

# **MSCI Climate Action Indexes Methodology**

**March 2023**

**Contents**

- 1 Introduction ..... 3
- 2 MSCI ESG Research ..... 4
  - 2.1 MSCI ESG Ratings.....4
  - 2.2 MSCI Impact Solutions: Sustainable Impact Metrics ..... 4
  - 2.3 MSCI ESG Controversies..... 5
  - 2.4 MSCI Climate Change Metrics.....5
- 3 Index Construction Methodology ..... 7
  - 3.1 Applicable Universe ..... 7
  - 3.2 Eligible Universe.....7
  - 3.3 Selection of Eligible Securities ..... 9
  - 3.4 Weighting of Selected Securities.....10
- 4 Maintaining the Climate Action Indexes ..... 12
  - 4.1 Semi-Annual Index Reviews .....12
  - 4.2 Monthly Index Reviews.....12
  - 4.3 Ongoing Event Related Changes .....12
- Appendix I: ESG Business Involvement Eligibility ..... 15
- Appendix II: Calculation of Security Level Scores..... 17
- Appendix III: Climate Risk Management Weighted Average Score..... 20
- Appendix IV: Calculation of Green Business Revenue ..... 21
- Appendix V: MSCI Extended Climate Action Indexes ..... 22

## 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®<sup>1</sup> sector in the Parent Index. Overall the Index targets a coverage of 50% of the companies per sector from the Parent Index.

---

<sup>1</sup> GICS, the Global Industry Classification Standard jointly developed by MSCI and S&P Global.

## 2 MSCI ESG Research

The Index uses company ratings and research provided by MSCI ESG Research. In particular, the Index uses the following MSCI ESG Research products: MSCI Impact Solutions, MSCI ESG Ratings MSCI Climate Change Metrics and MSCI ESG Controversies.

For details on MSCI ESG Research’s full suite of ESG products, please refer to: <https://www.msci.com/esg-investing>

### 2.1 MSCI ESG RATINGS

MSCI ESG Ratings aim to measure entities’ management of environmental, social and governance risks and opportunities. MSCI ESG Ratings are based on 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/esg-and-climate-methodologies>.

### 2.2 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 a 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	1. Alternative Energy 2. Energy Efficiency 3. Green Building
	Natural Capital	4. Sustainable Water 5. Pollution Prevention 6. Sustainable Agriculture
Social Impact	Basic Needs	7. Nutrition 8. Major Disease Treatment 9. Sanitation

		10. Affordable Real Estate
	Empowerment	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.

More detailed taxonomy for each category can be found in Section 2.4 of the MSCI ACWI Sustainable Impact Index Methodology available at: <https://www.msci.com/index-methodology>.

### 2.3 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/esg-and-climate-methodologies>.

### 2.4 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, align 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/climate-solutions>.

### 3 Index Construction Methodology

#### 3.1 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.

#### 3.2 ELIGIBLE UNIVERSE

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

##### 3.2.1. ESG CONTROVERSY SCORE ELIGIBILITY

- **ESG Controversies:** All securities assessed as having involvement in very severe 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. Companies not assessed by MSCI ESG Research on ESG Controversies are also excluded.
- **Environmental Harm:** All companies assessed as having involvement in very severe or severe environmental controversies that are classified as Red (MSCI Environmental Controversy Score of 0) or Orange Flags (score of 1). Companies not assessed by MSCI ESG Research on Environmental Controversy Score are also excluded.
  - A Red Flag indicates an ongoing Very Severe ESG controversy implicating a company directly through its actions, products, or operations
  - An Orange Flag indicates an ongoing Severe controversy implicating a company directly, or a Very Severe controversy that is either partially resolved or indirectly attributed to the company’s actions, products, or operations.

##### 3.2.2. 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

### 3.2.3. EMISSION ELIGIBILITY

Securities which either have higher Emission Intensity<sup>2</sup> than the High Emission Threshold (defined below) or higher total potential emission<sup>3</sup> than the High Potential Emission Threshold (defined below) and do not yet have approved science-based targets<sup>4</sup> are excluded.

- High Emission Threshold – Emission Intensity of the constituent(s) of the MSCI ACWI Index at the 95<sup>th</sup> percentile based on Emission Intensity. This 95<sup>th</sup> 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 95<sup>th</sup> percentile based on Total Potential Carbon Emissions excluding Metallurgical Coal. This 95<sup>th</sup> percentile calculation only includes companies which are considered most likely to use their fossil fuel reserve for energy applications<sup>5</sup>. Securities without Total Potential Carbon Emissions data are not included in this calculation of 95th percentile.

Additionally, Securities without Emission Intensity data (securities for which Emission Intensity cannot be calculated) are also excluded.

---

<sup>2</sup> The calculation of Emission Intensity is described in Appendix II.

<sup>3</sup> 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.

<sup>4</sup> 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>

<sup>5</sup> Companies with 'Fossil Fuel Reserves – Energy Application' set to True.



### 3.2.4. 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.

## 3.3 SELECTION OF ELIGIBLE SECURITIES

### 3.3.1. SECURITY-LEVEL ASSESSMENT

- Intensity Score - Each security is assigned to a quartile based on its sector relative Scope 1+2+3 Greenhouse Gas (GHG) Intensity<sup>6</sup>.

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
  - 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 Revenue.<sup>7</sup>
    - The Intensity Score of fourth quartile companies based on sector relative Green Business Revenue is lowered only if the Green Business Revenue  $\geq$  5%.

---

<sup>6</sup> 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.

<sup>7</sup> The fourth quartile here corresponds in broad terms to strong climate risk management or high sector-relative green business revenues.

- 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 Score<sup>8</sup>, Green Business Score and Green Business Revenue<sup>9</sup> are also described in Appendix II.

### 3.3.2. 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.

### 3.3.3. 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%<sup>10</sup> 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.

## 3.4 WEIGHTING OF SELECTED SECURITIES

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

---

<sup>8</sup> See Appendix III for the definition

<sup>9</sup> See Appendix IV for the definition

<sup>10</sup> 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.

### 3.4.1. 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 3.4 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 3.4.

## 4 Maintaining the Climate Action Indexes

### 4.1 SEMI-ANNUAL INDEX REVIEWS

The Indexes are rebalanced on a semi-annual basis<sup>11</sup>, 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.

### 4.2 MONTHLY INDEX REVIEWS

The 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’ 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.

### 4.3 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. Further, changes in index market capitalization that occur as a result of corporate event implementation will be

---

<sup>11</sup> Certain ESG datapoints required for historical index rebalancing are unavailable. In those cases, the Index used the values of those datapoints as of the date described below. For example, each periodic rebalancing of the Index prior to October 31, 2019, would have applied the “Reporting Emission Reduction Targets” value as of October 31, 2019 and “Approved Science Based Targets” from November 30, 2021.

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 Index, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the Index.

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.

**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>.

## 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+3<sup>12</sup>
- 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

<sup>12</sup> Prior to June 1, 2020, security level GHG Emission = Emissions from Scope 1+2

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.

### 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 Record<sup>13</sup>

---

<sup>13</sup> Since a favorable Track Record is negative, lower values of the Track Record indicate a stronger historic reduction in emissions

### 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.

**Table 2**

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

\* 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 by considering security's key issue management score and key issue weight.

If a security is only assigned a Management Score for the key issue 'Carbon Emissions Management Score' 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><b>Producers of Civilian Firearms</b></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 3.4.

### 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 4.1

#### 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’ 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% as detailed in Section 4.2.

**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



## Contact us

clientservice@msci.com

### AMERICAS

Americas	1 888 588 4567 *
Atlanta	+ 1 404 551 3212
Boston	+ 1 617 532 0920
Chicago	+ 1 312 675 0545
Monterrey	+ 52 81 1253 4020
New York	+ 1 212 804 3901
San Francisco	+ 1 415 836 8800
São Paulo	+ 55 11 3706 1360
Toronto	+ 1 416 628 1007

### EUROPE, MIDDLE EAST & AFRICA

Cape Town	+ 27 21 673 0100
Frankfurt	+ 49 69 133 859 00
Geneva	+ 41 22 817 9777
London	+ 44 20 7618 2222
Milan	+ 39 02 5849 0415
Paris	0800 91 59 17 *

### ASIA PACIFIC

China North	10800 852 1032 *
China South	10800 152 1032 *
Hong Kong	+ 852 2844 9333
Mumbai	+ 91 22 6784 9160
Seoul	00798 8521 3392 *
Singapore	800 852 3749 *
Sydney	+ 61 2 9033 9333
Taipei	008 0112 7513 *
Thailand	0018 0015 6207 7181 *
Tokyo	+ 81 3 5290 1555

## ABOUT MSCI

MSCI is a leader provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

The process for submitting a formal index complaint can be found on the index regulation page of MSCI's website at: [www.msci.com/index-regulation](http://www.msci.com/index-regulation).

To learn more, please visit [www.msci.com](http://www.msci.com).

## Notice and disclaimer

- This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or redisseminated in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its Information Providers.
- The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.
- The user of the Information assumes the entire risk of any use it may make or permit 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, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, 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 any Information Provider have any liability regarding any of the Information 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 by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.
- Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.
- The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.
- None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.
- It is not possible to invest directly 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 does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.
- Index returns do not represent the results of actual trading of investable assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.
- The Information may contain back tested data. Back-tested performance 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.
- 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. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.
- Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on [www.msci.com](http://www.msci.com).
- MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of [www.msci.com](http://www.msci.com).
- MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.
- Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD 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 Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.
- MIFID2/MIFIR notice: MSCI ESG Research LLC 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 ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data, reports and ratings based on published methodologies and available to clients on a subscription basis. We do not provide custom or one-off ratings or recommendations of securities or other financial instruments upon request.  
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>.