

Methodology book for:

- **MSCI ACWI SRI Low Carbon Select 5% Issuer Capped Index**
- **MSCI USA SRI Low Carbon Select 5% Issuer Capped Index**
- **MSCI World SRI Low Carbon Select 5% Issuer Capped Index**
- **MSCI EMU SRI Low Carbon Select 5% Issuer Capped Index**
- **MSCI Emerging Markets SRI Low Carbon Select 5% Issuer Capped Index**
- **MSCI Japan SRI Low Carbon Select 5% Issuer Capped Index**
- **MSCI Pacific SRI Low Carbon Select 5% Issuer Capped Index**
- **MSCI Europe SRI Low Carbon Select 5% Issuer Capped Index**
- **MSCI Switzerland IMI Extended SRI Low Carbon Select 5% Issuer Capped Index**
- **MSCI UK IMI Extended SRI Low Carbon Select 5% Issuer Capped Index**

November 2020

Contents

- 1 Introduction 4
- 2 MSCI ESG Research 5
 - 2.1 MSCI ESG Ratings..... 5
 - 2.2 MSCI ESG Controversies..... 5
 - 2.3 MSCI ESG Business Involvement Screening Research 5
 - 2.4 MSCI Climate Change Metrics..... 6
- 3 Constructing the MSCI SRI Low Carbon Select Indexes 7
 - 3.1 Underlying Universe..... 7
 - 3.2 Index Construction 7
 - 3.2.1 Selection based on ESG Criteria 7
 - 3.2.1.1 Values and Climate Change Based Exclusions 8
 - 3.2.1.2 ESG Ratings Eligibility..... 9
 - 3.2.1.3 ESG Controversies Score Eligibility 9
 - 3.2.1.4 Security Selection 9
 - 3.2.2 Selecting Companies with the Low Carbon Exposure 10
 - 3.2.2.1 Carbon Emission Selection Rules..... 10
 - 3.2.2.2 Potential Carbon Emission Selection Rules..... 10
 - 3.3 Security Weighting..... 11
 - 3.3.1 Issuer Capping 11
- 4 Constructing the MSCI Extended SRI Low Carbon Select Indexes 12
- 5 Maintaining the MSCI SRI Low Carbon Select Indexes 13
 - 5.1 Annual Index Reviews..... 13
 - 5.1.1 Updating the Eligible Universe 13
 - 5.1.2 Ranking of Eligible Securities..... 13
 - 5.1.3 Selection of Eligible Securities..... 14

5.2	Quarterly Index Reviews	14
5.3	Ongoing Event Related Changes	15
Appendix 1: Values and Climate Change Based Screening		
	Criteria	17
Appendix 2: Guidelines on Achieving the Target Sector		
	Coverage of 25%	21
Appendix 3: Guidelines on Achieving the Target Sector		
	Coverage of 50%	23

1 Introduction

The MSCI SRI Low Carbon Select Indexes¹ are designed to represent the performance of companies that have lower carbon exposure than that of the underlying Global Investable Market Index and exclude companies that are inconsistent with specific values based criteria focused on products with high negative social or environmental impact. Additionally, these indexes are designed to represent the performance of companies that have high Environmental, Social and Governance (ESG) ratings relative to their sector peers. Further, the MSCI SRI Low Carbon Select Indexes aim to target sector weights that reflect the relative sector weights of the underlying MSCI Global Investable Market Indexes to limit the systematic risk introduced by the ESG selection process. Overall, the MSCI SRI Low Carbon Select Indexes target coverage of 25%² of the underlying MSCI Global Investable Market Index. The MSCI SRI Low Carbon Select Indexes also aim to avoid concentration by capping issuers within each index to a maximum weight of 5% in accordance with the MSCI Capped Indexes methodology³.

¹

- MSCI ACWI SRI Low Carbon Select 5% Issuer Capped Index,
- MSCI USA SRI Low Carbon Select 5% Issuer Capped Index,
- MSCI World SRI Low Carbon Select 5% Issuer Capped Index,
- MSCI EMU SRI Low Carbon Select 5% Issuer Capped Index,
- MSCI Emerging Markets SRI Low Carbon Select 5% Issuer Capped Index,
- MSCI Japan SRI Low Carbon Select 5% Issuer Capped Index,
- MSCI Pacific SRI Low Carbon Select 5% Issuer Capped Index,
- MSCI Europe SRI Low Carbon Select 5% Issuer Capped Index,
- MSCI Switzerland IMI Extended SRI Low Carbon Select 5% Issuer Capped, and
- MSCI UK IMI Extended SRI Low Carbon Select 5% Issuer Capped Index

² The MSCI Extended SRI Low Carbon Select Indexes target the coverage of 50% of the underlying MSCI Global Investable Market Index.

³ Please refer to the MSCI Capped Indexes methodology at www.msci.com/index-methodology

2 MSCI ESG Research

The MSCI SRI Low Carbon Select Indexes use company ratings and research provided by MSCI ESG Research. In particular, these indexes use the following four 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 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 (formerly 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, 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/our-solutions/esg-investing/climate-solutions>

3 Constructing the MSCI SRI Low Carbon Select Indexes

3.1 UNDERLYING UNIVERSE

The underlying universe for MSCI SRI Low Carbon Select 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 ACWI SRI Low Carbon Select 5% Issuer Capped Index	MSCI ACWI Index
MSCI USA SRI Low Carbon Select 5% Issuer Capped Index	MSCI USA Index
MSCI World SRI Low Carbon Select 5% Issuer Capped Index	MSCI World Index
MSCI EMU SRI Low Carbon Select 5% Issuer Capped Index	MSCI EMU Index
MSCI Emerging Markets SRI Low Carbon Select 5% Issuer Capped Index	MSCI EM Index
MSCI Japan SRI Low Carbon Select 5% Issuer Capped Index	MSCI Japan Index
MSCI Pacific SRI Low Carbon Select 5% Issuer Capped Index	MSCI Pacific Index
MSCI Europe SRI Low Carbon Select 5% Issuer Capped Index	MSCI Europe Index
MSCI Switzerland IMI Extended SRI Low Carbon Select 5% Issuer Capped	MSCI Switzerland IMI
MSCI UK IMI Extended SRI Low Carbon Select 5% Issuer Capped	MSCI UK IMI

3.2 INDEX CONSTRUCTION

The MSCI SRI Low Carbon Select Indexes, select companies deemed eligible for inclusion by “Selection Based on ESG Criteria” and “Selecting Companies with Low Carbon Exposure” rules as described below. The two rules are applied independently on the underlying universe.

3.2.1 SELECTION BASED ON ESG CRITERIA

The MSCI SRI Low Carbon Select Indexes use company ratings and research provided by MSCI ESG Research LLC to determine eligibility for index inclusion.

3.2.1.1 VALUES AND CLIMATE CHANGE BASED EXCLUSIONS

The MSCI SRI Low Carbon Select 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 SRI Low Carbon Select Indexes.

Please refer to Appendix 1 for details on these criteria.

Values Based Exclusions:

- Controversial Weapons
- Civilian Firearms
- Nuclear Weapons
- Tobacco
- Alcohol
- Adult Entertainment
- Conventional Weapons
- Gambling
- Genetically Modified Organisms
- Nuclear Power

Climate Change Based Exclusions

- Extraction & Production
 - Thermal Coal Mining
 - Unconventional Oil & Gas Extraction
 - Conventional Oil & Gas Extraction
- Power Generation
 - Thermal Coal-based Power Generation
 - Oil & Gas-based Power Generation
- Fossil Fuel Reserves Ownership

3.2.1.2 ESG RATINGS ELIGIBILITY

The MSCI SRI Low Carbon Select 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 'A' or above to be eligible for inclusion in the MSCI SRI Low Carbon Select Indexes.

3.2.1.3 ESG CONTROVERSIES SCORE ELIGIBILITY

The MSCI SRI Low Carbon Select Indexes use MSCI ESG Controversies Scores to identify those 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 4 or above to be eligible for inclusion in the MSCI SRI Low Carbon Select Indexes.

3.2.1.4 SECURITY SELECTION

The MSCI SRI Low Carbon Select Indexes target 25% of the free float-adjusted market capitalization within each Global Industry Classification Standard (GICS®) sector of the underlying Parent Index.

The MSCI USA SRI Low Carbon Select 5% Issuer Capped Index, MSCI EMU SRI Low Carbon Select 5% Issuer Capped Index, MSCI Japan SRI Low Carbon Select 5% Issuer Capped Index, MSCI Pacific SRI Low Carbon Select 5% Issuer Capped Index, MSCI Europe SRI Low Carbon Select 5% Issuer Capped Index, MSCI Switzerland IMI Extended SRI Low Carbon Select 5% Issuer Capped Index and MSCI UK IMI Extended SRI Low Carbon Select 5% Issuer Capped Index are constructed by applying the above methodology to their respective parent indexes.

The MSCI World SRI Low Carbon Select 5% Issuer Capped Index and MSCI Emerging Markets SRI Low Carbon Select 5% Issuer Capped Index are constructed by applying the above methodology to the regional carve-outs of their corresponding parent indexes and then aggregating them together.

The following regions are used to construct the MSCI World SRI Low Carbon Select 5% Issuer Capped Index:

Region	Regional Carve-out
Developed Asia Pacific	MSCI Pacific Index
Developed Europe & Middle East	MSCI Europe & Middle East Index
Canada	MSCI Canada Index

Region	Regional Carve-out
USA	MSCI USA Index

The following regions are used to construct the MSCI Emerging Markets SRI Low Carbon Select 5% Issuer Capped Index:

Region	Regional Carve-out
Emerging Asia	MSCI Emerging Markets Asia Index
Emerging Europe, Middle East & Africa	MSCI Emerging Markets Europe, Middle East & Africa Index
Emerging Latin America	MSCI Emerging Markets Latin America Index

The MSCI World SRI Low Carbon Select 5% Issuer Capped Index and the MSCI Emerging Markets SRI Low Carbon Select 5% Issuer Capped Index are aggregated to construct the MSCI ACWI SRI Low Carbon Select 5% Issuer Capped Index.

3.2.2 SELECTING COMPANIES WITH THE LOW CARBON EXPOSURE

The MSCI SRI Low Carbon Select Indexes also select companies with low exposure to carbon risk, identified as companies with low carbon emission intensity and low potential emissions per dollar of market capitalization. Both the below rules are applied independently.

3.2.2.1 CARBON EMISSION SELECTION RULES

To select companies with low exposure to carbon emissions, the Parent Index constituents are ranked by the carbon emission intensity, and the top 10% of securities, by number, are excluded from the MSCI SRI Low Carbon Select Indexes. The cumulative weight of securities excluded from any sector is less than 30% of the weight of the sector in the Parent Index. In case this limit is reached for any sector, no further securities from that sector are excluded.

3.2.2.2 POTENTIAL CARBON EMISSION SELECTION RULES

To select companies with low exposure to fossil fuel reserves, the Parent Index constituents are ranked in descending order of the potential carbon emissions per dollar of the market capitalization of the company. Securities are excluded until the cumulative potential carbon emission of the excluded securities reaches 50% of the sum of the potential carbon emission of the constituents of the Parent Index.

3.3 SECURITY WEIGHTING

The MSCI SRI Low Carbon Select Indexes are constructed by weighting the eligible constituents in proportion of their free-float adjusted market capitalization.

3.3.1 ISSUER CAPPING

The maximum weight of any issuer in the MSCI SRI Low Carbon Select Indexes is capped at 5%. Within the capped group, securities are weighted in proportion to their free float-adjusted market capitalization. The weight of the securities outside the capped group will be increased in proportion to their weight prior to capping. The indexes are capped at the Annual Index Review as well as the Quarterly Index Reviews.

4 Constructing the MSCI Extended SRI Low Carbon Select Indexes

The MSCI Extended SRI Low Carbon Select Indexes are constructed with an aim to reflect the performance of companies that are consistent with specific values based criteria, have high minimum level of ESG performance. The Index is also designed to more broadly cover the underlying investment universe. Low Carbon Extended SRI Select Indexes can be constructed on the Standard or the IMI size-segment in Developed and Emerging Markets. Companies that fail the values based exclusion criteria as described in Section 3 are excluded from the MSCI Extended SRI Low Carbon Select Indexes. Any company that has an ESG Rating of 'BB' or lower or has an MSCI ESG Controversies Score of 0 is not eligible for inclusion in the MSCI Extended SRI Low Carbon Indexes. Further, the MSCI Extended SRI Low Carbon Select Indexes select companies with low exposure to carbon risk as mentioned in Section 3.2.4. The MSCI Extended SRI Low Carbon Indexes target 50% of the free float-adjusted market capitalization of each Global Industry Classification Standard (GICS®) sector of the Parent Index. The MSCI Extended SRI Low Carbon Select Indexes follow the same index review cycle and corporate events treatment as the MSCI SRI Low Carbon Select Indexes as described in Section 4.

Following indexes are covered under MSCI Extended SRI Low Carbon Select Indexes:

1. MSCI Switzerland IMI Extended SRI Low Carbon Select 5% Issuer Capped Index
2. MSCI UK IMI Extended SRI Low Carbon Select 5% Issuer Capped Index

Please see Appendix 3 for additional details on the ranking and selection rules.

5 Maintaining the MSCI SRI Low Carbon Select Indexes

5.1 ANNUAL INDEX REVIEWS

The MSCI SRI Low Carbon Select Indexes are reviewed on an annual basis in May to coincide with the May Semi-Annual Index Review of the Parent Index. The changes are implemented at the end of May. The pro forma indexes are generally announced nine business days before the effective date.

In general, MSCI uses MSCI ESG Research data (including MSCI ESG Ratings, MSCI ESG Controversies Scores, MSCI Business Involvement Screening Research and ESG Climate Change Metrics) as of the end of the month preceding the Index Reviews for the rebalancing of the MSCI SRI Low Carbon Select Indexes. For some securities, such data may not be published by MSCI ESG Research LLC 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 MSCI SRI Low Carbon Select Indexes.

At each Annual Index Review, the eligible universe is updated, and the composition of the index is reassessed in order to target 25% free float-adjusted cumulative market capitalization of each sector of the Parent Index.

5.1.1 UPDATING THE ELIGIBLE UNIVERSE

The eligible universe is updated during each Annual Index Review.

Companies that are not existing constituents of the MSCI SRI Low Carbon Select Indexes are evaluated using the same eligibility criteria described in Section 3.2.

Existing constituents of the MSCI SRI Low Carbon Select 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 3.2.1

5.1.2 RANKING OF ELIGIBLE SECURITIES

For each sector, eligible securities of the regional Parent Index are ranked based on the following criteria:

- ESG Rating

- ESG Trend⁴ (positive ESG Trend preferred to neutral ESG Trend and neutral ESG Trend preferred to negative ESG Trend)
- Current index membership (existing constituents above non-constituents)
- Industry adjusted ESG scores
- Decreasing free float-adjusted market capitalization.

5.1.3 SELECTION OF ELIGIBLE SECURITIES

For each sector, eligible securities of the regional Parent Index are then selected from the ranked universe in the following order until the target 25% coverage by cumulative free float-adjusted market capitalization is reached:

- Securities in the top 17.5% cumulative free float-adjusted market capitalization coverage of the ranked universe
- 'AAA' and 'AA' rated securities in the top 25% cumulative free float-adjusted market capitalization coverage of the ranked universe
- Current index constituents in the top 32.5% cumulative free float-adjusted market capitalization coverage of the ranked universe
- Remaining eligible securities in the ranked universe

Please see Appendix 2 for additional details on the ranking and selection rules.

5.2 QUARTERLY INDEX REVIEWS

The MSCI SRI Low Carbon Select Indexes are also reviewed on a quarterly basis 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 generally announced nine business days before the effective date.

For the Quarterly Index Reviews, MSCI ESG Ratings, MSCI ESG Controversies Score assessments, MSCI BISR data and MSCI ESG Climate Change Metrics 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 LLC 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 MSCI SRI Low Carbon Select Indexes.

⁴ ESG Trend is defined as the latest change in ESG Rating over the previous 12 months. A security without any change in ESG Rating over the previous 12 months will have a neutral ESG Trend.

At the Quarterly Index Reviews, existing constituents are deleted from the MSCI SRI Low Carbon Select Indexes if they do not meet the eligibility criteria described in Section 4.1.1. Existing constituents that meet the eligibility criteria are retained in the index.

Additions, from the eligible securities as per Section 3.2, are made only to those sectors where the current market capitalization coverage is less than 22.5%, until the 25% target is reached.

Market price movements may cause small deviations in the sector coverage between two Index Reviews. Therefore, to minimize turnover, a buffer of 10% is used on the target coverage of 25% to define under-representation.

5.3 ONGOING EVENT RELATED CHANGES

The following section briefly describes the treatment of common corporate events within the MSCI SRI Low Carbon Select 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 MSCI SRI Low Carbon Select 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

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 index on the date of security inclusion only if they meet the eligibility criteria described in Section 3 and the market capitalization

coverage of the sector to which the security belongs is less than 22.5%⁵.

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 inclusion 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>

⁵ Prior to September 01, 2020 – New securities added to the Parent Index (such as IPOs, other early inclusions and migrations from a different size-segment) are not added to the index on the date of security inclusion.

Appendix 1: Values and Climate Change Based Screening Criteria

Companies whose activities meet the following values and climate change-based criteria, as evaluated by MSCI ESG Research LLC, are excluded from the MSCI SRI Low Carbon Select Indexes.

Values Based Exclusions:

- **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 Global Ex-Controversial Weapons Indexes available at <https://www.msci.com/index-methodology>

- **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

- **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 classified as a “Producer”
 - All companies deriving 5% or more aggregate revenue from the production, distribution, retail, supply and licensing of tobacco-related products
- **Alcohol**
 - All companies deriving 5% or more revenue from the production of alcohol related products
 - All companies deriving 15% or more aggregate revenue from the production, distribution, retail and supply of alcohol-related products
- **Adult Entertainment**
 - All companies deriving 5% or more revenue from the production of adult entertainment materials
 - All companies deriving 15% or more aggregate revenue from the production, distribution and retail of adult entertainment materials
- **Conventional Weapons**
 - All companies deriving 5% or more revenue from the production of conventional weapons and components
 - All companies deriving 15% or more aggregate revenue from weapons systems, components, and support systems and services
- **Gambling**
 - All companies deriving 5% or more revenue from ownership of operation of gambling-related business activities
 - All companies deriving 15% or more aggregate revenue from gambling related business activities
- **Genetically Modified Organisms (GMO)**
 - All companies deriving 5% or more revenue from activities like genetically modifying plants, such as seeds and crops, and other organisms intended for agricultural use or human consumption
- **Thermal Coal**
 - All companies deriving more than 0% 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 more than 0% revenue (either reported or estimated) from the thermal coal based power generation
- All companies generating more than 0% of their total electricity from thermal coal in a given year
- All companies that have more than 0% of installed capacity attributed to thermal coal in a given year

- **Unconventional Oil & Gas Extraction**

- All companies deriving more than 0% revenue (either reported or estimated) from unconventional oil and gas production. It includes revenue from the production of oil sands, oil shale (kerogen-rich deposits), shale gas, shale oil, coal seam gas, and coal bed methane, as well as revenue from onshore or offshore oil and gas production in the Arctic region. It excludes revenue from conventional oil and gas production including deepwater, shallow water, and other onshore/offshore oil and gas.

- **Conventional Oil & Gas Extraction**

- All companies deriving more than 0% revenue (either reported or estimated) from conventional oil and gas production. It includes revenue from the production of deepwater, shallow water, and other onshore/offshore oil and gas. It excludes revenue from unconventional oil and gas production (oil sands, shale oil, shale gas) and onshore/offshore oil and gas production in the Arctic region. Only companies deriving 40% or less revenue from products, services, or infrastructure projects supporting the development or delivery of renewable energy and alternative fuels are excluded due to Conventional Oil & Gas Extraction screen.

- **Oil & Gas-based Power Generation**

- All companies generating more than 0% of their total electricity from liquid fuel and natural gas in a given year
- All companies that have more than 0% of installed capacity attributed to liquid fuel and natural gas in a given year
- All companies deriving more than 0% revenue (either reported or estimated) from liquid fuel- and natural gas-based power generation

- **Nuclear Power-based Power Generation**
 - All companies generating more than 0% of their total electricity from nuclear power in a given year
 - All companies that have more than 0% of installed capacity attributed to nuclear sources in a given fiscal year
 - All companies deriving more than 0% revenue (either reported or estimated) from ownership or operation of nuclear power plants

- **Fossil Fuel Reserves**
 - All companies, regardless of their industries, with evidence of owning fossil fuel reserves used most likely for energy applications.

Appendix 2: Guidelines on Achieving the Target Sector Coverage of 25%

The MSCI SRI Low Carbon Select Indexes target 25% coverage of the free float-adjusted market capitalization of each Global Industry Classification Standard (GICS®) sector of the regional Parent Index (“cumulative sector coverage”). The underlying principle in the construction of the indexes is to achieve cumulative sector coverage closest to 25%, while aiming to maintain index stability.

The following guidelines are used in achieving the target cumulative sector coverage of 25%:

- 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 company with better ESG Trend is given priority (positive ESG Trend preferred to neutral ESG Trend and neutral ESG Trend preferred to negative ESG Trend).
- In case of two companies with the same ESG Rating and the same ESG Trend, an existing index constituent is given priority to maintain index stability. Between two existing constituents with the same ESG Rating and the same ESG Trend, the company with the higher industry adjusted ESG Score is given priority. For two existing 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 4.1.3 until the cumulative sector coverage crosses 25% or there are no eligible securities left to be selected.
- MSCI defines the company that increases the cumulative sector coverage above 25% 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 25% compared to the cumulative sector coverage without the marginal company.

- The minimum cumulative sector coverage is set to 22.5%.
 - The marginal company is always selected if this is required to achieve cumulative sector coverage of 22.5%.
- Securities which are ineligible as per Section 4.1.1 will not be selected even if the cumulative sector coverage after selection of all eligible securities is below 25%.

Appendix 3: Guidelines on Achieving the Target Sector Coverage of 50%

The MSCI Extended SRI Low Carbon Select Indexes target 50% coverage of the free float-adjusted market capitalization of each Global Industry Classification Standard (GICS®) sector of the regional Parent Index (“cumulative sector coverage”). The underlying principle in the construction of the indexes is to achieve cumulative sector coverage closest to 50%, while aiming to maintain index stability.

- Securities in the top 35% cumulative free float-adjusted market capitalization coverage of the ranked universe
- ‘AAA’ and ‘AA’ rated securities in the top 50% cumulative free float-adjusted market capitalization coverage of the ranked universe
- Current index constituents in the top 65% cumulative free float-adjusted market capitalization coverage of the ranked universe
- Remaining eligible securities in the ranked universe

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 company with better ESG Trend is given priority (positive ESG Trend preferred to neutral ESG Trend and neutral ESG Trend preferred to negative ESG Trend).
- In case of two companies with the same ESG Rating and the same ESG Trend, an existing index constituent is given priority to maintain index stability. Between two existing constituents with the same ESG Rating and the same ESG Trend, the company with the higher industry adjusted ESG Score is given priority. For two existing 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 4.1.3 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 Appendix 3 will not be selected even if the cumulative sector coverage after selection of all eligible securities is below 50%.

Contact us

clientservice@msci.com

AMERICAS

Americas	1 888 588 4567 *
Atlanta	+ 1 404 551 3212
Boston	+ 1 617 532 0920
Chicago	+ 1 312 675 0545
Monterrey	+ 52 81 1253 4020
New York	+ 1 212 804 3901
San Francisco	+ 1 415 836 8800
São Paulo	+ 55 11 3706 1360
Toronto	+ 1 416 628 1007

EUROPE, MIDDLE EAST & AFRICA

Cape Town	+ 27 21 673 0100
Frankfurt	+ 49 69 133 859 00
Geneva	+ 41 22 817 9777
London	+ 44 20 7618 2222
Milan	+ 39 02 5849 0415
Paris	0800 91 59 17 *

ASIA PACIFIC

China North	10800 852 1032 *
China South	10800 152 1032 *
Hong Kong	+ 852 2844 9333
Mumbai	+ 91 22 6784 9160
Seoul	00798 8521 3392 *
Singapore	800 852 3749 *
Sydney	+ 61 2 9033 9333
Taipei	008 0112 7513 *
Thailand	0018 0015 6207 7181 *
Tokyo	+ 81 3 5290 1555

* = toll free

ABOUT MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 45 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit www.msci.com.

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>.

Notice and disclaimer

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or disseminated in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its Information Providers.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investable assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of www.msci.com.

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.

MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data, reports and ratings based on published methodologies and available to clients on a subscription basis. We do not provide custom or one-off ratings or recommendations of securities or other financial instruments upon request.

Privacy notice: For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at <https://www.msci.com/privacy-pledge>.