

METHODOLOGY BOOK FOR:

- **MSCI WORLD ESG UNIVERSAL SELECT BUSINESS SCREENS INDEX**
- **MSCI USA ESG UNIVERSAL SELECT BUSINESS SCREENS INDEX**
- **MSCI EUROPE ESG UNIVERSAL SELECT BUSINESS SCREENS INDEX**

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1 INTRODUCTION

The MSCI World ESG Universal Select Business Screens Index, the MSCI USA ESG Universal Select Business Screens Index and the MSCI Europe ESG Universal Select Business Screens Index (the “MSCI ESG Universal Select Business Screens Indexes”) aim to represent the performance of a strategy that excludes companies:

- that are associated with controversial weapons, nuclear weapons or oil sands
- that derive revenues from conventional weapons, thermal coal or tobacco
- that are involved in very severe controversies pertaining to ESG issues

At the same time, the strategy also aims to increase exposure to companies demonstrating both a robust ESG profile as well as a positive trend in improving that profile, by re-weighting free-float adjusted market capitalization weights based on certain ESG metrics.

2 MSCI ESG RESEARCH

MSCI ESG Research provides in-depth research, ratings and analysis of the environmental, social and governance-related business practices of thousands of companies worldwide. It consists of an integrated suite of tools and products to efficiently manage research, analysis and compliance tasks across the spectrum of ESG factors.

The Index uses company ratings and research provided by MSCI ESG Research. In particular, this index uses the following four MSCI ESG Research products: MSCI ESG Ratings, MSCI ESG Controversies Score, 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-integration>

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 (previously known as MSCI ESG 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/esg-integration>

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 ESG UNIVERSAL SELECT BUSINESS SCREENS INDEXES

The MSCI ESG Universal Select Business Screens Indexes are constructed using the following steps:

- Defining the Eligible Universe
- Applying ESG Exclusions
- Applying the MSCI ESG Universal Indexes methodology¹

These steps are defined in greater detail in the subsequent sections:

3.1 DEFINING THE ELIGIBLE UNIVERSE

The eligible universe for MSCI ESG Universal Select Business Screens Indexes includes all the constituents of their respective MSCI parent index (the “Parent Index”), as shown in the table below.

Index Name	Parent Index
MSCI World ESG Universal Select Business Screens Index	MSCI World Index
MSCI USA ESG Universal Select Business Screens Index	MSCI USA Index
MSCI Europe ESG Universal Select Business Screens Index	MSCI Europe Index

3.2 APPLYING ESG EXCLUSIONS

3.2.1 EXCLUSION OF COMPANIES BASED ON BUSINESS INVOLVEMENT

The MSCI ESG Universal Select Business Screens 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 MSCI ESG Universal Select Business Screens Indexes.

- Controversial Weapons
- Conventional Weapons
- Nuclear Weapons
- Oil Sands
- Thermal Coal

¹ Please refer to the methodology book for the MSCI ESG Universal Indexes, available at www.msci.com/index-methodology for more information

- Tobacco

Please refer to Appendix 1 for details on these criteria.

3.2.2 EXCLUSION OF UNRATED COMPANIES

Companies are excluded from the MSCI ESG Universal Select Business Screens Indexes if they have:

- Missing Controversy Score – Companies not assessed by MSCI ESG Research on MSCI ESG Controversies.
- Missing ESG Rating – Companies not rated by MSCI ESG Research for an ESG assessment.

3.2.3 EXCLUSION OF COMPANIES HAVING FACED VERY SEVERE ESG CONTROVERSIES

Companies having faced very severe controversies pertaining to ESG issues in the last three years – defined as companies with an ESG Controversy Score of 0 – are excluded from MSCI ESG Universal Select Business Screens Indexes.

3.3 APPLYING THE MSCI ESG UNIVERSAL INDEXES METHODOLOGY

The index constituents and their weights are determined by applying the ESG Universal Indexes Methodology on the securities which remain in the eligible universe after applying the ESG exclusions detailed in section 3.2.

4 MAINTAINING THE MSCI ESG UNIVERSAL SELECT BUSINESS SCREENS INDEXES

4.1 SEMI-ANNUAL INDEX REVIEWS

The MSCI ESG Universal Select Business Screens Indexes are reviewed on a semi-annual basis to coincide with the regular Semi-Annual Index Reviews of the MSCI Global Investable Market Indexes. The changes are implemented as of the close of the last business day of May and November.

In general, MSCI uses MSCI ESG Research data (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 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.

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

4.2 QUARTERLY INDEX REVIEWS

The MSCI ESG Universal Select Business Screens 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 involved in controversial businesses detailed in section 3.2. MSCI ESG Research data as of the end of January and July are used for the February and August Quarterly Index Reviews, respectively.

4.3 ONGOING EVENT RELATED CHANGES

The general treatment of corporate events in the MSCI ESG Universal Select Business Screens 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.

The following section briefly describes the treatment of common corporate events within MSCI ESG Universal Select Business Screens 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.

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 book.

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

APPENDIX 1 – ESG EXCLUSIONS CRITERIA

MSCI ESG Research has developed a framework designed to define significant involvement in controversial activities. According to this framework, there are three tolerance levels: Zero Tolerance, Minimal Tolerance and Low Tolerance.

Each controversial activity screened by the MSCI ESG Universal Select Business Screens Indexes (except Thermal Coal) is assigned to one of these tolerance levels:

Activities classified under “Zero Tolerance”

- **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>.
- **Nuclear Weapons**
 - All companies that manufacture nuclear warheads and/or whole nuclear missiles. Includes assembly and integration of warhead and missile body as well as companies with contracts to operate/manage government-owned facilities that manufacture nuclear warheads and missiles.
 - All companies that manufacture components that were developed or are significantly modified for exclusive use in nuclear weapons (warheads and missiles). Includes companies with contracts to operate/manage government-owned facilities that manufacture components for nuclear warheads and missiles, such as fissile materials, non-nuclear components, explosives, triggers and detonators, etc.
 - 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, such as repairing and maintaining nuclear weapons, providing overhaul and upgrade services (including engineering), stockpiling and stewardship, R&D work, testing and simulations, etc. Includes companies with contracts to operate/manage government-owned facilities that conduct R&D, testing, simulations, and other essential sciences on nuclear weapons.
 - All companies that manufacture components that were not developed or not significantly modified for exclusive use in nuclear weapons (warheads

and missiles). I.e. these components can be used in both nuclear and conventional weapons.

- All companies that manufacture or assemble delivery platforms that were not developed or not significantly modified for the exclusive delivery of nuclear weapons. i.e. these platforms are capable of delivering conventional weapons.
- All companies that manufacture components for nuclear-exclusive delivery platforms.
- All companies that manufacture nuclear weapons, including nuclear warheads, intercontinental ballistic missiles, and ballistic missile submarines, which are capable of the delivery of nuclear warheads.
- All companies that manufacture key nuclear weapons components.
- All companies that are 50 percent or more owned by a company with nuclear weapons involvement.
- Companies that own 20 to 49.99 percent of a company with involvement. When a company owns 50 percent or more of a subsidiary with involvement, MSCI treats it as a consolidated subsidiary.

- **Oil Sands**

- All companies with an industry tie to oil sands, in particular, reserve ownership and production activities.

Activities classified under “Minimal Tolerance”

- **Tobacco**

- All companies classified as a “Producer”
- All companies deriving 5% or more aggregate revenue from the production, distribution, retail and supply of tobacco-related products.

Activities classified under “Low Tolerance”

- **Conventional Weapons**

- All companies deriving 5% or more revenue (either reported or estimated) from the production of conventional weapons.
- All companies deriving 15% or more revenue (either reported or estimated) from weapons systems, components, and support systems and services.

Activities not classified under any specific tolerance level**• 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 the thermal coal-based power generation.

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