

MSCI ESG Selection P-Series Indexes Methodology

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1. Introduction

The MSCI ESG Selection P-Series Indexes (the "Indexes") are free float-adjusted market capitalization-weighted indexes designed to represent the performance of companies that are selected from an underlying index based on Environmental, Social and Governance (ESG) criteria.

The Indexes¹ are derived from underlying MSCI indexes (the "Parent Indexes") and aim to achieve sector weights that reflect the sector weights of the corresponding Parent Index. The Indexes are constructed by excluding constituents based on ESG ratings, exposure to ESG controversies or involvement in specific business activities and target 50% free float-adjusted market capitalization coverage of each Global Industry Classification Standard (GICS®)² sector by selecting constituents primarily based on criteria including the ESG rating and the company's industry-adjusted ESG score.

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 GICS is the global industry classification standard jointly developed by MSCI and S&P Global Market Intelligence.



2. Constructing the Indexes

2.1 Underlying Universe

The Underlying Universe for the Indexes is defined by the constituents of the MSCI Global Investable Market Indexes ("GIMI").

2.2 Eligibility Criteria

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

2.2.1 ESG Ratings Eligibility

The Indexes use 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.

2.2.2 ESG Controversies Score Eligibility

The Indexes use MSCI ESG Controversies Scores to identify 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 Indexes.

2.2.3 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. Please refer to Appendix II for details on these criteria.

- Controversial Weapons
- Nuclear Weapons
- Aggregate Weapons
- Civilian Firearms
- Tobacco
- Alcohol
- Gambling

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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.



- Nuclear Power
- Thermal Coal Mining
- Oil & Gas⁴
- Power Generation⁵
- Palm Oil Production⁶

2.3 Index Construction

The Indexes are constructed at a regional level, with the exception of North America which is built separately for Canada and the USA. Each regional Index targets 50% of the free float-adjusted market capitalization within each GICS sector of the underlying Parent Index.

The following regional Indexes are aggregated to construct the MSCI World ESG Selection P-Series Index.

MSCI Regional ESG Selection P-Series Index	Region	Parent Index
MSCI Pacific ESG Selection P-Series Index	Developed Asia Pacific	MSCI Pacific Index
MSCI Europe & Middle East ESG Selection P-Series Index	Developed Europe & Middle East	MSCI Europe & Middle East Index
MSCI Canada ESG Selection P-Series Index	Canada	MSCI Canada Index
MSCI USA ESG Selection P-Series Index	USA	MSCI USA Index

The following regional Indexes are aggregated to construct the MSCI EM ESG Selection P-Series Index.

MSCI Regional ESG Selection P- Series Index	Region	Parent Index
MSCI Emerging Markets Asia ESG Selection P-Series Index	Emerging Asia	MSCI Emerging Markets Asia Index
MSCI Emerging Markets Europe, Middle East & Africa ESG Selection P-Series Index	Emerging Europe, Middle East & Africa	MSCI Emerging Markets Europe, Middle East & Africa Index

⁴ The Unconventional Oil & Gas and the Arctic Oil & Gas extraction screens are applied from November 2018.

⁵ The Fossil Fuel Power Generation screens are applied from November 2018.

⁶ The Palm Oil Production screens are applied from November 2019.



MSCI Emerging Markets Latin	Emerging Latin America	MSCI Emerging Markets
America ESG Selection P-Series		Latin America Index
Index		

The MSCI World ESG Selection P-Series Index and the MSCI EM ESG Selection P-Series Index are aggregated to construct the MSCI ACWI ESG Selection P-Series Index.

The Indexes for other regions and countries are constructed using their respective underlying region or country parent indexes to limit the systematic risk and country/region-specific risk introduced by the ESG selection process. For example, the MSCI Europe Region ESG Selection P-Series, MSCI EMU Region ESG Selection P-Series, and MSCI World ex Europe Region ESG Selection P-Series Indexes are constructed by applying the index construction rules at the level of the respective region covered by the index. They aim to target sector weights that reflect the relative sector weights of the underlying regional index.

2.4 Treatment of Unrated Companies

Companies not assessed by MSCI ESG Research on data for any of the following MSCI ESG Research products are not eligible for inclusion in the Indexes:

- MSCI ESG Ratings
- MSCI ESG Controversies
- MSCI Climate Change Metrics
- MSCI Business Involvement Screening Research (BISR)



3. Maintaining the Indexes

3.1 Annual Index Review

The Indexes are reviewed on an annual basis in May to coincide with the May Index Review of the Parent Index, and the changes are implemented at the end of May. In general, the pro forma Indexes are announced nine business days before the effective date.

In general, MSCI uses MSCI ESG Research data⁷ (including MSCI ESG Ratings, MSCI ESG Controversies Scores, 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 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.

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 sector of the Parent Index.

3.1.1 Updating the Eligible Universe

The Eligible Universe is updated during each Annual Index Review.

Companies that are currently not constituents of the Indexes are evaluated using the same eligibility criteria described in Section 2.2.

Existing constituents of the Indexes 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 2.2.3

3.1.2 Ranking of Eligible Securities

For each sector, eligible securities of the regional Parent Index as described in Section 2.2 are ranked based on the following criteria:

- ESG Rating
- Current Index membership (existing constituents above non-constituents of the Indexes)
- Industry-adjusted ESG scores
- Decreasing free float-adjusted market capitalization

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



3.1.3 Selection of Eligible Securities

For each sector, eligible securities of the regional Parent Index are then selected from the ranked Eligible Universe in the following order until the target 50% coverage by cumulative free float-adjusted market capitalization is reached:

- Securities in the top 35% cumulative free float-adjusted market capitalization coverage of the ranked universe, including the first security that increases the cumulative coverage above 35%
- 'AAA' rated securities in the top 50% cumulative free float-adjusted market capitalization coverage of the ranked universe, including the first security that increases the cumulative coverage above 50%
- Current Index constituents in the top 65% cumulative free float-adjusted market capitalization coverage of the ranked universe, including the first security that increases the cumulative coverage above 65% if that security is a current index constituent
- Remaining eligible securities in the ranked universe

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

3.2 Quarterly Index Reviews

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

For the Quarterly Index Reviews, MSCI ESG Ratings, MSCI ESG Controversies Score assessments and MSCI BISR 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 Indexes.

At the Quarterly Index Reviews, existing constituents are deleted from the Indexes if they do not meet the eligibility criteria described in Section 3.1.1. Existing constituents that meet the eligibility criteria are retained in the index.

Additions, from the eligible securities as per Section 2.2, are made only to those sectors where the current market capitalization coverage is less than 45%, until the 50% target is reached.

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

3.3 Ongoing Event-Related Maintenance

The following section briefly describes the treatment of common corporate events within the Indexes.

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 Indexes between Index Reviews on account 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
New additions to the Parent Index	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 Indexes on the date of security inclusion only if they meet the eligibility criteria described in Section 2.2 and the market capitalization coverage of the sector to which the security belongs is less than 45%.
Spin-Offs	All securities created as a result of the spin-off of an existing Index constituent will not be added to the Indexes at the time of event implementation. Reevaluation for addition in the Indexes will occur at the subsequent Index Review.
Merger/Acquisition	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.

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 utilize 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/resources/factsheets/MSCI_ESG_BISR.pdf.

4.4 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 https://www.msci.com/climate-change-solutions.



Appendix I: Guidelines on Achieving the Target Sector Coverage of 50%

The Indexes target 50% coverage of the free float-adjusted market capitalization of each GICS sector of the regional Parent Index. The underlying principle in the construction of the indexes is to achieve cumulative sector coverage closest to 50%, while aiming to maintain index stability.

The following guidelines are used in achieving the target cumulative sector coverage of 50%:

- For each sector, 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 existing ESG Selection P-Series index
 constituent is given priority to maintain index stability. Between two existing constituents with
 the same ESG Rating, the company with the higher industry-adjusted ESG score is given priority.
 For two existing ESG Selection P-Series Index constituents with the same industry-adjusted ESG
 score, the security with the largest free float-adjusted market capitalization is given priority.
- The cumulative sector coverage at each rank is calculated.
- In each sector, companies are selected as per the rules mentioned in Section 3.1.2 until the cumulative sector coverage crosses 50% or there are no eligible securities left to be selected.
- MSCI defines the company that increases the cumulative sector coverage above 50% 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 sector coverage with the marginal company is closer to 50% compared to the cumulative sector coverage without the marginal company.
- The minimum cumulative sector coverage is set to 45%.
 - The marginal company is always selected if this is required to achieve cumulative sector coverage of 45%.
- Securities which are ineligible as per Section 3.1.1 will not be selected even if the cumulative sector coverage after selection of all eligible securities is below 50%.



Appendix II: Controversial Business Involvement 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 ESG Selection P-Series Indexes (except the fossil fuel-related and other screens) 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/latest/XCW

"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

Tobacco

- All companies involved in the production of tobacco products. Tobacco products include nicotine-containing products, including traditional and alternative tobacco smoking products.
- All companies deriving 5% or more aggregate revenue (or, where not disclosed, maximum estimated revenue) from the production, distribution or retail of tobacco products, as a licensor of brand names for tobacco products, or as a supplier for tobacco products in their most recently completed fiscal year. Tobacco products include nicotine-containing products, including traditional and alternative tobacco smoking products.



Civilian Firearms

- All companies that produce firearms and small-arms ammunitions intended for civilian markets.
- All companies deriving 5% or more revenue (either reported or estimated) from the production, wholesale or retail, of firearms and ammunition intended for civilian use in their most recently completed fiscal year.

"Least Restrictive" screen applied

Alcohol

 All companies deriving 10% or more revenue (or, where not disclosed, maximum estimated revenue) from alcohol production in their most recently completed fiscal year.

Gambling

 All companies deriving 10% or more revenue (or, where not disclosed, maximum estimated revenue) from gambling operations, including online or mobile gambling, in their most recently completed fiscal year.

Nuclear Power

 All companies deriving 10% or more revenue (or, where not disclosed, maximum estimated revenue) from nuclear power generation in their most recently completed fiscal year.

No specific restrictiveness level applied

Aggregate Weapons

All companies deriving 10% or more aggregate revenue (either reported or estimated) 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 nondetectable fragments weapons in their most recently completed fiscal year.

Thermal Coal Mining

 All companies deriving 1% or more revenue (either reported or estimated) from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties. It does not cover revenue from metallurgical coal; coal mined for internal power generation (e.g. in the case of vertically integrated power producers); intra-company sales of mined thermal coal; and revenue from coal trading.

Oil & Gas

 Select Oil and Gas-related Activities: All companies deriving 10% or more revenue from oil and gas related activities, including distribution/retail, equipment and services, extraction



and production, pipelines and transportation and refining. This does not cover biofuel production and sales and trading activities.

- Unconventional Oil & Gas Extraction: All companies deriving 5% or more revenue (either reported or estimated) from unconventional oil and gas. It includes 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.
- Arctic Oil & Gas: All companies deriving 5% or more aggregate revenue (either reported or estimated) from arctic oil and gas production. The definition of Arctic is geographical and includes production activities north of the 66.5 latitude. The underlying factors cover offshore or onshore oil and gas production.

Power Generation

- Thermal Coal Power: All companies deriving 5% or more revenue (either reported or estimated) from thermal coal-based power generation.
- Fossil Fuel Power: 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.

Palm Oil Production

 All companies deriving 5% or more revenue (or, where not disclosed, maximum estimated revenue) from the production of Palm Oil.



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 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 https://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.



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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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