Index Methodology



MSCI ACWI IMI EFFICIENT ENERGY MATERIALS ESG SELECT INDEX

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1 Introduction

The MSCI ACWI IMI Efficient Energy Materials ESG Select Index (the 'Index') aims to represent the performance of a select set of companies associated with the following themes:

- Efficient Energy and clean technology
- Smart Cities
- Future Mobility¹

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¹ The Indexes are governed by a set of methodology and policy documents ("Methodology Set"), including the present index methodology document. The Methodology Set for the Indexes can be accessed from MSCI's webpage https://www.msci.com/index-methodology in the section 'Search Methodology by Index Name or Index Code'.

The Methodology Set includes a document 'ESG Factors in Methodology' that contains the list of environmental, social, and governance factors considered, and how they are applied in the methodology (e.g., selection, weighting or exclusion).



2 **Constructing the Index**

The Index uses company ratings and research provided by MSCI ESG Research² for the Index construction.

The Index is constructed by selecting stocks from the MSCI ACWI Investable Market Index (IMI) ('Parent Index'), based on rules explained in the following sections.

2.1 Determining the components of the Index

The Index uses the relevance scores of the constituents of three MSCI Thematic Indexes³ ('Component Indexes'):

- MSCI ACWI IMI Future Mobility Index
- MSCI ACWI IMI Smart Cities Index
- MSCI ACWI IMI Efficient Energy Index

2.2 Determining the Eligible Universe of the Index

An eligible universe for the Index is constructed by applying the following filters to the Parent Index:

2.2.1 ESG Controversy Score

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

Missing ESG Controversy Score – Companies not assessed by MSCI ESG Research's MSCI ESG Controversy Scores are excluded.

2.2.2 ESG Rating

ESG Rating = 'CCC' – Securities of companies having an MSCI ESG Rating of 'CCC' are excluded.

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² See section 4 for further information regarding ESG and climate data used in the Indexes that MSCI Limited sources 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. MSCI Limited is the benchmark administrator for the MSCI indexes.

³ Please refer to <u>https://www.msci.com/index-methodology</u> for the methodology of the Component Indexes and for details of the calculation of relevance score.



Missing ESG Rating – Companies which are not rated by MSCI ESG Research for an MSCI ESG Rating are not excluded.

2.3 Determining the Selected Universe of the Index

The selected universe for the Index is constructed by combining all stocks from the selected universe of each component described in section 2.1.

The selected universe for each component described in section 2.1 is constructed using the following steps.

2.3.1 Selected Universe for Future Mobility Component

The following additional steps are followed to construct the selected universe:

- Securities from the eligible universe which are present in the top threequarters of the MSCI ACWI IMI Future Mobility Index, by relevance score, are included in the selected universe.
- 2. Securities in the selected universe are weighted by the product of their relevance score and their float adjusted market capitalization. The weights of selected securities are then normalized to sum to 100%.
- 3. Additionally, the weights of selected securities are capped at the issuer level to mitigate concentration risk. The issuer weight in this component is capped at 5%.

2.3.2 Selected Universe for Smart Cities Component

The following additional steps are followed to construct the selected universe:

- 1. Securities from the eligible universe which are present in the top threequarters of the MSCI ACWI IMI Smart Cities Index, by relevance score are included in the selected universe.
- 2. Securities in the selected universe are weighted by the product of their relevance score and their float adjusted market capitalization. The weights of selected securities are then normalized to sum to 100%.
- 3. Additionally, the weights of selected securities are capped at the issuer level to mitigate concentration risk. The issuer weight in this component is capped at 5%.

2.3.3 Selected Universe For Efficient Energy Component

The following additional steps are followed to construct the selected universe:

1. For each security in the eligible universe, a combined relevance score is calculated as: Maximum (Relevance Score in the MSCI ACWI IMI Efficient

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Energy Index, Clean Tech Alternative Energy Revenue⁴/100, Clean Tech Energy Efficiency Revenue⁵/100).

- 2. Securities with a combined relevance score greater than or equal to 25% are sorted in descending order. Of these, securities which are present in the top three-quarters by combined relevance score are included in the selected universe.
- Securities in the selected universe are weighted by the product of their combined relevance score and their float adjusted market capitalization. The weights of selected securities are then normalized to sum to 100%.
- 4. Additionally, the weights of selected securities are capped at the issuer level to mitigate concentration risk. The issuer weight in this component is capped at 5%.

2.4 Determining the weights of the constituents of the Index

The weight of each stock in the Index is calculated as follows:

$$w_i^{Mix} = \sum_{C(j)} s_i^{C(j)} x \ w_i^{C(j)}$$

where:

- w_i^{Mix} is the weight of stock i in the Index
- $w_i^{C(j)}$ is the weight of stock i in the Component $C(j)^6$
- $s_i^{C(j)}$ is the scaling factor applied to the weight of all stocks in the Component C(j)
- $S_i^{Future Mobility Component} = 30\%$
- $s_i^{Smart\ Cities\ Component} = 20\%$
- $S_i^{Efficient \ Energy \ Component} = 50\%$

Additionally, constituent weights are capped at the issuer level to mitigate concentration risk in the Index. The issuer weight in the Index is capped at 5%.

⁶ C(j) refers to each of the components described in sections 2.3.1 to 2.3.3 in this document.

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^{2.3} Please refer to <u>https://www.msci.com/index-methodology</u> for the MSCI Global Environment Indexes methodology for details of the calculation of the clean tech alternative energy revenue and the clean tech energy efficiency revenue.



3 Maintaining the Index

3.1 Semi-Annual Index Review

The Index is reviewed on a Semi-Annual basis in May and November to coincide with the May and November Index Reviews of the Component Indexes, and the changes are implemented at the end of May and November. In general, the pro forma index is announced nine business days before the effective date.

During the Index Review, the eligible universe and selected universe are updated.

In general, MSCI uses MSCI ESG Research data⁷ (including MSCI ESG Ratings, MSCI ESG Controversies Score and MSCI Sustainable Impact Metrics) as of the end of the month preceding the Index Reviews. 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. 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 Ongoing event-related maintenance

The general treatment of corporate events in the index 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.

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.

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



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.

The MSCI Corporate Events methodology book is available at: <u>https://www.msci.com/index-methodology.</u>

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4 MSCI ESG Research

The Index is 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 Score and MSCI Sustainable Impact Metrics. MSCI Indexes are administered by MSCI Limited.

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: <u>https://www.msci.com/esg-and-climate-methodologies</u>.

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: <u>https://www.msci.com/esg-and-climate-methodologies</u>

4.3 MSCI Impact Solutions: Sustainable Impact metrics

MSCI Impact Solutions' Sustainable Impact Metrics is designed to identify companies that derive revenue from products or services with positive impact on society and the environment. The Sustainable Impact Metrics are comprised of six Environmental Impact categories and seven Social Impact categories arranged by theme.



MSCI Sustainable Impact Taxonomy

Pillar	Themes	Categories
Environmental Impact	Climate Change	 Alternative energy Energy efficiency Green building
	Natural capital	 Sustainable water Pollution prevention Sustainable agriculture
Social Impact	Basic needs	 Nutrition Major Disease Treatment Sanitation 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 <u>https://www.msci.com/index-methodology</u>



Appendix I: Changes to this Document

The following sections have been modified since January 2022:

• Introduction

The following sections have been modified as of July 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 2.2.1: Clarified the exclusion criteria for companies involved in ESG Controversies
- MSCI ESG Research. Moved that section after the Section 3. Updated the descriptions of MSCI ESG Research products.



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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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