue

For each constituent in the Parent Index, the Green Revenue% is calculated as the cumulative revenue (%) from the six Clean Tech themes which are as follows:

- **Alternative Energy** – products and services that support the transmission, distribution and generation of renewable energy and alternative fuels to reduce carbon and pollutant emissions in supporting affordable and clean energy to combat climate change.
- **Energy Efficiency** – products, and services that support the maximization of productivity in labor, transportation, power, and domestic applications with minimal energy consumption to ensure universal access to affordable, reliable, and modern energy services.
- **Sustainable Water** – products, services, infrastructure projects and technologies that resolve water scarcity and water quality issues, through minimizing and monitoring current water demand, improving the quality and availability of water supply to improve resource management in both domestic and industrial use.
- **Green Building** – design, construction, redevelopment, retrofitting, or acquisition of green-certified properties to promote mechanisms for raising capacity for effective climate change mitigation and adaptation.
- **Pollution Prevention** – products, services, infrastructure projects and technologies that reduces volume of waste materials through recycling, minimizes introduction of toxic substances, and offers remediation of existing contaminants such as heavy metals and organic pollutants in various environmental media to significantly address pollution in all levels and its negative effects.
- **Sustainable Agriculture** - revenues from forest and agricultural products that meet environmental and organic certification requirements to significantly address biodiversity loss, pollution, land disturbance, and water overuse.

Appendix V: MSCI Extended Climate Action Indexes

The MSCI Extended Climate Action Indexes methodology is a variant of the MSCI Climate Action Indexes methodology, which starts with a MSCI Climate Action Index and then additionally excludes all securities involved in the following business activities:

Extended Climate Action Index	Climate Action Index	Additional Business Exclusions
MSCI USA Extended Climate Action Index	MSCI USA Climate Action Index	<p>Producers of Civilian Firearm</p> <p>All companies classified as “Producer” of firearms and small arms ammunitions for civilian markets. It does not cover companies that cater to the military, government, and law enforcement markets.</p>

WEIGHTING OF REMAINING SECURITIES

The remaining securities are weighted as per Section 2.4.

MAINTENANCE OF MSCI EXTENDED CLIMATE ACTION INDEXES

SEMI-ANNUAL INDEX REVIEWS

The MSCI Extended Climate Action Indexes are rebalanced on a semi-annual basis, as of the close of the last business day of May and November, coinciding with the May and November Index Review of the MSCI Global Investable Market Indexes. The pro forma Indexes are in general announced nine business days before the effective date as detailed in Section 3.1

QUARTERLY INDEX REVIEWS

The Indexes are rebalanced on a quarterly basis, as of the close of the last business day of February and August, coinciding with the February and August Index Review of the MSCI Global Investable Market Indexes. The pro forma Indexes are in general announced nine business days before the effective date. During quarterly reviews, the ‘ESG Controversy Score Eligibility’ and ‘ESG Business Involvement Eligibility’ including Additional Business Exclusions of existing constituents are reviewed.

Existing constituents that meet the exclusion criteria are deleted from the index and the weight of remaining constituents are renormalized to 100%.

In general, MSCI uses MSCI ESG Controversies data and MSCI Business Involvement Screening Research data as of the end of the month preceding the Index Reviews for the rebalancing of the Indexes.

MONTHLY INDEX REVIEWS

The MSCI Extended Climate Action Indexes are rebalanced on a monthly basis, as of the close of the last business day of the month. The pro forma Indexes are in general announced nine business days before the effective date.



During Monthly reviews, the 'ESG Controversy Score Eligibility' of existing constituents is reviewed. Existing constituents that meet the exclusion criteria are deleted from the index and the weight of remaining constituents are renormalized to 100%.

Appendix VI: Methodology Set

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

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

The Methodology Set for the Index 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 VII: Changes to this Document

The following sections have been modified as of March 2023:

- Section 3.2.4: Added clarification on Climate Risk Management Eligibility
- Section 3.3.1: Added a reference to Appendix II
- Appendix II: Added clarification for the Calculation of Sector Relative Quartiles, Emission Track Record, and Credible Track Record. Added examples for the Calculation of Security Level Assessment.
- Appendix V: Added details for the methodology of the MSCI Extended Climate Action Indexes

The following sections have been modified as of August 2023:

- Section 3.3: Clarification for Ongoing Event-Related Changes Updated to delete reference to the application of Variable Weighting Factor (VWF) in relation to the treatment of corporate events, and the neutralization of the Index if the frequency of Index Reviews in the Parent is greater than the frequency of Index Reviews in the Index.
- Section 4: MSCI ESG Research Moved that section after Section 3 (Maintaining the MSCI Climate Action Indexes).

The following sections have been modified as of November 2023:

- Section 3.2 added to reflect the change from monthly screening of business involvement screens to quarterly.
- Section 2.2.1: Removed exclusions based on environmental controversies.
- Section 2.5: New section detailing the treatment of companies with ratings and research not available from MSCI ESG Research
- Appendix III: Added details of missing value treatment of key issues.
- Appendix V: Updated to reflect the change of monthly screening of business involvement screens to quarterly.

The following sections have been modified as of November 2024

- Section 2.5: Added the treatment of companies when data on business involvement screening research or climate change metrics research is not available from MSCI ESG Research
- Appendix VI: Added details on the Methodology Set for the Indexes

The following section has been modified as of December 2024

- Section 4.5: Added a sub-section under Climate Change Metrics to provide additional details on Fossil Fuels related activities and Greenhouse Gas Emissions.

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