

# **MSCI AC Asia ex Japan ESG Leaders Low Carbon Select 5% Issuer Capped Index Methodology**

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## 1 Introduction

The MSCI AC Asia ex Japan ESG Leaders Low Carbon Select 5% Issuer Capped Index (the “Index”) is designed to represent the performance of companies that have lower carbon exposure than that of its corresponding market capitalization weighted index (the “Parent<sup>1</sup> Index”) and is designed to represent the performance of companies that have high Environmental, Social and Governance (“ESG”) ratings relative to their sector peers, to ensure the inclusion of the best-in-class companies from an ESG perspective.

The Index aims to target sector weights that reflect the relative sector weights of the Parent Index to limit the systematic risk introduced by the ESG selection process. Overall, the Index targets coverage of 50% of the Parent Index.

The Index also aims to avoid concentration by capping securities to a maximum weight of 5%<sup>2</sup>.

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<sup>1</sup> The Parent Index is the MSCI AC Asia ex Japan Index

<sup>2</sup> For more information, please refer to the MSCI Capped Indexes methodology at [www.msci.com/index-methodology](http://www.msci.com/index-methodology)

## 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 ESG Ratings, MSCI ESG Controversies, MSCI ESG Business Involvement Screening Research and MSCI Climate Change Metrics.

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 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>.

### 2.3 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: [http://www.msci.com/resources/factsheets/MSCI\\_ESG\\_BISR.pdf](http://www.msci.com/resources/factsheets/MSCI_ESG_BISR.pdf).

## 2.4 MSCI Climate Change Metrics

MSCI Climate Change Metrics provide 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/climate-solutions>.

## 3 Constructing the Index

### 3.1 Eligible Universe

The Eligible Universe is constructed from the constituents of the Parent Index by selecting securities for inclusion based on the following rules:

- Selecting securities with Low Carbon Exposure
- Selecting securities based on ESG criteria

The two rules are applied independently and only securities which meet both rules are deemed eligible for inclusion in the Index. The rules of index construction are described below.

### 3.2 Index Construction

#### 3.2.1 Selecting Companies with Low Carbon Exposure

The Low Carbon<sup>3</sup> Universe is constructed from the Eligible 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 the Carbon Emission Intensity, and the top 5% of securities, by number, are excluded from the Low Carbon Universe.

The cumulative weight of securities excluded due to carbon emissions intensity 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 are applied independently.

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<sup>3</sup> For more information, please refer to the MSCI Low Carbon Leaders Core methodology at [www.msci.com/index-methodology](http://www.msci.com/index-methodology)

### 3.2.2 Selection Based on ESG Criteria

The ESG Criteria is based on the Values and Climate Change based screens, ESG Ratings and ESG Controversy scores.

#### 3.2.2.1 Values and Climate Change Based Exclusions

The Index uses MSCI ESG Business Involvement Screening Research to identify companies that are involved in the following business activities.

Companies that meet the business involvement criteria are excluded from the Index.

Please refer to Appendix 1 for details on these criteria.

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

#### 3.2.2.2 ESG Ratings Eligibility

The Index 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 Index.

#### 3.2.2.3 ESG Controversies Score Eligibility

The Index uses MSCI ESG Controversies Scores to identify those companies that are involved in very serious controversies involving the environmental, social, or governance impact of their operations and/or products and services. Companies are required to have an MSCI ESG Controversies Score of 3 or above to be eligible for inclusion in the Index.



### 3.2.3 Security Selection

#### 3.2.3.1 Defining Groups for Security Selection

The following regions are used for the construction of the Index:

- Developed Asia Pacific
- Emerging Asia

Securities in the Parent Indexes are assigned “Selection Groups<sup>4</sup>” based on their regions and their Global Industry Classification Standard GICS® sector.

#### 3.2.3.2 Applying the Iterative Process

The Index targets 50% (“target”) of the free float-adjusted market capitalization within each Selection Group as defined in Section 3.2.3.1 and a capping<sup>5</sup> of 5% (“cap”) on security weights by applying the iterative process described below –

1. Calculate “Cap<sub>p</sub>” as the defined below –

$$Cap_p = target * cap$$

2. Define a “Capped Universe” from the Parent Index. The securities in the Capped Universe are assigned weights as per the below formula –

$$Weight\ in\ Capped\ Universe = MIN(Cap_p, Weight\ in\ Parent\ Index)$$

The excess weight available due to the capping of securities is not distributed among the remaining securities in the Capped Universe. Thus, the total weight of securities in the Capped Universe may be below 100%.

3. Within each Selection Group of the Parent Index, aim to select securities that form a 50% cumulative weight of each Selection Group, using cumulative security weights as defined in the Capped Universe.

4. Define a “Selection Universe” which comprises of the selected securities in Step 3. The weights of securities in the Selection Universe are derived from their corresponding weights in the Capped Universe. The cumulative weight of securities in the “Selection Universe” is calculated and then the sum of the weight is renormalized to 100%.

The steps 1-4 above are repeated over 20 iterations and the iteration in which the maximum security weight in the Selection Universe is closest to 5% in terms of an absolute difference is selected. If none of the stocks which are assigned a weight of

<sup>4</sup> For more information, please refer to Appendix 2.

<sup>5</sup> For more information, please refer to the MSCI Capped Indexes methodology at [www.msci.com/index-methodology](http://www.msci.com/index-methodology)



Capp in Step 2 are selected in the Selection Universe, the iterative process stops and the Selection Universe in that iteration is selected.

## 4 Maintaining the Index

### 4.1 Annual Index Reviews

The Index is reviewed on an annual basis in May to coincide with the May Semi-Annual Index Review of the Parent Index. The changes are implemented at the end of May. The pro forma indexes are generally announced nine business days before the effective date.

In general, MSCI uses MSCI ESG Research data (including MSCI ESG Ratings, MSCI ESG Controversies, MSCI 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 Index. 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 Index.

At each Annual Index Review, the eligible universe is updated, and the composition of the index is reassessed in order to target 50% free float-adjusted cumulative market capitalization of each Selection Group of the Parent Index.

### 4.2 Updating the Eligible Universe

The Eligible Universe is updated during each Annual Index Review.

Companies that are not existing constituents of the Index are evaluated using the same eligibility criteria described in Section 3.2.

Existing constituents of the Index are maintained in the eligible universe if they meet all the following conditions:

- MSCI ESG Rating of 'BB' or above
- MSCI ESG Controversies Score of 1 or above
- Not screened by the business involvement criteria described in Section 3.2.1 and Section 3.2.2.1.

### 4.3 Ranking Of Eligible Securities

For each Selection Group, eligible securities of the Parent Index are ranked based on the following criteria:

- ESG Rating

- ESG Trend<sup>6</sup> (positive ESG Trend preferred to neutral ESG Trend and neutral ESG Trend preferred to negative ESG Trend)
- Current index membership (existing constituents above non-constituents)
- Industry adjusted ESG scores
- Decreasing free float-adjusted market capitalization.

#### 4.3.1 Ranking Of Eligible Securities

For each sector, eligible securities of the Parent Index are ranked based on the following criteria:

- ESG Rating
- ESG Trend (positive ESG Trend preferred to neutral ESG Trend and neutral ESG Trend preferred to negative ESG Trend)
- Current index membership (existing constituents above non-constituents)
- Industry adjusted ESG scores

#### 4.3.2 Selection of Eligible Securities

For each Selection Group, eligible securities of the Parent Index are then selected from the ranked universe in the following order until the target 50% of the cumulative weight of the Parent Index is reached:

- Securities in the top 35% of the cumulative weight in the Parent Index of the ranked universe, using weights as per the Capped Universe
- 'AAA' and 'AA' rated securities in the top 50% of the cumulative weight in the Parent Index of the ranked universe, using weights as per the Capped Universe
- Current index constituents in the top 65% of the cumulative weight in the Parent Index of the Ranked Universe, using weights as per the Capped Universe
- Remaining eligible securities in the Ranked Universe

Please see Appendix 2 for additional details on the ranking and selection rules.

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<sup>6</sup> ESG Trend is defined as the latest change in ESG Rating over the previous 12 months. A security without any change in ESG Rating over the previous 12 months will have a neutral ESG Trend.

## 4.4 Quarterly Index Reviews

The Index is also reviewed on a quarterly basis to coincide with the regular Index Reviews of the Parent Index. The changes are implemented at the end of February, August and November. The pro forma indexes are generally announced nine business days before the effective date.

For the Quarterly Index Reviews, MSCI ESG Ratings, MSCI ESG Controversies, MSCI data, MSCI Business Involvement Screening Research and MSCI Climate Change Metrics data are taken as of the end of the month preceding the Index Reviews, i.e., January, July and October. For some securities, this 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 Index.

At the Quarterly Index Reviews, existing constituents are deleted from the Index if they do not meet the eligibility criteria described in Section 4.1.1. Existing constituents that meet the eligibility criteria are retained in the Index.

Additions from the eligible securities as per Section 3.2 are made only to those Selection Groups, where the cumulative weight in the Capped Universe is less than 45% of the cumulative weight of the Selection Group in the Parent Index. Eligible securities are added until the target 50% cumulative weight of the Selection Group in the Parent Index is achieved, using the cumulative weights in the Capped Universe.

Market price movements may cause small deviations in the selection group coverage between two Index Reviews. Therefore, to minimize turnover, a buffer of 10% is used on the target coverage of 50% to define under-representation.

## 4.5 Ongoing Event Related Changes

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. For cases where additions are noted below, securities will be added to the index only if added to the Parent Index.

Parent Index deletions will be reflected simultaneously.

There are no deletions from the Index between Index Reviews because of a security becoming ineligible because of MSCI ESG Rating downgrade and/or decrease in MSCI ESG Controversies Score and/or change in business involvement.

EVENT TYPE	EVENT DETAILS
<b>New additions to the Parent Index</b>	New securities added to the Parent Index (such as IPOs, other early inclusions and migrations from a different size-segment) will be added to the MSCI AC Asia ex Japan ESG Leaders Low Carbon Select 5% Issuer Capped Index on the date of security inclusion only if they meet the eligibility criteria described in Section 3 and the market capitalization coverage of the sector to which the security belongs is less than 45%.
<b>Spin-Offs</b>	All securities created as a result of the spin-off of an existing Index constituent will not be added to the MSCI AC Asia ex Japan ESG Leaders Low Carbon Select 5% Issuer Capped Index at the time of event implementation. Reevaluation for inclusion in the Indexes will occur at the subsequent Index Review.
<b>Merger/Acquisition</b>	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.
<b>Changes in Security Characteristics</b>	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 1: Values and Climate Change Based Screening Criteria

MSCI ESG Research has developed a framework designed to define significant involvement in controversial activities. According to this framework, there are four levels of restrictiveness: Most Restrictive, Highly Restrictive, Moderately Restrictive, Least Restrictive.

Each controversial activity screened by the MSCI AC Asia ex Japan ESG Leaders Low Carbon Select 5% Issuer Capped Index (except Conventional Weapons, Fossil Fuel Extraction and Thermal Coal Power) is assigned to one of these restrictiveness levels.

### **“Most Restrictive” screen applied**

- **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 Ex-Controversial Weapons Indexes available at <https://www.msci.com/index-methodology>

### **“Highly Restrictive” screen applied**

- **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

#### **“Moderately Restrictive” screen applied**

- **Civilian Firearms**

- All companies deriving 5% or more revenue from the production 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 15% 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 deriving 5% or more revenue from the production of tobacco-related products
- All companies deriving 15% or more aggregate revenue from the production, distribution, retail, supply and licensing of tobacco-related products

#### **“Least Restrictive” screen applied**

- **Alcohol**

- All companies deriving 10% or more revenue from the production of alcohol-related products

- **Gambling**

- All companies deriving 10% or more revenue from ownership or operation of gambling-related business activities

- **Nuclear Power**

- All companies deriving 10% or more revenue from the ownership or operation of nuclear power plants

## **No specific restrictiveness level applied**

- **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

- **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 coal-based power generation.

## Appendix 2: Guidelines on Achieving the Target Coverage of 50%

The MSCI AC Asia ex Japan ESG Leaders Low Carbon Select 5% Issuer Capped Index targets 50% of the cumulative weight of each Selection Group of the Parent Index ("target weight"). The underlying principle in the construction of the indexes is to achieve cumulative weight closest to the target weight, while aiming to maintain index stability.

The following guidelines are used in achieving the target weight:

- For each Selection Group, the eligible companies of the regional Parent Index are first ranked based on the company level ESG Rating.
- If two companies have the same ESG Rating, the company with better ESG Trend is given priority (positive ESG Trend preferred to neutral ESG Trend and neutral ESG Trend preferred to negative ESG Trend).
- In case of two companies with the same ESG Rating and the same ESG Trend, an existing index constituent is given priority to maintain index stability. Between two existing constituents with the same ESG Rating and the same ESG Trend, the company with the higher industry adjusted ESG Score is given priority. For two existing index constituents with the same industry adjusted ESG score, the security with the largest free float-adjusted market capitalization is given priority.
- The cumulative weight at each rank is calculated using weights in the Capped Universe.
- In each Selection Group, companies are selected as per the rules mentioned in Section 4.1.3 until the cumulative weight crosses the target weight or there are no eligible securities left to be selected.
- MSCI defines the company that increases the cumulative weight above the target weight as the "marginal company".
  - If the marginal company is a current index constituent, then it is always selected.
  - If the marginal company is not a current index constituent, then it is selected only if the cumulative weight with the marginal company is closer to the target weight compared to the cumulative weight without the marginal company.
- The minimum cumulative weight is set to 45% of the cumulative weight of the selection group in the Parent Index.



- The marginal company is always selected if this is required to achieve the minimum cumulative weight.
- Securities which are ineligible as per Section 4 will not be selected even if the cumulative weight after selection of all eligible securities is below the target weight.

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