

MSCI Climate Change ESG Select Indexes Methodology

November 2024

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1 Introduction

The MSCI Climate Change ESG Select Indexes (the “Indexes”) aim to represent the performance of an investment strategy that re-weights securities based on the opportunities and risks associated with the transition to a lower carbon economy. The Indexes¹ are designed to exceed the minimum standards of the EU Climate Transition Benchmark (CTB). The Indexes apply a heuristics-based approach to meet the following objectives:

- Reduce the weighted average greenhouse gas intensity by 30% (compared to the underlying investment universe).
- Reduce the weighted average greenhouse gas (GHG) intensity by 7% on an annualized basis
- Reduce the weighted average potential emissions intensity by 30% (compared to the underlying investment universe).
- Have at least equivalent ratio of weighted average “Green Revenues” to weighted average “Fossil fuels-based Revenues” as that of the underlying investment universe.

The Indexes are constructed based on the MSCI Climate Change Indexes methodology² and apply additional eligibility criteria as described in Section 2.

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

² For more information, please refer to the MSCI Climate Change Indexes Methodology at <https://www.msci.com/index-methodology>

2 Constructing the Indexes

The Indexes are constructed in accordance with the MSCI Climate Change Indexes Methodology⁴ with the following exceptions:

- The Category Tilt Score for the Solutions LCT Category is set to 3.
- The issuer weight limits, active sector weights, and minimum active Solutions Category weights applied before the Iterative Process are not applied to the Indexes (see Section 2.5.2 of the MSCI Climate Change Indexes Methodology for more details).
- The Indexes apply Issuer Capping (see Section 2.3 of this document for more details).

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

2.1 Defining the Parent Indexes

The Parent Indexes for the MSCI Climate Change ESG Select Indexes include all the constituents of their corresponding market capitalization weighted indexes (the “Parent Indexes”), as shown in the table below:

Index Name	Parent Index
MSCI World Climate Change ESG Select Index	MSCI World
MSCI USA Climate Change ESG Select Index	MSCI USA
MSCI Europe Climate Change ESG Select Index	MSCI Europe
MSCI EMU Climate Change ESG Select Index	MSCI EMU
MSCI Japan Climate Change ESG Select Index	MSCI Japan
MSCI Germany Climate Change ESG Select Index	MSCI Germany

2.2 Eligibility Criteria

The Indexes apply the eligibility criteria noted above and additional eligibility criteria as per Section 2.2.

⁴ As per Appendix V (Iterative Downweighting to meet the minimum EU CTB requirements) of the MSCI Climate Change Indexes Methodology, companies in the Solutions category as per Low Carbon Transition Risk Assessment are not eligible for downweighting. However, this rule was not applied for the MSCI Germany Climate Change ESG Select Index at the time of the May 2023, August 2023, November 2023 and February 2024 Index Reviews in order to ensure rebalancing feasibility.

³ See section 4 for further information regarding ESG and climate data used in the Indexes that MSCI Limited and MSCI Deutschland GmbH source from MSCI ESG Research LLC, a separate subsidiary of MSCI Inc. MSCI ESG Research is solely responsible for the creation, determination and management of such data as a provider to MSCI Limited and MSCI Deutschland GmbH. MSCI Limited and MSCI Deutschland GmbH are the benchmark administrators for the MSCI indexes

2.2.1 Eligible Universe

The Eligible Universe for the Indexes includes all the existing constituents of their corresponding market capitalization weighted indexes (the “Parent Indexes”).

2.2.2 Controversial Business Involvement Criteria

The Indexes use MSCI ESG Business Involvement Screening Research and MSCI Climate Change Metrics to identify companies that are involved in the following business activities. Companies that meet the business involvement criteria are excluded from the Indexes:

- Controversial Weapons
- Nuclear Weapons
- Tobacco
- Thermal Coal
- Conventional Oil & Gas
- Unconventional Oil and Gas
- Nuclear-based Power Generation
- Global Norms – United Nations Global Compact Compliance
- Human Rights Concerns Controversies
- Scope 1+2 Emissions Intensity
- Energy Consumption Intensity
- Nuclear Mining
- Civilian Firearms
- Weapons

Please refer to Appendix I for details on the screens.

2.2.3 ESG Ratings Eligibility

The Indexes uses MSCI ESG Ratings to identify companies that have demonstrated an ability to manage their ESG risks and opportunities. Companies are required to have an MSCI ESG Rating of ‘BB’ or above to be eligible for inclusion in the Indexes.

2.2.4 ESG Controversies Score Eligibility

All Companies assessed having involvement in ESG Controversies that are classified as Red flag (MSCI Controversy Score of 0) or Orange flag (MSCI Controversy Score of 1).

- 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 ESG controversy implicating a company directly, or a Very Severe ESG controversy that is either partially resolved or indirectly attributed to the company's actions,

Companies are required to have an MSCI ESG Controversies that are classified as Orange Flag (Score of 1) or above to be eligible for inclusion in the Indexes.

2.3 Issuer Capping

The maximum weight of any issuer in the Index is capped at 7.5% in accordance with the MSCI Capped Indexes methodology⁶.

2.4 Treatment of Unrated Companies

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

- ESG Ratings
- ESG Controversies

For the treatment of companies where the Scope 1+2+3 Emissions Intensity is not available, please refer to Appendix II.

⁶ Please refer to the MSCI Capped Indexes methodology at www.msci.com/index-methodology.

3 Maintaining the Indexes

3.1 Quarterly Index Reviews

The Indexes are reviewed to coincide with the regular Index Reviews of the MSCI Global Investable Market Indexes. The changes are implemented as of the close of the last business day of February, May, August and November.

In general, MSCI uses MSCI ESG Research data⁷ (including MSCI ESG Ratings, MSCI ESG Controversies, MSCI ESG Business Involvement Screening Research and MSCI Climate Change Metrics) as of the end of the month preceding the Index Reviews for the rebalancing of the Indexes. For some securities, such data may not be published by MSCI ESG Research by the end of the month preceding the Index Review. For such securities, MSCI will use ESG data published after the end of month, when available, for the rebalancing of the Indexes.

The pro forma Indexes are in general announced nine business days before the effective date.

3.2 Ongoing Event Related Changes

The general treatment of corporate events in the indexes aim to minimize turnover outside of Index Reviews. The methodology aims to appropriately represent an investor’s participation in an event based on relevant deal terms and pre-event weighting of the index constituents that are involved. Further, changes in index market capitalization that occur as a result of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

Additionally, if the frequency of Index Reviews in the Parent Indexes are greater than the frequency of Index Reviews in the indexes, the changes made to the Parent Indexes during intermediate Index Reviews will be neutralized in the MSCI Climate Change ESG Select 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 Indexes 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.

⁷ See section 4 for details of data sourced from MSCI ESG Research used in the Indexes.



Merger/Acquisition

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

If an existing Index constituent is acquired by a non-Index constituent, the existing constituent will be deleted from the Index and the acquiring non-constituent will not be added to the Index.

Changes in Security Characteristics

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

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

4 MSCI ESG Research

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

4.1 MSCI ESG Ratings

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

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

4.2 MSCI ESG Controversies

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

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

4.3 MSCI ESG Business Involvement Screening Research

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

For more details on MSCI ESG Business Involvement Screening Research, please refer to <https://www.msci.com/legal/disclosures/esg-disclosures>.

4.4 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, alignment with temperature pathways and factoring climate change research into their risk management processes, in particular through climate scenario analysis for both transition and physical risks.



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

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

Appendix I: Controversial Business Involvement Criteria

- **Carbon Emissions Intensity**
 - All companies with a Carbon Emissions Intensity (Scope 1+2) greater than or equal to 1500 tCO2/\$M Sales.
- **Civilian Firearms**
 - All companies that derive 5% or more revenue from the manufacture and retail of civilian firearms and ammunition.
- **Controversial Weapons**
 - All companies that have any tie to Controversial Weapons.
- **Energy Consumption Intensity**
 - All companies with an Energy consumption (GwH) per million EUR revenue greater than or equal to 300.
- **Global Norms – United Nations Global Compact Compliance**
 - All companies that fail to comply with the United Nations Global Compact principles.
- **Human Rights Concerns Controversies**
 - All companies which are flagged for Severe and Very Severe controversy related to Human Rights violation in the last three years.
- **Nuclear-based Power Generation**
 - All companies deriving 5% or more higher percent of revenue from supplying key nuclear specific products or services to the nuclear power industry.
 - All companies deriving 5% or more revenue (either reported or estimated) from nuclear power activities.
- **Nuclear Mining**
 - All companies deriving 5% or more revenue from the mining of uranium.
- **Nuclear Weapons**
 - All companies that have any tie to nuclear weapons.
- **Oil and Gas Value Chain**
 - All companies deriving 10% or more aggregate revenue from oil and gas related activities, including distribution, retail, equipment and services, extraction and production, pipelines and transportation, refining, gas processing and gas retail sales but excluding biofuel production and sales and oil and gas trading activities.

- **Power Generation**
 - All companies deriving 50% or more aggregate revenue from thermal coal based power generation, liquid fuel based power generation and natural gas based power generation.
- **Conventional Oil & Gas**
 - All companies that derive 5% or more revenue (either reported or estimated) from the extraction and production of oil and gas.
- **Tobacco**
 - All companies that manufacture tobacco products, such as cigars, blunts, cigarettes, e-cigarettes, inhalers, beedis, kreteks, smokeless tobacco, snuff, snus, dissolvable and chewing tobacco. This also includes companies that grow or process raw tobacco leaves.
 - All companies that derive 5% or more revenue from tobacco-related business activities.
- **Thermal Coal**
 - All companies deriving more than 0% 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 excludes: 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.
 - All companies that disclose evidence of thermal coal production.
 - All companies deriving 5% or more revenue (either reported or estimated) from thermal coal based power generation
- **Unconventional Oil & Gas**
 - All companies deriving more than 0% revenue from unconventional oil and gas. It includes revenues from oil sands, oil shale (kerogen-rich deposits), shale gas, shale oil, coal seam gas, and coal bed methane. It excludes all types of conventional oil and gas production including Arctic onshore/offshore, deepwater, shallow water and other onshore/offshore.
 - All companies that provide evidence of producing shale oil and gas.
 - All companies that provide evidence of producing oil sands.
 - All companies deriving more than 0% revenue from Arctic oil.
 - All companies deriving more than 0% revenue from Arctic gas.
 - All companies with evidence of producing Arctic oil. It excludes revenue from non-extraction activities (e.g. exploration, surveying, processing, refining); ownership of Arctic oil reserves with no associated extraction revenues; revenue from intra-company sales.

- All companies with evidence of producing Arctic gas. It excludes revenue from non-extraction activities (e.g. exploration, surveying, processing, refining); ownership of Arctic gas reserves with no associated extraction revenues; revenue from intra-company sales.
- **Weapons**
 - All companies deriving 5% or more revenue (or, where not disclosed, maximum estimated revenue) from the production of conventional weapons, components for such products or support systems and services for such products; production of biological or chemical weapons, components for such products; production of nuclear weapons, exclusive and dual-use delivery platform capable to deliver such products, intended and dual-use components of such products, services provided for such products; and the production of blinding laser, incendiary or non-detectable fragments weapons in their most recently completed fiscal year.

Appendix II: Calculation of Target Metrics

Greenhouse Gas (GHG) Emissions Intensity

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

MSCI ESG Research estimates company-specific indirect (Scope 3) GHG emissions from the Scope 3 Carbon Emissions Estimation Model. The data is generally updated on an annual basis.

Calculation of GHG Intensity

For Parent Index constituents where the Scope 1+2+3 Emissions Intensity is not available, the average Scope 1+2+3 Emissions Intensity of all the constituents of the MSCI ACWI in the same GICS Industry Group in which the constituent belongs is used.

Security Level GHG Intensity =

$$\frac{\text{Scope 1 + 2 + 3 Carbon Emissions} * (1 + EVIAF)}{\text{Enterprise Value} + \text{Cash(in M\%)}}$$

Enterprise Value Inflation Adjustment Factor (EVIAF)⁸ =

$$EVIAF = \left(\frac{\text{Average(Enterprise Value + Cash)}}{\text{Previous (Average(Enterprise Value + Cash))}} \right) - 1$$

Weighted Average GHG Intensity of Parent Index =

$$\sum (\text{Weight in Parent Index} * \text{Security Level GHG Intensity})$$

Weighted Average GHG Intensity of Derived Index =

$$\sum (\text{Index Weight} * \text{Security Level GHG Intensity})$$

Calculation of Potential Carbon Emissions Intensity

For newly added companies to the index where data is not available yet, MSCI uses zero fossil fuel reserves.

Security Level Potential Carbon Emissions (PCE) Intensity =

$$\frac{\text{Absolute Potential Emissions} * (1 + EVIAF)}{\text{Enterprise Value} + \text{Cash(in M\%)}}$$

Weighted Average Potential Emissions Intensity of Parent Index =

⁸ Average Enterprise Value + Cash is calculated for securities in the Eligible Universe

$$\sum (Weight\ in\ Parent\ Index * Security\ Level\ PCE\ Intensity)$$

Weighted Average Potential Emissions Intensity of Derived Index =

$$\sum (Index\ Weight * Security\ Level\ PCE\ Intensity)$$

Calculation of Average Decarbonization

On average, the Indexes follow a 7% decarbonization trajectory since the Base Date. The Weighted Average GHG Intensity at the Base Date (W_1) is used to compute the target Weighted Average GHG Intensity at any given Semi-Annual Index Review (W_t) as per the below formula.

$$W_t = W_1 * 0.93^{\frac{(t-1)}{2}}$$

Where ‘t’ is the number of Semi-Annual Index Reviews since the Base Date.

Thus, for the 3rd Semi-Annual Index Review since the Base Date (t=3), the target Weighted Average GHG Intensity will be $W_1 * 0.93$.

Calculation of Green Revenue to Fossil fuels-based Revenue Multiple

Green 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 address significantly biodiversity loss, pollution, land disturbance, and water overuse

The Weighted Average Green Revenue% is calculated as:

$$= \sum (Weight\ in\ Index * Green\ Revenue\%)$$

Fossil fuels-based Revenue

For each constituent in the Parent Index, the Fossil fuels-based Revenue% is calculated as the cumulative revenue (%) from the following sources:

- 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 excludes 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)
- Revenue% from the extraction, production and refining of Conventional and Unconventional Oil & Gas. Conventional Oil and Gas includes Arctic onshore/offshore, deep water, shallow water and other onshore/offshore. Unconventional Oil and Gas includes oil sands, oil shale (kerogen-rich deposits), shale gas, shale oil, coal seam gas, and coal bed methane.
- Revenue% from thermal coal based power generation, liquid fuel based power generation and natural gas based power generation.

The Weighted Average Fossil fuels-based Revenue% is calculated as:

$$= \sum (Weight\ in\ Index * Brown\ Revenue\%)$$

The Green Revenues to Fossil fuels-based Revenues multiple for either the Parent Index or the Index is calculated as a ratio of the Weighted Average Green Revenue to the Weighted Average Fossil fuels-based Revenue as per the formula below:

$$= \frac{Weighted\ Average\ Green\ Revenue\%}{Weighted\ Average\ Brown\ Revenue\%}$$

Climate Impact Sectors

NACE⁹ is the European Union’s classification of economic activities. As per the draft DA, stocks in the NACE Section codes A, B, C, D, E, F, G, H, L are classified as “High Climate Impact” sector and other stocks are classified ‘Low Climate Impact’ sector. The GICS¹⁰ Sub-Industry code for each security is mapped to the corresponding “Climate Impact Sector” using a mapping. This mapping is constructed in the following steps:

⁹ For further details regarding NACE, please refer to https://ec.europa.eu/eurostat/statistics-explained/index.php?title=NACE_background

¹⁰ For further information regarding GICS, please refer to <https://www.msci.com/gics>

1. MSCI has published a mapping¹¹ between the NACE classes and GICS Sub-Industry.
2. For each GICS Sub-Industry, the number of NACE classes which fall under the High Climate Impact Sector (say the number of classes is N_H) and Low Climate Impact Sector (say the number of classes is N_L) is identified
3. If all the NACE classes for a given GICS Sub-Industry are identified in the High Climate Impact Sector ($N_L = 0$), then the GICS Sub-Industry is mapped to the High Climate Impact Sector. Conversely, if all the NACE classes for a given GICS Sub-Industry are identified in the Low Climate Impact Sector ($N_H = 0$) then the GICS Sub-Industry is mapped to the Low Climate Impact Sector
4. In case a GICS Sub-Industry is mapped to some NACE classes in the High Climate Impact Sector and the others in the Low Climate Impact Sector, the GICS Industry is mapped to the Climate Impact Sector in the following manner:
 - a. **$N_H \geq N_L$** : If the number of NACE classes in the High Climate Impact Sector is at least equivalent to the number of NACE classes in the Low Climate Impact Sector, the GICS Sub-Industry is mapped to the High Climate Impact Sector
 - b. **$N_H < N_L$** : If the number of NACE classes in the High Climate Impact Sector is less than the number of NACE classes in the Low Climate Impact Sector, the GICS Sub-Industry is mapped to the Low Climate Impact Sector
5. Using the GICS Sub-Industry to Climate Impact Sector mapping created in Step 4, and the security-level GICS Sub-Industry, each security in the Parent Index is classified in either High Climate Impact Sector or Low Climate Impact Sector

¹¹ This mapping is available in the [Handbook of Climate Transition Benchmarks, Paris-Aligned Benchmark and Benchmarks' ESG Disclosures](#). Please note that the mapping does not reflect changes in the GICS structure that were implemented in the MSCI indexes on June 1, 2023.

Appendix III: Methodology Set

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

- Description of methodology set – 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 Climate Change Indexes Methodology – www.msci.com/index/methodology/latest/ClimateChange
- MSCI Capped Indexes Methodology – www.msci.com/index/methodology/latest/Capped
- 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 IV: Changes to this Document

The following sections have been modified effective December 01, 2022:

- Introduction – Updated to reflect the new screen for ‘arctic oil & gas’
- Section 2.2.1: Updated to reflect the new screen for ‘arctic oil & gas’
- Appendix I: Updated to reflect the revised screens for ‘thermal coal’ and ‘unconventional oil & gas’ and the new screen for ‘arctic oil & gas’

The following sections have been modified effective May 01, 2023:

- Methodology book was updated to reflect the transition of the MSCI Global Investable Market Indexes (GIMI) to Quarterly Comprehensive Index Reviews.
- All references to “Semi-Annual Index Reviews” and “Quarterly Index Reviews” of the MSCI GIMI were replaced with “Index Reviews.”

Section 4: MSCI ESG Research

- Moved that section after the Section 3
- Added the definition of industry-adjusted ESG score under Section 4.1 (MSCI ESG Ratings)

The following sections have been modified effective September 01, 2023:

- Section 2.2: Updated footnote to clarify treatment at the August 2023 Index Review
- Section 2.2.3: Clarified the exclusion criteria for companies involved in ESG Controversies.

The following sections have been modified effective December 01, 2023:

- Section 2.1: Updated to reflect the exclusion of select GICS® sub-industries.
- Section 2.2.1: Updated to reflect the new screen for ‘conventional oil and gas’ and the revised screen for thermal coal based power generation.
- Section 2.4: Added a section for the treatment of unrated companies.
- Section 2.2.3: Clarified the exclusion criteria for companies involved in ESG Controversies.
- Appendix I: Updated the description for the new and revised screens
- Appendix II: Added the calculation of target metrics for carbon emissions intensity, potential emissions, average decarbonization, calculation of green-to-brown revenue and details on the climate impact sector.
- Appendix III – Updated references on NACE and GICS mapping

The following sections have been modified as of August 2024:

Section 2.3 Issuer Capping

- The issuer capping was changed from 10% to 5% for all Indexes.

Appendix III: Methodology Set

- Added details on the Methodology Set for the Indexes

The following sections have been modified as of November 2024:

Section 2. Constructing the Indexes

- Moved and updated the description of where the methodology differs from the MSCI Climate Change Indexes Methodology

Section 2.2 Eligibility Criteria

- Removed the GICS Sub-Industries exclusions.

Section 2.3 Issuer Capping

- The issuer capping was changed from 5% to 7.5% for all Indexes.

Appendix I: Controversial Business Involvement Criteria

- Updated the Carbon Emissions Intensity and Energy Consumption Intensity screens.
- Removed the liquid fuel-based power generation screen.
- Added the Oil and Gas Value Chain and Power Generations screens.

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To learn more, please visit www.msci.com.

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>.

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