

METHODOLOGY BOOK FOR:

- **MSCI NORTH AMERICA SELECT ESG EX CONTROVERSIES INDEX**
- **MSCI EUROPE SELECT ESG EX CONTROVERSIES INDEX**
- **MSCI PACIFIC SELECT ESG EX CONTROVERSIES INDEX**
- **MSCI EMERGING MARKETS (EM) SELECT ESG EX CONTROVERSIES INDEX**

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1 Introduction

The MSCI North America Select ESG ex Controversies Index, MSCI Europe Select ESG ex Controversies Index, MSCI Pacific Select ESG ex Controversies Index and MSCI Emerging Markets (EM) Select ESG ex Controversies Index (the “MSCI Select ESG ex Controversies Indexes”) are free float-adjusted market capitalization weighted indexes that are designed to reflect the performance of companies that have above average Environmental, Social and Governance (ESG) ratings relative to their sector peers. Additionally, these indexes exclude companies that are associated with business that have a high negative social impact (for example – adult entertainment, tobacco, weapons, nuclear power and gambling) as well as those with a high negative environmental impact (for example – thermal coal).

2 ESG Research Framework

The MSCI Select ESG ex Controversies Indexes use company rating research provided by MSCI ESG Research LLC. In particular, these indexes use the following four MSCI ESG Research products: MSCI ESG Ratings, MSCI ESG Controversies Score, MSCI ESG Business Involvement Screening Research and MSCI ESG Climate Change Metrics Data.

For details on MSCI ESG Research’s full suite of ESG products, please refer to: http://www.msci.com/products/esg/about_msci_esg_research.html

2.1 MSCI ESG RATINGS

MSCI ESG Ratings provides research, analysis and ratings of how well companies manage environmental, social and governance risks and opportunities. MSCI ESG Ratings provides an overall company ESG rating - a seven-point scale from ‘AAA’ to ‘CCC’. In addition, the product provides scores and percentiles indicating how well a company manages each key issue relative to industry peers.

For more details on MSCI ESG Ratings, please refer to:

<https://www.msci.com/esg-ratings>

2.2 MSCI ESG CONTROVERSIES

MSCI ESG Controversies (earlier known as MSCI Impact Monitor) provides assessments of controversies concerning the 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.

For more details on MSCI ESG Controversies Score, please refer to

<https://www.msci.com/documents/10199/acbe7c8a-a4e4-49de-9cf8-5e957245b86b>

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

2.4 MSCI CLIMATE CHANGE METRICS

MSCI Climate Change Metrics is designed to support investors seeking to achieve a range of objectives, including measuring and reporting on climate risk exposure, implementing low carbon and fossil fuel-free strategies, and factoring climate change research into their risk management processes. It provides Carbon Emissions, Fossil Fuel exposure, environmental impact (i.e., clean technology) data and screens, as well as climate-related risk exposure and management assessment on companies.

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

3 Constructing the MSCI Select ESG ex Controversies Indexes

The MSCI Select ESG ex Controversies Indexes are constructed by applying the following steps to the corresponding Parent Index

- Selection Universe
- Eligible Universe
- Weighting Scheme

3.1 SELECTION UNIVERSE

The selection universe for the MSCI Select ESG ex Controversies Indexes is their corresponding MSCI Parent Index, as shown in the table below:

Index	Parent Index
MSCI North America Select ESG ex Controversies Index	MSCI North America Index
MSCI Europe Select ESG ex Controversies Index	MSCI Europe Index
MSCI Pacific Select ESG ex Controversies Index	MSCI Pacific Index
MSCI Emerging Markets (EM) Select ESG ex Controversies Index	MSCI Emerging Markets Index

3.2 ELIGIBLE UNIVERSE

Securities from the selection universe which are not excluded by the below criteria, are eligible for inclusion in the MSCI Select ESG ex Controversies Indexes.

3.2.1 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.

3.2.2 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.

3.2.3 VALUES AND CLIMATE CHANGE BASED EXCLUSIONS

The Indexes use 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 Indexes:

Values based Exclusions:

1. Alcohol
2. Gambling
3. Tobacco
4. Nuclear Power
5. Conventional Weapons
6. Nuclear Weapons
7. Controversial Weapons
8. Civilian Firearms
9. Adult Entertainment

Climate Change based Exclusions

1. Thermal Coal
2. Oil & Gas Extraction

Please refer to the Appendix for details on these criteria.

3.3 WEIGHTING SCHEME

The remaining securities in the eligible universe are weighted in proportion of their free float-adjusted market capitalization.

4 Maintaining the MSCI Select ESG ex Controversies Indexes

4.1 QUARTERLY INDEX REVIEW

The Indexes reviewed on a quarterly basis, coinciding with the May and November Semi-Annual Index Reviews and the February and August Quarterly Index Reviews of the Parent Index.

In general, MSCI uses MSCI ESG Research data (including MSCI ESG Ratings, MSCI ESG Controversies Scores, MSCI Business Involvement Screening Research and MSCI ESG 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 Indexes.

The pro forma Index is typically announced nine business days before the effective date.

4.2 ONGOING EVENT-RELATED CHANGES

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

No new securities will be added (except where noted below) to the Indexes 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 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

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 not be added to the index at the time of event implementation.

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>.

Appendix: Screening Criteria

Companies, whose activities meet the following controversial business activities-based criteria, as evaluated by MSCI ESG Research, are excluded from the Indexes:

Alcohol

- All companies classified as a “Producer” or “Distiller” that earn either 50% or more revenue or more than \$1 billion in revenue from alcohol-related products

Gambling

- All companies classified as involved in “Operations” and “Support” that earn 50% or more in revenue, or more than \$1 billion in revenue, from gambling-related products

Tobacco

- All companies classified as a “Producer” that earn either 50% or more revenue or more than \$1 billion in revenue from tobacco-related products

Nuclear Power

- All companies with 6000 MW or more of installed capacity attributed to nuclear sources or with 50% or more of installed capacity attributed to nuclear sources
- All companies involved in nuclear fuel enrichment for nuclear power generation
- All companies involved in uranium mining for nuclear power generation
- All companies involved in nuclear reactor design or construction for nuclear power generation

Conventional Weapons

- All companies that manufacture conventional weapons components or conventional weapons and weapons systems and earn 50% or more in revenue, or \$3 billion or more in revenue from these activities

Nuclear Weapons

- All companies involved in manufacturing of nuclear weapon components, nuclear weapon systems, nuclear warheads and missiles, nuclear components modified/developed exclusively for nuclear weapons, delivery platforms modified/developed exclusively for nuclear weapons or companies

involved in production/storage of fissile materials used in/for nuclear weapons.

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>

Civilian Firearms

- All companies classified as a “Producer” that earn either 50% or more revenue or more than \$100 million in revenue from civilian firearms

Adult Entertainment

- All companies classified with any tie to adult entertainment (i.e. producer, distributor, retailer, and/or ownership) that earn either 50% or more revenue or more than \$1 billion in revenue from adult entertainment).

Thermal Coal

- All companies deriving 30% 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 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 deriving 30% or more revenue (either reported or estimated) from thermal coal-based power generation

Oil & Gas Extraction

- All companies that derive more than 30% of revenue from Oil & Gas (both conventional and unconventional).

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