

MSCI ESG Universal Low Carbon Select 5% Issuer Capped Indexes Methodology

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1 Introduction

The MSCI ESG Universal Low Carbon Select 5% Issuer Capped Indexes¹ ("the Indexes") aim to represent the performance of an investment strategy that by re-weighting free-float market cap weights based upon certain ESG metrics seeks to increase exposure to those companies demonstrating both a robust ESG profile as well as a positive trend in improving that profile, while excluding companies based on various ESG and climate change criteria.

The Indexes² are constructed in following steps. Firstly, we exclude stocks based on Carbon Emissions Intensity from a market cap weighted index (the "Parent Index"). Secondly, we exclude stocks based on certain ESG and climate change criteria. Thirdly, we define an ESG re-weighting factor that reflects an assessment of both the current ESG profile (based on the current MSCI ESG Rating – see Section 2.4.1) as well as the trend in that profile (based on the MSCI ESG Rating Trend – see section .4.2). Finally, we re-weight securities from the free-float market cap weights of the Parent Index using combined ESG score (product of ESG Rating and ESG Rating Trend) to construct the Indexes.

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 II for more details.

² Please refer to Section 2 for the list of Indexes covered by this methodology book.



2 Constructing the Indexes

2.1 Applicable Universe

The Applicable Universe includes all the existing constituents of the corresponding free float adjusted market capitalization weighted index as shown in the table below ("Parent Index"). This approach aims to provide an opportunity set with sufficient liquidity and investment capacity.

Index Name	Parent Index
MSCI World ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI World Index
MSCI USA ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI USA Index
MSCI EMU ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI EMU Index
MSCI Emerging Markets ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI Emerging Markets Index
MSCI Japan ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI Japan Index
MSCI ACWI ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI ACWI
MSCI Europe ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI Europe Index
MSCI China ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI China Index
MSCI Australia ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI Australia Index
MSCI Canada ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI Canada Index
MSCI India ESG Universal Low Carbon Select 5% Issuer Capped Index	MSCI India Index

2.2 Low Carbon Universe

The Low Carbon Universe is constructed from the Applicable Universe by excluding companies with high Scope 1+2 Carbon Emissions Intensity and Potential Carbon Emissions.

To select companies with low exposure to carbon emissions, the Parent Index constituents are ranked by Carbon Emission Intensity, and the top 5% of securities, by number, are excluded from the Low Carbon Universe. The cumulative weight of securities excluded from any sector is less than 30% of the weight of the sector in the Parent Index. In case this limit is reached for any sector, no further securities from that sector are excluded.

To select companies with low exposure to fossil fuel reserves, the Parent Index constituents are ranked by the Potential Carbon Emissions per Dollar of the Market Capitalization of the company. Securities are excluded from the Low Carbon Universe until the cumulative Potential Carbon Emission of the excluded securities reaches 50% of the sum of the Potential Carbon Emission of the constituents of the Parent Index. The two screens mentioned above are applied independently.



2.3 Eligible Universe

The Eligible Universe is constructed from the Low Carbon Universe by excluding companies that are involved in the following businesses and meet the business involvement exclusion criteria as detailed in Appendix 1I:

- Controversial Weapons
- Conventional Weapons
- Nuclear Weapons
- Civilian Firearms
- Tobacco
- Fossil Fuel Extraction
- Thermal Coal Power

Additionally, companies are required to have an MSCI ESG Controversies Score of 1 or above and an MSCI ESG Rating of 'B' or above to be eligible for inclusion.

2.4 Determination Of Combined ESG Score

Each company in the Low Carbon Universe is assigned a Combined ESG score, which is calculated by taking into account a company's MSCI ESG Rating and its MSCI ESG Rating Trend.

2.4.1. ESG Rating Score

Using the MSCI ESG Rating, we group companies so as to assign an ESG Rating score to each company in the Eligible Universe as illustrated in the table below:

Rating Group	ESG Rating	ESG Category	ESG Rating Score
1	AAA	Leaders	1.5
2	AA		
3	A		
4	BBB	Neutral	1
5	BB		
6	В	Laggards	0.5

2.4.2. ESG Rating Trend Score

MSCI ESG Rating Trend shows the ESG rating change from prior to current: it is expressed as the number of levels between the current rating and the previous rating. The rating trend is positive for a ratings upgrade (for example, the company's ESG rating changed from BBB to AAA), negative for ratings downgrade (for example company's ESG rating changed from AA to A) and zero for no change in the rating.



An 'ESG Rating Trend Score' is assigned to each company based on its ESG Rating Trend as per the following table:

Trend group	ESG Rating Trend*	ESG Rating Trend Score
1	Upgrade	1.2
2	Neutral	1
3	Downgrade	0.8

* ESG Rating Trend

- Upgrade Company's latest ESG Rating has increased by at least one level compared to previous assessment.
- Neutral Company's latest ESG Rating has stayed the same as its ESG Rating from previous assessment or MSCI ESG Research has initiated coverage on the company.
- Downgrade Company's latest ESG Rating has decreased by at least one level compared to its previous assessment.

2.4.3. Combined ESG Score

The Combined ESG Score is calculated for each company as follows:

Combined ESG Score = ESG Rating Score * ESG Trend Score

In order to reduce reverse turnover in the index, the Combined ESG Score of a security is capped between the ESG Rating Scores corresponding to MSCI ESG Rating of 'AAA' (best rating) and 'B (worst rating). Thus, as per the ESG Rating Scores defined in Section 2.4.1, the Combined ESG Score is capped between 1.5 and 0.5 respectively.

2.5 Weighting Scheme

At each rebalancing, all the securities from the eligible universe are weighted by the product of their market capitalization weight in the Parent Index and the Combined ESG Score.

 $Security\ Weight = Combined\ ESG\ Score * Market\ Capitalization\ Weight\ in\ the\ Parent\ Index$

The above weights are then normalized to 100%.

Additionally, constituent weights are capped at the issuer level to mitigate concentration risk. Issuers in the Indexes will be capped at 5%.

Note that the capping of the issuer weight is done for the pro forma index as of the effective date, based on the closing prices as of the index review announcement date. In cases where the issuer weight breaches the cap as a result of market price movements or corporate events between the announcement date and the effective date, the capping is not applied again. Similarly, even if any issuer weight breaches the cap as a result of market price movements or corporate events between two Semi-Annual Index Reviews, no capping is applied.



2.6 Treatment of Unrated companies

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

- MSCI ESG Controversies
- MSCI ESG Ratings



3 Maintaining the Indexes

3.1 Semi Annual Index Reviews

The 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 semi-annual 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 ESG Ratings, MSCI Climate Change Metrics, MSCI ESG Controversies Scores and MSCI Business Involvement Screening Research) as of the end of the month preceding the Index Reviews for the rebalancing of MSCI ESG Universal Low Carbon Select 5% Issuer Capped 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 MSCI ESG Universal Low Carbon Select 5% Issuer Capped Indexes. This approach aims to capture timely updates to ESG Ratings of the constituents and coincides with the rebalancing of the relevant MSCI Parent Indexes.

3.2 Quarterly Index Reviews

The Indexes are reviewed on a quarterly basis to coincide with the regular Quarterly Index Reviews of the MSCI Global Investable Market Indexes, as of the close of the last business day of February and August. At quarterly reviews, the indexes are not re-constituted, but existing constituents will be deleted from the Indexes if they are ineligible for selection in the Index as per the exclusion criteria detailed in Section 2.2 – Eligible Universe and Section 2.3 – Low Carbon Universe of the methodology.

In general, MSCI uses MSCI ESG Research data (including MSCI ESG Ratings, MSCI Climate Change Metrics, MSCI ESG Controversies Scores and MSCI Business Involvement Screening Research) as of the end of the month preceding the Index Reviews for the rebalancing of MSCI ESG Universal Low Carbon Select 5% Issuer Capped 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 MSCI ESG Universal Low Carbon Select 5% Issuer Capped Indexes.



3.3 Monthly Review Of Controversies

Index constituents are reviewed on a monthly basis for the involvement in ESG controversies³. Existing constituents will be deleted if they are assessed as having involvement in ESG controversies that are classified as Red Flags (MSCI ESG Controversies Score of 0). A Red Flag indicates an ongoing, Very Severe ESG controversy implicating a company directly through its actions, products, or operations

MSCI uses MSCI ESG Controversies data as of the end of the month preceding the review (e.g., end of June data for the July monthly review). For some securities, such data may not be published by MSCI ESG Research by the end of the month preceding the review. For such securities, MSCI will use ESG data published after the end of month, when available, for the monthly review of the Index.

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

3.4 Ongoing Event Related Changes

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

Additionally, if the frequency of Index Reviews in the Parent Index is greater than the frequency of Index Reviews in the 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.

³ The monthly review of ESG Controversies is applied within the Index, starting on July 2023, and is not applicable historically prior to that date.



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 nonconstituent 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 products 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 Climate Change Metrics, MSCI ESG Controversies and MSCI ESG Business Involvement Screening Research, 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 Climate Change Metrics

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

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

4.2.1 Fossil Fuels and Power Generation Metrics

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

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

4.3 MSCI ESG Controversies

MSCI ESG Controversies provide assessments of controversies concerning the potential negative environmental, social, and/or governance impact of company operations, products and services. The evaluation framework used in MSCI ESG Controversies is designed to be consistent with international norms represented by the UN Declaration of Human Rights, the ILO Declaration on



Fundamental Principles and Rights at Work, and the UN Global Compact. MSCI ESG Controversies Score falls on a 0-10 scale, with "0" being the most severe controversy.

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

4.4 MSCI ESG Business Involvement Screening Research

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

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



Appendix I: Business Involvement Screening Criteria

Controversial Weapons

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

Conventional Weapons

- All companies deriving 5% or more revenue from the production of conventional weapons and components
- All companies deriving 10% or more aggregate revenue from the production of nuclear, biological, chemical, and conventional weapons and weapons systems, components, and support systems and services

Nuclear Weapons

- All companies that manufacture nuclear warheads and/or whole nuclear missiles
- All companies that manufacture components that were developed or are significantly modified for exclusive use in nuclear weapons (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
- 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

Civilian Firearms

- All companies classified as "Producer" of firearms and small arms ammunitions for civilian markets. It does not include companies that cater to the military, government, and law enforcement markets
- All companies deriving 5% or more aggregate revenue from the production and distribution (wholesale or retail) of firearms or small arms ammunition intended for civilian use.

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

Fossil Fuel Extraction

All companies deriving 5% or more aggregate revenue (either reported or estimated) from thermal coal mining and unconventional oil and gas extraction.

- Thermal Coal Mining: Revenue 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
- Unconventional Oil & Gas Extraction: Revenue from oil sands, oil shale (kerogen-rich deposits), shale gas, shale oil, coal seam gas, and coal bed methane. It does not cover all types of conventional oil and gas production including Arctic onshore/offshore, deep water, shallow water and other onshore/offshore

• Thermal Coal Power

- All companies deriving 5% or more revenue (either reported or estimated) from thermal coalbased power generation.



Appendix II: Methdology Set

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

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

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

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



Appendix III: Changes to this Document

The following sections have been modified effective September 17, 2021:

Section 2.1: Aplicable Universe

 Added the MSCI China ESG Universal Low Carbon Select 5% Issuer Capped Index with the Parent Index as MSCI China

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

Section 2.2: Eligible Universe

• Updated to include the enhancements to the controversial business involvement criteria

Appendix I: Business Involvement Screening Criteria

 Updated to include the definitions of the enhancements to the controversial business involvement criteria

The following sections have been modified effective June 2021:

Section 2.3: Low Carbon Universe

Added a section on the monthly review of controversies.

Section 4: MSCLESG Research

Updated the language and moved the section from 2 to 4.

The following sections have been modified effective June 27, 2022:

Appendix I: Business Involvement Screening Criteria

• Updated to clarify the nuclear weapons business involvement criteria

The following sections have been modified effective October, 2022 -

Section 2.1: Aplicable Universe

 Added the MSCI Australia ESG Universal Low Carbon Select 5% Issuer Capped Index with the Parent Index as MSCI Australia

The following sections have been modified as of July 3, 2023:

Section 3: Maintaining the Indexes

• The monthly review of ESG controversies is applied within the Index effective July 3, 2023 and is not applicable historically prior to that date.

Section 4: MSCI ESG Research

• Moved the MSCI ESG Research section after Section 3 and updated the product language.

The following sections have been modified as of January 2024

Section 2:

 Adjusted the construction steps to clarify that the Low Carbon screening takes place before the ESG Screening.



Section 2.1: Aplicable Universe

- Added the MSCI Canada ESG Universal Low Carbon Select 5% Issuer Capped Index with the Parent Index as MSCI Canada Index
- Added the MSCI India ESG Universal Low Carbon Select 5% Issuer Capped Index with the Parent Index as MSCI India Index

Appendix II: Methodology Set

Added details on the Methodology Set of the Index.

The following section has been modified as of December 2024

Section 2.6: Treatment of Unrated Companies

 Added the treatment of companies when ratings and research is not available from MSCI ESG Research

Section 4.2: MSCI Climate Change Metrics

 Added a sub-section under Climate Change Metrics to provide additional details on Fossil Fuels related activities.



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