

Methodology Book for:

- **MSCI World Select ESG Screened Index**
- **MSCI USA Select ESG Screened Index**
- **MSCI Japan Select ESG Screened Index**
- **MSCI EM Select ESG Screened Index**
- **MSCI Europe Select ESG Screened Index**
- **MSCI EMU Select ESG Screened Index**
- **MSCI ACWI Select ESG Screened Index**
- **MSCI EM Asia Select ESG Screened Index**
- **MSCI Pacific ex Japan Select ESG Screened Index**
- **MSCI Canada Select ESG Screened Index**
- **MSCI China A Inclusion Select ESG Screened Index**

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1 Introduction

The MSCI World Select ESG Screened, MSCI USA Select ESG Screened, MSCI Japan Select ESG Screened, MSCI EM Select ESG Screened, MSCI Europe Select ESG Screened, MSCI EMU Select ESG Screened, MSCI ACWI Select ESG Screened, MSCI EM Asia Select ESG Screened, MSCI Pacific ex Japan Select ESG Screened, MSCI Canada Select ESG Screened, and MSCI China A Inclusion Select ESG Screened Indexes (herein, “the Indexes”) aim to represent the performance of a free float adjusted market capitalization weighted investment strategy that excludes companies:

- that are associated with conventional, controversial, civilian, and nuclear weapons as well as tobacco, palm oil and arctic oil & gas or
- that are assigned an MSCI ESG Rating of ‘CCC’ or
- that derive revenues from thermal coal, oil sands extraction, or
- that are involved in very severe controversies and/or in certain biodiversity-related controversies or
- that are not in compliance with the United Nations Global Compact principles

In addition, the Indexes target a minimum 30% reduction in carbon emission intensity relative to the underlying parent indexes (“Parent Indexes”).

2 MSCI ESG Research

The Indexes use company ratings and research provided by MSCI ESG Research. In particular, the Indexes use the following MSCI ESG Research products: MSCI ESG Ratings, MSCI ESG Controversies, MSCI 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.

2.4 MSCI CLIMATE CHANGE METRICS

MSCI Climate Change Metrics provides 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, align 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 MSCI Select ESG Screened Indexes

3.1 ELIGIBLE UNIVERSE

The Eligible Universe for Indexes includes all the constituents of their respective Parent Index, as shown in Appendix 2.

3.2 ELIGIBILITY CRITERIA

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

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 with an MSCI ESG Rating of ‘CCC’ are excluded from the Indexes.

3.2.2 ESG 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.

- Conventional Weapons
- Controversial Weapons
- Nuclear Weapons
- Civilian Firearms
- Tobacco
- Fossil Fuel Extraction
- Thermal Coal Power
- Arctic Oil & Gas
- Palm Oil

In addition to the above, companies are also excluded from the Parent Index if they exhibit any of the following characteristics:

- MSCI ESG Controversies Score of zero¹ and/or fail to comply with the United Nations Global Compact Principles
- MSCI ESG Controversies: Environment – Land Use and Biodiversity Score of 1
- MSCI ESG Controversies: Environment – Supply Chain Management Score of 1

Please refer to Appendix 1 for details on these criteria.

3.3 WEIGHTING SCHEME

The remaining securities, after the exclusions based on section 3.2, are weighted in proportion of their free float-adjusted market capitalization.

Additionally, security weights are adjusted to specific requirements of neutrality and active exposure relative to sector/country/region categories as detailed in Appendix 3.

3.4 GHG INTENSITY REDUCTION

After the weighting scheme is applied as per section 3.3, the GHG intensity relative to the Parent Index is assessed. If the GHG intensity² is not at least 30% lower than the Parent Index, additional securities are excluded from the Eligible Universe to achieve a reduction of 30% GHG intensity relative to the Parent Index. The following iterative process is applied:

1. Securities are ranked in descending order of GHG intensity.
2. The security with the highest GHG intensity is excluded and the resulting index is compared to the Parent Index, to determine if a 30% reduction in GHG intensity has been achieved.
3. If the reduction has been achieved, no further securities are excluded. If the reduction has not been achieved, further securities are excluded as per steps 1 and 2 until the 30% reduction is achieved.

¹ The exclusion of companies that have an MSCI ESG Controversies Score of zero applies since August 2022 Quarterly Review.

² Please refer to Appendix 4 for details of the calculation of GHG Intensity.

4 Maintaining the MSCI Select ESG Screened Indexes

4.1 QUARTERLY INDEX REVIEWS

The Indexes are reviewed on a quarterly basis to coincide with the regular Index Reviews of the MSCI Global Investable Market Indexes. The changes are implemented as of the close of the last business day of February, May, August and November.

In general, MSCI uses MSCI ESG Research data (including MSCI ESG Ratings, MSCI ESG Controversies Scores and MSCI Business Involvement Screening Research) 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 MONTHLY REVIEW OF CONTROVERSIES

Index constituents are reviewed on a monthly basis for the involvement in ESG controversies and for compliance with the United Nations Global Compact Principles. Existing constituents will be deleted if they face controversies as defined by MSCI ESG Controversy Score of 0 ('Red flag' companies), or if they fail comply with the UN Global Compact Principles.

MSCI uses MSCI ESG Controversies data as of the end of the month preceding the review (e.g., end of June data for the end of July monthly review). For some securities, such data may not be published by MSCI ESG Research by the end of the month preceding the review. For such securities, MSCI will use ESG data published after the end of month, when available, for the monthly review of the Index.

The pro forma Indexes are generally announced nine business days before the first business day of the month.

4.3 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 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 on account of a security becoming ineligible because of a change in business involvement, MSCI ESG Rating and/or failure to comply with the UN Global Compact Principles and/or decrease in MSCI ESG Controversies Score.

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. 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.) Re-evaluation 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 four levels of restrictiveness: Most Restrictive, Highly Restrictive, Moderately Restrictive and Least Restrictive.

Each controversial activity screened by the Indexes (except Fossil Fuel Extraction, Thermal Coal Power, Palm Oil, Arctic Oil & Gas and Global Norms) 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.

- **Civilian Firearms**

- All companies classified as “Producer” 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 5% or more aggregate revenue from the production and distribution (wholesale or retail) of firearms or small arms ammunition intended for civilian use.

- **Conventional 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 weapons systems, components, and support systems and services

- **Tobacco**

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

No specific restrictiveness level applied

- **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.
- **Arctic Oil & Gas**
 - All companies deriving 5% or more revenue from arctic oil and arctic gas production. The definition of Arctic is geographical and includes production activities north of the 66.5 latitude. This includes offshore or onshore oil and gas production.
- **Palm Oil**
 - All companies deriving 5% or more aggregate revenue from the production or distribution of Palm Oil.

- **Global Norms – United Nations Global Compact Compliance**

All companies that fail to comply with the United Nations Global Compact principles.

Note on Unrated Securities or Securities with Missing Coverage:

- Companies that are not assessed on MSCI ESG Research’s ESG Controversies, and ESG Ratings are excluded from the final universe.

Appendix 2 – Eligible Universe

The Eligible Universe for the Indexes includes all the constituents of their respective MSCI Parent Index, as shown below.

Index Name	Parent Index
MSCI World Select ESG Screened Index	MSCI World
MSCI USA Select ESG Screened Index	MSCI USA
MSCI Japan Select ESG Screened Index	MSCI Japan
MSCI EM Select ESG Screened Index	MSCI EM
MSCI Europe Select ESG Screened Index	MSCI Europe
MSCI EMU Select ESG Screened Index	MSCI EMU
MSCI ACWI Select ESG Screened Index	MSCI ACWI
MSCI EM Asia Select ESG Screened Index	MSCI EM Asia
MSCI Pacific ex Japan Select ESG Screened Index	MSCI Pacific ex Japan
MSCI Canada Select ESG Screened Index	MSCI Canada
MSCI China A Inclusion Select ESG Screened Index	MSCI China A Inclusion

Appendix 3 – Additional Weighting Scheme

After the exclusions based on section 3.2 and the weighting scheme applied based on section 3.3, the weights for the Indexes are updated as specified below.

Region Neutrality³: The weight of each region in the Indexes is equated with the weight of that region in the corresponding Parent Index. This is done by normalizing the weights of the constituents within each region to reflect the effective Parent Index region weight.

Sector Active Exposure: The Indexes weights are updated to control the sector weights from deviating at most a fixed percentage relative to the sector weights of the corresponding Parent Index.

Country Active Exposure: The Indexes weights are updated to control the country weights from deviating at most a fixed percentage relative to the country weights of the corresponding Parent Index.

Index Name	Region Neutrality	Sector Active Exposure Absolute Limit ⁴	Country Active Exposure Absolute Limit	Cap on Maximum Country Weight ⁵
MSCI World Select ESG Screened Index	Yes	1%	No	No
MSCI USA Select ESG Screened Index	No	5%	No	No
MSCI Japan Select ESG Screened Index	No	1%	No	No

³ Regions currently identified are Americas, Europe & Middle East and Pacific. In addition, the Emerging Markets (EM) region is used in the MSCI ACWI Select ESG Screened Index

⁴ A 0.50% buffer is incorporated to the Sector and Country Active Exposure Absolute Limits, reducing the absolute fixed percentage of deviation relative to the corresponding Parent Index

⁵ Applied after GHG Intensity Reduction as per section 3.4

Index Name	Region Neutrality	Sector Active Exposure Absolute Limit ⁴	Country Active Exposure Absolute Limit	Cap on Maximum Country Weight ⁵
MSCI EM Select ESG Screened Index	No	No	5%	No
MSCI Europe Select ESG Screened Index	No	1%	No	No
MSCI EMU Select ESG Screened Index	No	1%	No	No
MSCI ACWI Select ESG Screened Index	Yes	Within Developed Markets (DM): In North America: 5% In rest of countries: 1% No sector limit is applied to Emerging Markets (EM)	Within Emerging Markets (EM): 1% No country limit is applied to Developed Markets (DM)	No
MSCI EM Asia Select ESG Screened Index	No	No	5%	Maximum weight for India capped at 18%
MSCI Pacific ex Japan Select ESG Screened Index	No	1%	No	No
MSCI Canada Select ESG Screened Index	No	1%	No	No

Index Name	Region Neutrality	Sector Active Exposure Absolute Limit ⁴	Country Active Exposure Absolute Limit	Cap on Maximum Country Weight ⁵
MSCI China A Inclusion Select ESG Screened Index	No	1%	No	No

Appendix 4 – Calculation of GHG Intensity

The security level and index level GHG Intensity are calculated as per below formula:

$$\text{Security Level GHG Intensity} = \frac{\text{Carbon Emissions Scope 1 + 2 + 3}}{\text{Enterprise Value} + \text{Cash (in M\$\text{)}}}$$

$$\begin{aligned} &\text{Index Level GHG Intensity} \\ &= \frac{\text{sum of (Constituent weight * Security Level GHG Intensity)}}{\text{sum of constituent weight with Carbon emissions and EVIC data available}} \end{aligned}$$

Securities with missing Carbon Emissions and/or Enterprise Value + Cash are not considered for potential exclusion under section 3.4.

Methodology Book Tracked Changes

First version reviewed and published in April 2021.

The following modifications are effective from May 2021.

Section 1: Introduction

- Updated indexes list: MSCI ACWI Select ESG Screened Index added

Appendix 2 – Eligible Universe

- Updated Eligible Universe table

Appendix 3 – Additional Weighting Scheme

- Updated Weighting Scheme table

The following modifications are effective from August 2021.

Appendix 1 – ESG Exclusion Criteria

- Updated criteria for Conventional Weapons

The following modifications are effective from November 2021.

Section 1: Introduction

- Updated indexes list: MSCI EM Asia Select ESG Screened Index and MSCI Pacific ex Japan Select ESG Screened Index added

Appendix 2 – Eligible Universe

- Updated Eligible Universe table

Appendix 3 – Additional Weighting Scheme

- Updated Weighting Scheme table

The following modifications are effective from April 2022.

Section 1: Introduction

- Updated indexes list: MSCI Canada Select ESG Screened Index and MSCI China A Inclusion Select ESG Screened Index added

Appendix 2 – Eligible Universe

- Updated Eligible Universe table

Appendix 3 – Additional Weighting Scheme

- Updated Weighting Scheme table

The following modifications are effective from May 2022.

Section 3.2.2: ESG Exclusions

- Added ‘Fossil Fuel Extraction’ and ‘Thermal Coal Power’
- Removed ‘Thermal Coal’ and ‘Oil Sands’

Section 4.2: Ongoing Event-Related Maintenance

- Clarified the maintenance rules

Appendix 1: ESG Exclusions Criteria

- Added screens for ‘Fossil Fuel Extraction’ and ‘Thermal Coal Power’
- Removed screens for ‘Thermal Coal’ and ‘Oil Sands’
- Added note on treatment for unrated securities or securities with missing coverage

The following modifications are effective from August 2022.

Section 1: Introduction

- Added exclusion criteria for MSCI ESG Controversies Score of zero

Section 3.2.2: ESG Exclusions

- Added exclusion criteria for MSCI ESG Controversies Score of zero

The following modifications are effective from November 2022.

Appendix 3 – Additional Weighting Scheme

- Updated Weighting Scheme table

The following modifications are effective from February 2023.

Section 3.1: Eligible Universe

- Added screens for 'Arctic Oil & Gas' and 'Palm Oil'
- Added references to 'Environment – Land Use & Biodiversity Score' and 'Environment – Supply Chain Management Score'

Section 3.4: GHG Intensity Reduction

- New section

Section 4.2: Monthly Review of Controversies

- New section

Appendix 1: ESG Exclusions Criteria

- Added screens for 'Palm Oil' and 'Arctic Oil & Gas'

Appendix 4: Calculation of GHG Intensity

- New appendix

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".

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