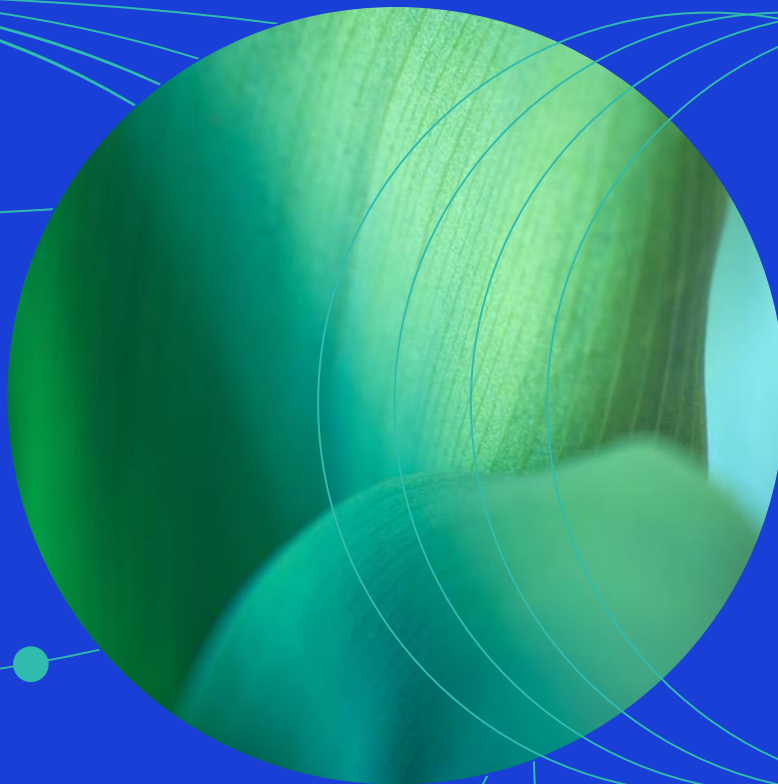




May 2026

MSCI Climate Action Indexes Methodology



Contents

1	Introduction	4
2	Constructing the Indexes	5
2.1	Applicable Universe	5
2.2	Eligible Universe	5
2.2.1	Controversies Score Eligibility.....	5
2.2.2	Controversial Business Involvement Eligibility	5
2.2.3	GHG Intensity Eligibility	6
2.2.4	Carbon Risk Management Eligibility.....	6
2.3	Tilting Eligible Securities	6
2.4	Weighting Scheme	7
2.4.1	Tilted Weights (Prior to Capping)	7
2.4.2	Capped Weights	7
2.5	Treatment of Unrated Companies.....	8
3	Maintaining the Indexes.....	9
3.1	Semi-Annual Index Reviews.....	9
3.2	Quarterly Index Reviews	9
3.3	Ongoing Event-Related Maintenance.....	9
4	MSCI Solutions	11
4.1	MSCI ESG Ratings	11
4.2	MSCI Impact Solutions: Sustainable Impact Metrics	11
4.3	MSCI Controversies	12
4.4	MSCI Business Involvement Screening Research.....	12
4.5	MSCI Climate Change Metrics.....	12
4.5.1	Fossil Fuels and Power Generation Metrics	12
4.5.2	Greenhouse Gas (GHG) Emissions	13
	Appendix I: Controversial Business Involvement Eligibility	14
	Appendix II: Calculation of Security Level Scoring Factors.....	16
	Appendix III: Calculation of the Carbon Risk Management Score.....	19

Appendix IV: Calculation of Green Business Score 20

Appendix V: Capping Mechanism 21

Appendix VI: MSCI Extended Climate Action Indexes 22

Appendix VII: Methodology Set 23

Appendix VIII: Changes to the Document 24

1 Introduction

The MSCI Climate Action Indexes¹ (the ‘Indexes’) are designed to represent the performance of companies that have been assessed to be best positioned for the climate transition relative to their GICS^{®2} sector peers, based on the below parameters.

Companies from the underlying parent index (the “Parent Index”) are evaluated on four dimensions, each assessed on a sector-relative basis:

- GHG Intensity — Scope 1+2+3 greenhouse gas intensity
- Emissions Reduction Commitments — science-based targets and credible emissions track record
- Carbon Risk Management Score — a security-level score³ that measures how well a company manages its carbon-related risks.
- Revenue from Green Businesses — cumulative revenue from Environmental Impact categories

Eligible companies are assessed and weighted based on the above four dimensions using a tilting approach that increases exposure to companies assessed as best positioned for the climate transition within their respective GICS sector.

Finally, the Indexes apply a capping mechanism to limit issuer concentration and control active sector exposures relative to the Parent Index.

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 VII for more details.

² GICS is the Global Industry Classification Standard jointly developed by MSCI and S&P Dow Jones Indices.

³ The security level key issue management scores are sourced from the MSCI ESG Ratings Methodology.

2 Constructing the Indexes

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 Solutions LLC (“MSCI Solutions”)⁴ 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 Controversies Score Eligibility

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

2.2.2 Controversial Business Involvement Eligibility

The Indexes use MSCI 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 details on these criteria.

- Controversial Weapons
- Tobacco
- Thermal Coal Mining
- Oil Sands
- Nuclear Weapons- (Non-Proliferation Treaty⁵)

⁴ See Section 4 for further information regarding sustainability and climate data used in the Indexes that MSCI Limited and MSCI Deutschland GmbH source from MSCI Solutions LLC (“MSCI Solutions”), a separate subsidiary of MSCI Inc. MSCI Solutions 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.

⁵ The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is a multilateral international treaty that entered into force on 5 March 1970, aimed at preventing the spread of nuclear weapons and advancing nuclear disarmament. See United Nations Office for Disarmament Affairs (UNODA), available at <https://www.un.org/disarmament/wmd/nuclear/npt/>.

2.2.3 GHG Intensity Eligibility

Securities which either have higher GHG Intensity⁶ than the High Emission Threshold (defined below) or higher total Potential Emission⁷ than the High Potential Emission Threshold (defined below) and do not have approved science-based targets are excluded from the Indexes.

- High Emission Threshold – GHG Intensity of the constituent(s) of the MSCI ACWI Index at the 95th percentile based on GHG 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 applications⁸. Securities without Total Potential Carbon Emissions data are not included in this calculation of 95th percentile.

2.2.4 Carbon Risk Management Eligibility

Securities that meet the following conditions but do not have approved science-based targets are excluded from the Indexes:

- **Non constituents:** Securities ranked in the lowest quartile of their GICS sector based on their Carbon Risk Management Score.
- **Existing constituents:** Securities ranked in the lowest decile of their GICS sector based on their Carbon Risk Management Score.

The calculation of the Carbon Risk Management Score is described in Appendix III.

2.3 Tilting Eligible Securities

- Intensity Score - Each security is assigned an Intensity Score of 1, 2, 3 or 4 based on its sector relative Scope 1+2+3 GHG Intensity quartile, where a score of 1 is assigned to securities in the highest quartile and a score of 4 is assigned to securities in the lowest quartile. For example, securities that have the lowest intensity relative to their GICS sector peers are assigned an Intensity Score of 4.
- Each security is assigned a Tilt Score by adjusting the Intensity Score according to a discrete adjustment per the following two scenarios:

⁶ The calculation of GHG Intensity is described in Appendix II

⁷ 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.

⁸ Companies with 'Fossil Fuel Reserves – Energy Application' set to True.

- Scenario 1: Securities can have an increase in tilt score of 2 (moving from 1 to 3, 2 to 4 and 3 to 4) if they have an approved science-based targets (SBTi) or are in the top quartile based on their sector-relative Emissions Reduction Score.
- Scenario 2: Securities that do not satisfy scenario 1 can have an increase in tilt score by 1 (moving from 1 to 2, 2 to 3 or 3 to 4) if the relevant security is in the fourth quartile based on either their sector-relative Carbon Risk Management or Green Business Score⁹
- The Tilt Score uplift based on Green Business Score only applies if Green Business Revenue is \geq 5%.
- The Tilt Score has a ceiling of 4.

More details on calculation steps of the Tilt Score are described in Appendix II. The calculation steps for Intensity Score, Emissions Reduction Score, Carbon Risk Management Score¹⁰, Green Business Score¹¹ are also described in Appendix II.

2.4 Weighting Scheme

2.4.1 Tilted Weights (Prior to Capping)

At each Index Review, securities in the Eligible Universe are weighted by the product of their weight in the Parent Index and the Tilt Score.

$$\text{Security Tilted Weight} = \text{Tilt Score} * \text{Weight in the Parent Index}$$

The above weights are then normalized to 100%.

2.4.2 Capped Weights

At each Index Review, the tilted weights (as determined in Section 2.4.1) are then subject to issuer and sector level capping as per the below criteria:

- Active Issuer Capping: the weight of each issuer is capped at (Issuer Weight in the Parent Index + 2%)
- Active GICS Sector Capping: The weight of each sector is constrained to +/- 5% relative to the weight of the sector in the Parent Index.

The Active Issuer Capping and Active GICS Sector Capping are applied simultaneously. Further details are provided in Appendix V.

⁹ The fourth quartile here corresponds in broad terms to strong carbon risk management or high sector-relative green business revenues — consistent with the convention used for the Intensity Score, where Q4 represents securities with lower intensity.

¹⁰ See Appendix III for the definition

¹¹ See Appendix IV for the definition

2.5 Treatment of Unrated Companies

Companies not assessed by MSCI Solutions on data for the following MSCI sustainability and climate products are not eligible for inclusion in the Indexes.

- MSCI 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 Carbon Risk Management Score, please refer to Appendix III.

3 Maintaining the Indexes

3.1 Semi-Annual Index Reviews

The Indexes are reviewed on a semi-annual basis¹², 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 Solutions data (including MSCI Climate Change Metrics, MSCI Sustainable Impact Metrics, MSCI 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 reviewed 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 'Controversies Score Eligibility' and 'Controversial 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 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 Maintenance

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 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 not be added to the Index.

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

¹² 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.

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 Solutions

The Indexes are a product of MSCI Inc. that utilize information such as company ratings and research produced and provided by MSCI Solutions LLC (“MSCI Solutions”), a subsidiary of MSCI Inc. In particular, the Indexes use the following MSCI sustainability and climate products: MSCI ESG Ratings, MSCI Impact Solutions, MSCI Climate Change Metrics and MSCI 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/sustainability-and-climate-resources-and-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 Solutions 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/sustainability-and-climate-resources-and-disclosures>.

4.3 MSCI Controversies

MSCI 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 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 Controversies Score falls on a 0-10 scale, with “0” being the most severe controversy.

The MSCI Controversies methodology can be found at: <https://www.msci.com/legal/sustainability-and-climate-resources-and-disclosures>.

4.4 MSCI Business Involvement Screening Research

MSCI 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/sustainability-and-climate-resources-and-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.

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

4.5.1 Fossil Fuels and Power Generation Metrics

MSCI Solutions 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 Solutions 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.

Appendix I: Controversial Business Involvement Eligibility

Companies whose activities meet the following values and climate-based criteria, as evaluated by MSCI Solutions, are excluded from the Indexes:

- **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 - (Non-Proliferation Treaty¹³)**

All companies that have a country of classification corresponding to a country that is not a signatory of the Treaty on the Non-Proliferation of Nuclear Weapons (Signatory = False) and are flagged by the categories listed below are excluded:

- 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

¹³ The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is a multilateral international treaty that entered into force on 5 March 1970, aimed at preventing the spread of nuclear weapons and advancing nuclear disarmament. See United Nations Office for Disarmament Affairs (UNODA), available at <https://www.un.org/disarmament/wmd/nuclear/npt/>.

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 Scoring Factors

Sector Relative Quartiles

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

Table 1

Quartile Score (1 to 4)	Ranking Metric
1. Intensity Score	GHG Intensity
2. Green Business Score	Green Business Revenue
3. Carbon Risk Management Score	Product Carbon Footprint Management Score or Carbon Emissions Management Score (see Appendix III)
4. Emissions Reduction Score	Average Yearly Emissions Change (Geometric Average of the last 3 Yearly Changes in Emissions)

- GHG Intensity
 - Security level GHG Intensity = $\text{GHG Emissions} / (\text{Enterprise Value} + \text{Cash } (\$))$
 - GHG Emissions = Emissions from Scope 1+2+3¹⁴
- Green Business Revenue - Security level cumulative % of revenue from a set of Environmental Impact categories described in Appendix IV.
- Carbon Risk Management Score –
 - Product Carbon Footprint Management Score – Score from 0 to 10 assessed under the MSCI ESG Ratings Methodology.
 - Carbon Emissions Management Score – Score from 0 to 10 assessed under the MSCI ESG Ratings Methodology.

Additional details on the calculation of the score are in Appendix III.

- Average Yearly Emissions Change –

The Emissions Reduction Score is only calculated for securities which meet the following conditions:

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

- Average Yearly Emission Change for the last 4 years (3 yearly changes): reduction of $\geq 2\%$
- Reports Scope 1 and 2 Emissions
- Has published an Emission Reduction Target
- For all securities that meet the above criteria – the Emissions Reduction Score is equal to the Sector-level Quartile value based on the Average Yearly Emissions Change (calculated as the Geometric Average of the Yearly GHG Emissions Change for the last 4 years). Average Yearly Emission Change is not calculated for securities with less than 4 years of emission data.

Calculation of Sector Relative Quartile Scores (GHG Intensity)

- Within each GICS sector, securities are ranked in ascending order of GHG Intensity. In case two securities have the same GHG Intensity, securities are ranked in descending order of free float-adjusted market capitalization.
- Ranked securities are divided into four equal groups (quartiles), where a quartile score of 1 corresponds to securities with relatively higher GHG Intensity.

Calculation of Sector Relative Quartile Scores (other metrics)

- Within each GICS sector, securities are ranked in descending order of their ranking metric. In case of same metric value, securities are ranked in descending order of free float-adjusted market capitalization.
- Ranked securities are divided into four equal groups (quartiles), where a quartile score of 4 corresponds to best performing securities, i.e., securities with:
 - Relatively higher Green Business Revenues
 - Relatively higher Product Carbon Footprint Management Score or Carbon Emissions Management Score (as applicable)

Calculation of Tilt Score

Table 2 describes the calculation of Tilt Score through using a few hypothetical scenarios:

- Company A and Company E do not receive any promotion and hence their Tilt Score is the same as their respective Intensity Score.
- Company B is assigned a Carbon Risk Management Score of 4 and hence its Intensity Score is increased by one and the company is assigned a Tilt Score of 3.
- Company C has an Intensity Score of 2 and has one or more active carbon emissions reduction target/s approved by the Science Based Targets initiative (SBTi). Because of approved science-based targets, the company's Intensity Score is increased by two such that its final score is 4.
- Company D has approved science-based targets, because of which the company's Intensity Score is increased by two and the company is assigned a Tilt Score of 4 (as it cannot be higher than 4).
- Company F is assigned a Green Business Score of 4 and hence its Intensity Score is increased by one and the company is assigned a Tilt Score of 2

Table 2

	Companies					
	A	B	C	D	E	F
Intensity Score	1	2	2	3	3	1
Carbon 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	No	No	No
Emission Reduction Score	2	3	1	4	1	3
Promotion Score	0	1	2	2	0	1
Tilt Score	1	3	4	4	3	2

* Refers to Sector Relative Quartiles

Appendix III: Calculation of the Carbon Risk Management Score

The calculation is done for each security in the Applicable Universe and is equal to the Product Carbon Footprint Management Score when the key issue weight is non-zero and a score is available.

. In cases where the key issue weight for the Product Carbon Footprint Management Score is zero or a score is not available, the Carbon Risk Management Score is equal to the Carbon Emissions Management Score.

The Carbon Risk Management Score is calculated using management scores & weights from the MSCI ESG Ratings Methodology for two key issues:

Product Carbon Footprint Management Score: Assesses the company’s ability to manage its exposure to risks related to the carbon intensity of its products and its ability to reduce the carbon footprint in its supply chains or in the use of its products and services. (Score: 0-10)

Carbon Emissions Management Score: Assesses the company’s ability to manage its exposure to risks related to the carbon intensity of its operations. (Score: 0-10)

Appendix IV: Calculation of Green Business Score

For each constituent in the Parent Index, the Green Business Score is calculated as the cumulative revenue (%) from the following six Environmental Impact categories:

- **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: Capping Mechanism

The Indexes apply a capping mechanism to limit concentration and control active sector exposures relative to the Parent Index. It operates simultaneously across issuer and sector weights.

A. Parameters for Capping

- A company's weight in the Index may not exceed its weight in the Parent Index by more than 2%.
- The weight of any GICS Sector in the Index may not deviate by more than $\pm 5\%$ from its weight in the Parent Index.

B. The Capping Mechanism

The capping mechanism is applied in the following steps:

- A deviation ratio is calculated for each company and sector — the ratio of current weight to maximum bound, or minimum bound to current weight in the case of a minimum constraint.
- The constraint with the highest deviation ratio is identified as the most binding violation and adjusted to its permitted bound.
- The excess weight released is redistributed proportionally across all remaining constituents.
- This continues until all deviation ratios are at or below 1 (assessed to 5 decimal places), or the maximum number of cycles is reached, at which point the most recent solution is used.

Appendix VI: 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	Parent Index	Additional Business Exclusions
MSCI USA Extended Climate Action Index	MSCI USA 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

The MSCI Extended Climate Action Indexes are maintained according to same rules as the MSCI Climate Action Indexes, as per Section 3. In addition to this, the MSCI Extended Climate Action Indexes apply a monthly review as defined below.

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 ‘Controversies 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 VII: 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 – 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 VIII: Changes to the 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 Solutions 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 Solutions
- 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 Solutions
- 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.

The following sections have been modified as of May 2026:

Section 1: Introduction

- Updated introduction to reflect changes to the Climate Action Indexes

Section 2.2.2: Controversial Business Involvement Eligibility

- Updated the exclusion criteria for nuclear weapons, to screen only when their country of classification is not a signatory to the Treaty on the Non-Proliferation of Nuclear Weapons

Section 2.2.4: Carbon Risk Management Eligibility

- Updated sub-section to reflect the eligibility for companies with approved SBTi targets
- Changed the name of the metric from Climate Risk Management Score to Carbon Risk Management Score.
- Simplified definition of the Carbon Risk Management Score to include only the Carbon Emissions Management Score and Product Carbon Footprint Management Score
- Added the new application of a buffer rule for existing index constituents under the Carbon Risk Management Score screen

Section 2.3: Tilting of Eligible Securities

- Updated sub-section to reflect the interpretation of the Intensity Score, clarifying the directionality of the score used in the tilt score.
- Replaced the 50% ranking and selection within each GICS sector with a new tilting approach

Section 2.4 Weighting Scheme

- Modified section to reflect the relative issuer cap (Parent Index Weight + 2%) replacing the absolute 5% issuer cap
- Added that the active issuer and sector capping will be applied simultaneously rather than sequentially

Appendix I: Controversial Business Involvement Eligibility

- The nuclear weapons screen was modified to a screen excluding companies in countries that are non-signatories of the Non-Proliferation Treaty of nuclear weapons

Appendix II: Calculation of Security Level Scoring Factors

- New section added to describe the process of the emissions reduction score
- The definition of the Carbon Risk Management Score was simplified to include only the Carbon Emissions Management Score and the Product Carbon Footprint Management Score, replacing the previous multiple score approach
- New section added with the calculation of sector relative quartile scores

- Examples in table 2 have been inverted reflecting the new directionality of the score used in the Tilt Score

Appendix III: Calculation of the Carbon Risk Management Score

- Updated Appendix to reflect the simplified definition of the Carbon Risk Management Score

Appendix V: Capping Mechanism

- A new appendix has been added to provide further details on the capping framework

Appendix VI: Extended Climate Action

- The Extended Climate Action details were moved to Appendix VI.
- Removed the Semi-Annual and Quarterly Index Review details and added a reference to Section 3, "Maintaining the Indexes," of the Methodology.

Contact us

About MSCI Inc.

MSCI (NYSE: MSCI Inc.) strengthens global markets by connecting participants across the financial ecosystem with a common language. Our research-based data, analytics and indexes, supported by advanced technology, set standards for global investors and help our clients understand risks and opportunities so they can make better decisions and unlock innovation. We serve asset managers and owners, private-market sponsors and investors, hedge funds, wealth managers, banks, insurers and corporates.

To learn more, please visit www.msci.com/msci.com/contact-us

The process for submitting a formal index complaint can be found on the index regulation page of MSCI's website at: <https://www.msci.com/index-regulation>.

AMERICA

United States	+ 1 888 588 4567 *
Canada	+ 1 416 687 6270
Brazil	+ 55 11 4040 7830
Mexico	+ 52 81 1253 4020

EUROPE, MIDDLE EAST & AFRICA

South Africa	+ 27 21 673 0103
Germany	+ 49 69 133 859 00
Switzerland	+ 41 22 817 9777
United Kingdom	+ 44 20 7618 2222
Italy	+ 39 02 5849 0415
France	+ 33 17 6769 810

ASIA PACIFIC

China	+ 86 21 61326611
Hong Kong	+ 852 2844 9333
India	+ 91 22 6784 9160
Malaysia	1800818185 *
South Korea	+ 82 70 4769 4231
Singapore	+ 65 67011177
Australia	+ 612 9033 9333
Taiwan	008 0112 7513 *
Thailand	0018 0015 6207 7181 *
Japan	+ 81 3 4579 0333

* toll-free

Notice and disclaimer

The data, data feeds, databases, reports, text, graphs, charts, images, videos, recordings, models, metrics, analytics, indexes, ratings, scores, cases, estimates, assessments, software, websites, products, services and other information and materials contained herein or delivered in connection with this notice (collectively, the "Information") are copyrighted, trade secrets (when not publicly available), trademarks and proprietary property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), MSCI's licensors, direct or indirect suppliers and authorized sources, and/or any third party contributing to the Information (collectively, with MSCI, the "Information Providers"). All rights in the Information are reserved by MSCI and its Information Providers and user(s) shall not, nor assist others to, challenge or assert any rights in the Information.

Unless you contact MSCI and receive its prior written permission, you must NOT use the Information, directly or indirectly, in whole or in part (i) for commercial purposes, (ii) in a manner that competes with MSCI or impacts its ability to commercialize the Information or its services, (iii) to provide a service to a third party, (iv) to permit a third party to directly or indirectly access, use or resell the Information, (v) to redistribute or resell the Information in any form, (vi) to include the Information in any materials for public dissemination such as fund factsheets, market presentations, prospectuses, and investor information documents (e.g. KIIDs or KIDs), (vii) to create or as a component of any financial products, whether listed or traded over the counter or on a private placement basis or otherwise, (viii) to create any indexes, ratings or other data products, including in derivative works combined with other indexes or data or as a policy, product or performance benchmarks for active, passive or other financial products, (ix) to populate a database, or (x) to train, use as an input to, or otherwise in connection with any artificial intelligence, machine learning, large language models or similar technologies except as licensed and expressly authorized under MSCI's AI Contracting Supplement at <https://www.msci.com/legal/supplemental-terms-for-client-use-of-artificial-intelligence>.

The intellectual property rights of MSCI and its Information Providers may not be misappropriated or used in a competitive manner through the use of third-party data or financial products linked to the Information, including by using an MSCI index-linked future or option in a competing third-party index to provide an exposure to the underlying MSCI index or by using an MSCI index-linked ETF to create a financial product that provides an exposure to the underlying MSCI index without obtaining a license from MSCI.

The user or recipient of the Information assumes the entire risk of any use it may make, permit or cause to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, SUITABILITY, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION. Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall MSCI or any other Information Provider have any liability arising out of or relating to any of the Information, including for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages, even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not be applicable law be excluded or limited.

The Information, including index construction, ratings, historical data, or analysis, is not a prediction or guarantee of future performance, and must not be relied upon as such. Past performance is not indicative of future results. The Information may contain back tested data. Back-tested performance based on back-tested data is not actual performance but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy. The Information may include "Signals," defined as quantitative attributes or the product of methods or formulas that describe or are derived from calculations using historical data. Signals are inherently backward-looking because of their use of historical data, and they are inherently inaccurate, not intended to predict the future and must not be relied upon as such. The relevance, correlations and accuracy of Signals frequently change materially over time.

The Information may include data relating to indicative prices, evaluated pricing or other information based on estimates or evaluations (collectively, "Evaluations") that are not current and do not reflect real-time traded prices. No evaluation method, including those used by the Information Providers, may consistently generate evaluations or estimates that correspond to actual "traded" prices of any relevant securities or other assets. Evaluations are subject to change at any time without notice and without any duty to update or inform you, may not reflect prices at which actual transactions or collateral calls may occur or have occurred. The market price of securities, financial instruments, and other assets can be determined only if and when executed in the market. There may be no, or may not have been any, secondary trading market for the relevant securities, financial instruments or other assets. Private capital, equity, credit and other assets and their prices may be assessed infrequently, may not be priced on a secondary market, and shall not be relied upon as an explicit or implicit valuation of a particular instrument. Any reliance on fair value estimates and non-market inputs introduces potential biases and subjectivity. Internal Rate of Return metrics are not fully representative without full disclosure of fund cash flows, assumptions, and time horizons.

The Information does not constitute, and must not be relied upon as, investment advice, credit ratings, or proxy advisory or voting services. None of the Information Providers, their products or services, are fiduciaries or make any recommendation, endorsement, or approval of any investment decision or asset allocation. Likewise, the Information does not represent an offer to sell, a solicitation to buy, or an endorsement of any security, financial product, instrument, investment vehicle, or trading strategy, whether or not linked to or in any way based on any MSCI index, rating, subcomponent, or other Information (collectively, "Linked Investments"). The Information should not be relied on and is not a substitute for the skill, judgment and experience of any user when making investment and other business decisions. MSCI is not responsible for any user's compliance with applicable laws and regulations. All Information is impersonal, not tailored to the needs of any person, entity or group of persons, not objectively verifiable in every respect, and may not be based on information that is important to any user.

It is not possible to invest in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI makes no assurance that any Linked Investments will accurately track index performance or provide positive investment returns. Index returns do not represent results of actual trading of investible assets/securities. MSCI maintains and calculates indexes but does not manage assets. The calculation of indexes and index returns may deviate from the stated methodology. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase securities underlying the index or Linked Investments. The imposition of these fees and charges would cause the performance of a Linked Investment to be different than the MSCI index performance.

Information provided by MSCI Solutions LLC and certain related entities ("MSCI Solutions"), including materials utilized in MSCI sustainability and climate products, have not been submitted to, nor received approval from any regulatory body. MSCI sustainability and climate offerings, research and data are produced by, and ratings are solely the opinion of MSCI Solutions. Other MSCI products and services may utilize information from MSCI Solutions, Barra LLC or other affiliates. More information can be found in the relevant methodologies on www.msci.com. MSCI Indexes are administered by MSCI Limited (UK) and MSCI Deutschland GmbH. No regulated use of any MSCI private real assets indexes in any jurisdiction is permitted without MSCI's express written authorization. The process for applying for MSCI's express written authorization can be found at: <https://www.msci.com/index-regulation>.

MSCI receives compensation in connection with licensing its indexes and other Information to third parties. MSCI Inc.'s revenue includes fees based on assets in Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of msci.com. Issuers mentioned in MSCI Solutions materials or their affiliates may purchase research or other products or services from one or more MSCI affiliates, manage financial products such as mutual funds or ETFs rated by MSCI Solutions or its affiliates or are based on MSCI Indexes. Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Constituents in MSCI Inc. equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. MSCI Solutions has taken steps to mitigate potential conflicts of interest and safeguard the integrity and independence of its research and ratings.

MIFID2/MIFIR notice: MSCI Solutions does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI product or service supports, promotes or is intended to support or promote any such activity. MSCI Solutions is an independent provider of sustainability and climate data. All use of indicative prices for carbon credits must comply with any rules specified by MSCI. All transactions in carbon credits must be traded "over-the-counter" (i.e. not on a regulated market, trading venue or platform that performs a similar function to a trading venue) and result in physical delivery of the carbon credits.

You may not remove, alter, or obscure any attribution to MSCI or notices or disclaimers that apply to the Information. MSCI, Barra, RiskMetrics, and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P Dow Jones Indices. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and S&P Dow Jones Indices. Terms such as including, includes, for example, such as and similar terms used herein are without limitation.

MSCI and its Information Providers may use automated technologies and artificial intelligence to help generate content and output incorporated in the Information.

Privacy notice: For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at: <https://www.msci.com/privacy-pledge>. For copyright infringement claims contact us at dmca@msci.com. This notice is governed by the laws of the State of New York without regard to conflict of laws principles.