

Methodology Book for:

- MSCI World SRI Filtered ex Fossil Fuels Index
- MSCI EM (Emerging Markets) SRI Filtered ex Fossil Fuels Index
- MSCI USA SRI Filtered ex Fossil Fuels Index
- MSCI Europe SRI Filtered ex Fossil Fuels Index
- MSCI EMU SRI Filtered ex Fossil Fuels Index
- MSCI Japan SRI Filtered ex Fossil Fuels Index
- MSCI Pacific ex Japan SRI Filtered ex Fossil Fuels Index

June 2020



Contents	1 Introduction	4
	2 MSCI ESG Research	5
	2.1 MSCI ESG Ratings	5
	2.2 MSCI ESG Controversies	[
	2.3 MSCI ESG Business Involvement Screening Research	5
	2.4 MSCI Climate Change Metrics	
	3 Constructing the MSCI SRI Filtered ex Fossil Fuels Indexe	es 7
	3.1 Eligible Universe	7
	3.2 Eligibility Criteria	7
	3.2.1 VALUES AND CLIMATE CHANGE BASED SCREENING CRITERIA	7
	3.2.2 ESG RATINGS ELIGIBILITY	8
	3.2.3 ESG CONTROVERSIES SCORE ELIGIBILITY	8
	3.3 Index Construction	9
	3.4 Security Weighting	10
	3.4.1 ISSUER CAPPING	10
	4 Maintaining the MSCI SRI Filtered ex Fossil Fuels Indexes	s 1 1
	4.1 Annual Index Review	11
	4.1.1 UPDATING THE ELIGIBLE UNIVERSE	1
	4.1.2 RANKING OF ELIGIBLE SECURITIES	1
	4.1.3 SELECTION OF ELIGIBLE SECURITIES	12
	4.2 Quarterly Index Reviews	12
	4.3 Capping Frequency	13
	4.4 Ongoing Event Related Changes	13
	Appendix 1: Values and Climate Change Based Screening	1.5



Appendix 2: Guidelines on Achieving the Target Sector	
Coverage of 25%	19



1 Introduction

The MSCI World SRI Filtered ex Fossil Fuels, MSCI EM (Emerging Markets) SRI Filtered ex Fossil Fuels, MSCI USA SRI Filtered ex Fossil Fuels, MSCI Europe SRI Filtered ex Fossil Fuels, MSCI EMU SRI Filtered ex Fossil Fuels, MSCI Japan SRI Filtered ex Fossil Fuels, MSCI Pacific ex Japan SRI Filtered ex Fossil Fuels Indexes (herein, "MSCI SRI Filtered ex Fossil Fuels Indexes") are free float-adjusted market capitalization weighted indexes that exclude companies that are inconsistent with specific business involvement-based criteria focused on revenue associated with high negative environmental or social impact. These indexes are also designed to represent the performance of companies that have high Environmental, Social and Governance (ESG) ratings relative to their sector peers, to ensure the inclusion of the best-in-class companies from an ESG perspective. Additionally, the MSCI SRI Filtered ex Fossil Fuels 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, these indexes target coverage of 25% of the underlying MSCI Global Investable Market Index.



2 MSCI ESG Research

The MSCI SRI Filtered ex Fossil Fuels 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 such as Low Carbon Transition scores and categories.

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



3 Constructing the MSCI SRI Filtered ex Fossil Fuels Indexes

3.1 ELIGIBLE UNIVERSE

The eligible universe for MSCI SRI Filtered ex Fossil Fuels 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 SRI Filtered ex Fossil Fuels Index	MSCI World Index
MSCI EM (Emerging Markets) SRI Filtered ex Fossil Fuels Index	MSCI EM Index
MSCI USA SRI Filtered ex Fossil Fuels Index	MSCI USA Index
MSCI Europe SRI Filtered ex Fossil Fuels Index	MSCI Europe Index
MSCI EMU SRI Filtered ex Fossil Fuels Index	MSCI EMU Index
MSCI Japan SRI Filtered ex Fossil Fuels Index	MSCI Japan Index
MSCI Pacific ex Japan SRI Filtered ex Fossil Fuels Index	MSCI Pacific ex Japan Index

3.2 ELIGIBILITY CRITERIA

The MSCI SRI Filtered ex Fossil Fuels Indexes use company ratings and research provided by MSCI ESG Research to determine eligibility for index inclusion.

3.2.1 VALUES AND CLIMATE CHANGE BASED SCREENING CRITERIA

The MSCI SRI Filtered ex Fossil Fuels Indexes use MSCI ESG Business Involvement Screening Research and MSCI Climate Change Metrics to identify companies that are involved in business activities with negative environmental and social impact.

Companies that meet the following business involvement criteria are excluded from the MSCI SRI Filtered ex Fossil Fuels Indexes.

Please refer to Appendix 1 for details on these criteria.

Values-based Exclusions:



- Tobacco
- Controversial Weapons
- Civilian Firearms
- Nuclear Weapons
- Conventional Weapons
- Alcohol
- Adult Entertainment
- 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
 - o Fossil Fuel Reserves for Energy Application

3.2.2 ESG RATINGS ELIGIBILITY

The MSCI SRI Filtered ex Fossil Fuels 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 Filtered ex Fossil Fuels Indexes.

3.2.3 ESG CONTROVERSIES SCORE ELIGIBILITY

The MSCI SRI Filtered ex Fossil Fuels Indexes use MSCI ESG Controversies Scores to identify companies that are involved in very serious controversies associated with 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 Filtered ex Fossil Fuels Indexes.



3.3 INDEX CONSTRUCTION

The MSCI SRI Filtered ex Fossil Fuels Indexes target 25% of the free float-adjusted market capitalization within each GICS®¹ sector of the underlying Parent Index.

The MSCI USA SRI Filtered ex Fossil Fuels, MSCI Europe SRI Filtered ex Fossil Fuels, MSCI EMU SRI Filtered ex Fossil Fuels, MSCI Japan SRI Filtered ex Fossil Fuels, and MSCI Pacific ex Japan SRI Filtered ex Fossil Fuels Indexes are constructed by applying the above methodology to their respective Parent Indexes.

The MSCI World SRI Filtered ex Fossil Fuels and MSCI EM (Emerging Markets) SRI Filtered ex Fossil Fuels Indexes 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 Filtered ex Fossil Fuels Index:

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

The following regions are used to construct the MSCI EM (Emerging Markets) SRI Filtered ex Fossil Fuels 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

MSCI.COM | PAGE 9 OF 22

 $^{^{\}rm 1}\,\text{GICS}\$,$ the global industry classification standard jointly developed by MSCI Inc. and S&P Global.



3.4 SECURITY WEIGHTING

The MSCI SRI Filtered ex Fossil Fuels Indexes are constructed by weighting the eligible constituents in proportion of their free-float adjusted market capitalization.

3.4.1 ISSUER CAPPING

The maximum weight of any issuer in the MSCI SRI Filtered ex Fossil Fuels Indexes is capped at 5% in accordance with the MSCI Capped Indexes methodology². The excess weight of the capped issuers is distributed among the remaining constituents in proportion of their existing weights in the index.

 $^{^2}$ Please refer to the MSCI Capped Indexes methodology at $\underline{www.msci.com/index-methodology}$



4 Maintaining the MSCI SRI Filtered ex Fossil Fuels Indexes

4.1 ANNUAL INDEX REVIEW

The MSCI SRI Filtered ex Fossil Fuels Indexes are reviewed on an annual basis in May to coincide with the May Semi-Annual Index Review of the Parent Index, and the changes are implemented at the end of May. The pro forma indexes are generally annuanced 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 MSCI Climate Change Metrics) as of the end of the month preceding the Index Reviews for the rebalancing of the MSCI SRI Filtered ex Fossil Fuels Indexes. For some securities, such data may not be published by MSCI ESG Research by the end of the month preceding the Index Review. For such securities, MSCI will use ESG data published after the end of month, when available, for the rebalancing of MSCI SRI Filtered ex Fossil Fuels 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.

4.1.1 UPDATING THE ELIGIBLE UNIVERSE

The eligible universe is updated during each Annual Index Review.

Companies that are not existing constituents of the MSCI SRI Filtered ex Fossil Fuels Indexes are evaluated using the same eligibility criteria described in Section 3.2.

Existing constituents of the MSCI SRI Filtered ex Fossil Fuels 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

4.1.2 RANKING OF ELIGIBLE SECURITIES

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

ESG Rating



- ESG Trend³ (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.

4.1.3 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.

4.2 QUARTERLY INDEX REVIEWS

The MSCI SRI Filtered ex Fossil Fuels 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 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 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 Filtered ex Fossil Fuels Indexes.

³ 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 Filtered ex Fossil Fuels 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 indexes.

Additions from the eligible securities as per Section 3.2 are made only to 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.

4.3 CAPPING FREQUENCY

The indexes are capped at the Annual Index Review as well as the Quarterly Index Reviews.

4.4 ONGOING EVENT RELATED CHANGES

The following section briefly describes the treatment of common corporate events within the MSCI SRI Filtered ex Fossil Fuels 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 MSCI SRI Filtered ex Fossil Fuels 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 MSCI SRI Filtered ex Fossil Fuels Indexes on the date of security inclusion only if they meet the eligibility criteria described in Section 3.2 and the market capitalization



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

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 nonconstituent 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: 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, are excluded from the MSCI SRI Filtered ex Fossil Fuels Indexes

Values-based Exclusions Criteria:

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

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

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
- All companies deriving 15% or more aggregate revenue from weapons systems, components, and support systems and services

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

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 gamblingrelated 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

Nuclear Power

- All companies generating 5% or more of their total electricity from nuclear power in a given year
- All companies that have 5% or more of installed capacity attributed to nuclear sources in a given fiscal year
- All companies deriving 5% or more aggregate revenue from nuclear power activities including revenue from the ownership or operation of nuclear power plants, ownership or operation of active uranium mines, and supply of key nuclear-specific products or services to the nuclear power industry.

Climate Change-based Exclusions Criteria:

Extraction & Production

Thermal Coal Mining

- 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 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

All companies deriving more than 0% revenue (either reported or estimated) from unconventional oil and gas production. It covers 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 does not cover revenue from conventional oil and gas production including deep water, shallow water, and other onshore/offshore oil and gas.

o Conventional Oil & Gas Extraction

All companies deriving more than 0% revenue (either reported or estimated) from the production of deep water, shallow water, and



other onshore/offshore oil and gas. It does not cover revenue from unconventional oil and gas production (oil sands, shale oil, shale gas) and onshore/offshore oil and gas production in the Arctic region.

Power Generation

Thermal Coal-based Power Generation

- All companies generating 10% or more of their total electricity from thermal coal in a given year
- All companies that have 10% or more of installed capacity attributed to thermal coal in a given year
- All companies deriving 5% or more revenue (either reported or estimated) from thermal coal-based power generation

Oil & Gas-based Power Generation

- All companies generating 30% or more of their total electricity from liquid fuel and natural gas in a given year
- All companies that have 30% or more of installed capacity attributed to liquid fuel and natural gas in a given year
- All companies deriving 30% or more revenue (either reported or estimated) from liquid fuel- and natural gas-based power generation

• Fossil Fuel Reserves Ownership

Fossil Fuel Reserves for Energy Application

All companies, regardless of their industries, with evidence of owning fossil fuel reserves used most likely for energy applications. For high intensity industries (Energy, Utilities, Diversified Metals & Mining), this factor flags companies with evidence of fossil fuel reserves (excluding metallurgical coal). For other industries, it flags companies with evidence of fossil fuel reserves (excluding metallurgical coal) and deriving revenue from business segments associated with energy application of fossil fuels such as thermal coal mining, oil & gas exploration & production and downstream activities e.g. refining; distribution & retail; pipeline & transportation; trading and fossil fuel based power generation. Fossil fuel reserves are defined as proved and probable reserves (i.e. 2P) for coal and proved reserves (i.e. 1P) for oil and natural gas. Evidence of owning reserves includes companies providing the exact volume of reserves, and companies making a statement about their ownership of reserves.



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

The MSCI SRI Filtered ex Fossil Fuels 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%.



Contact us

AMERICAS

clientservice@msci.com

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

ABOUT MSCI

MSCI is a leader 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.

^{* =} toll free



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 redisseminated in whole or in part without prior written permission from MSCI

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 investible 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 concerning officers and directors, please refer to our Privacy Notice at https://www.msci.com/privacy-pledge.