



July 2025

**Methodology Book for:**  
**- MSCI GBP IG Climate Solutions**  
**Target Select Screens Corporate**  
**Bonds Index**  
**- MSCI USD + EUR + GBP IG Climate**  
**Solutions Target Select Screens**  
**Corporate Bonds Index**



## Contents

<b>1</b>	<b>Introduction .....</b>	<b>3</b>
<b>2</b>	<b>Index Construction Methodology .....</b>	<b>4</b>
<b>2.1</b>	<b>Applicable Universe.....</b>	<b>4</b>
<b>2.2</b>	<b>Eligible Universe .....</b>	<b>4</b>
<b>2.3</b>	<b>Optimization Constraints.....</b>	<b>4</b>
<b>2.4</b>	<b>Determining the Optimized Index.....</b>	<b>6</b>
<b>2.5</b>	<b>Treatment of Unrated Companies.....</b>	<b>6</b>
<b>3</b>	<b>Maintaining the Index.....</b>	<b>8</b>
<b>4</b>	<b>MSCI ESG Research .....</b>	<b>10</b>
<b>4.1</b>	<b>MSCI Climate Change Metrics .....</b>	<b>10</b>
<b>4.1.1.</b>	<b>Greenhouse Gas (GHG) Emissions.....</b>	<b>10</b>
<b>4.2</b>	<b>MSCI ESG Ratings.....</b>	<b>10</b>
<b>4.3</b>	<b>MSCI ESG Controversies .....</b>	<b>11</b>
<b>4.4</b>	<b>MSCI ESG Business Involvement Screening Research .....</b>	<b>11</b>
	<b>Appendix I: ESG-based Exclusion Criteria .....</b>	<b>12</b>
	<b>Appendix II: Calculation of Target Metrics .....</b>	<b>15</b>
	<b>Appendix III: Parent Indexes.....</b>	<b>17</b>
	<b>Appendix IV: New release of Barra® Optimizer.....</b>	<b>18</b>
	<b>Appendix V: Methodology Set.....</b>	<b>19</b>
	<b>Appendix VI: Changes to the Document .....</b>	<b>20</b>

# 1 Introduction

The MSCI GBP IG Climate Solutions Target Select Screens Corporate Bonds Index and the MSCI USD + EUR + GBP IG Climate Solutions Target Select Screens Corporate Bonds Index (herein, the “Indexes”<sup>1</sup>) are indexes designed to represent the performance of strategies that seek systematic integration of environmental, social and governance (ESG) norms, multiple dimensions of carbon exposure (carbon emissions and fossil fuel reserves) and green revenue in index construction.

The Indexes are designed to minimize active share relative to the MSCI GBP IG Corporate Bond Select Index and the MSCI USD+EUR+GBP IG Corporate Bond Select Index (herein, the “Parent Indexes”) respectively as defined in the Appendix III.

The Indexes are constructed using risk-constrained optimization along with specific ESG Score, carbon exposure and green revenue exposure criteria. The Index construction aims to improve the Indexes’ ESG profile, reduce the carbon exposure (Greenhouse Gas Emissions and Potential Emissions) and improve green revenue exposure (clean technologies solutions) relative to that of the Parent Indexes.

---

<sup>1</sup> The Indexes are governed by a set of methodology and policy documents (“Methodology Set”), including the present Index methodology document. Please refer to Appendix V for more details.

## 2 Index Construction Methodology

The Indexes use company ratings and research provided by MSCI ESG Research<sup>2</sup> for the Index construction.

Constructing the Indexes involves the following steps:

- Defining the Parent Indexes
- Defining the Eligible Universe
- Defining the Optimization Constraints
- Defining the Optimized Indexes

### 2.1 Applicable Universe

The applicable universe includes all the existing constituents of the Parent Indexes as detailed in Appendix III. This approach aims to provide an opportunity set with sufficient liquidity and investment capacity.

### 2.2 Eligible Universe

The eligible universe consists of the securities from the Applicable Universe by excluding securities of companies based on the exclusion criteria defined in Appendix I.

### 2.3 Optimization Constraints

At each Monthly Index Review, the indexes are constructed using an optimization process that aims to achieve replicability and investability as well as minimize active share relative to the Parent Index subject to the following constraints:

1. Climate and ESG Objectives – constraints detailed in Table 1
2. Diversification Objectives – constraints detailed in Table 2

The definitions of the target metrics for the optimization are detailed in Appendix II.

---

<sup>2</sup> See section 4 for further information regarding ESG and climate data used in the Indexes that MSCI Limited and MSCI Deutschland GmbH source from MSCI ESG Research LLC, a separate subsidiary of MSCI Inc. MSCI ESG Research is solely responsible for the creation, determination and management of such data as a provider to MSCI Limited and MSCI Deutschland GmbH. MSCI Limited and MSCI Deutschland GmbH are the benchmark administrators for the MSCI Indexes.

Table 1: Constraints imposed to meet Climate and ESG objectives:

No.	Climate and ESG Objectives	
1.	Minimum reduction in absolute Greenhouse Gas (GHG) Emission (Scope 1+2) relative to Parent Index	50%
2.	Minimum reduction in Weighted Average Potential Emissions relative to Parent Index <sup>3</sup>	50%
3.	Minimum increase in ESG Score of MSCI GBP IG Climate Solutions Target Select Screens Corporate Bonds Index relative to Parent Index <sup>4</sup>	10%
4.	Minimum increase in ESG Score of MSCI USD + EUR + GBP IG Climate Solutions Target Select Screens Corporate Bonds Index relative to Parent Index <sup>5</sup>	20%
5.	Minimum increase in Weighted Average Green Revenue relative to the Parent Index	100%

Table 2: Constraints imposed to meet diversification objectives:

No.	Diversification Objective	
1.	Constituent Active Weight	+/- 2%
2.	Issuer capping	3%
3.	Security Weight as a multiple of its weight in the Parent Index	10x
4.	Active Sector Weights (the Energy GICS Sector is not constrained)	+/-5%

<sup>3</sup> For construction of the MSCI GBP IG ESG Climate Solutions Target Select Corporate Bond Index and MSCI USD+EUR+GBP IG ESG Climate Solutions Target Select Corporate Bond Index, only fossil fuel reserves used for energy purposes are considered.

<sup>4</sup> For the purpose of calculating the Weighted Average ESG Score, securities with missing data are excluded and the weight of remaining securities in the Index are re-weighted in proportion of existing weights to add up to 100%.

<sup>5</sup> For the purpose of calculating the Weighted Average ESG Score, securities with missing data are excluded and the weight of remaining securities in the Index are re-weighted in proportion of existing weights to add up to 100%.

No.	Diversification Objective	
5.	Active Country Weights <sup>6</sup>	+/-5%
6.	One Way Turnover	4%
7.	Active Effective Duration of Index <sup>7</sup>	+/-0.25 (soft constraint)
8.	Active Credit Rating of Index <sup>8</sup>	+/-0.25 (soft constraint)

During the Monthly Index Review, in the event that there is no optimal solution that satisfies all the optimization constraints, the following constraints will be relaxed, until an optimal solution is found:

- Relax the one-way index turnover constraint in steps of 1% up to 10%
- Relax the maximum security weight multiple constraint in steps of 2 up to 20
- The one-way index turnover constraint and the maximum security weight multiple constraint are alternately relaxed until a feasible solution is achieved

In the event that no optimal solution is found after the above constraint relaxations are exhausted, the relevant Index will not be rebalanced for that Monthly Index Review.

## 2.4 Determining the Optimized Index

The Index is constructed using the Barra Open Optimizer<sup>9</sup>. The optimization uses universe of eligible securities and the specified optimization objectives and constraints to determine the constituents of the Indexes.

## 2.5 Treatment of Unrated Companies

All securities that are not excluded by the specified MSCI ESG Business Involvement Screening Research (BISR) criteria are eligible for inclusion in the index.

Companies not assessed by MSCI ESG Research on data for any of the following MSCI ESG Research products are not eligible for inclusion in the Indexes:

<sup>6</sup> Based on country of domicile. In case there are countries in the parent index which weigh less than 2.5% in the parent index then for such countries the active country upper bound of +5% is not applicable. When a country weighs less than 2.5% in parent index then the upper bound of country weight in the Index is set at three times of the country's weight in parent index.

<sup>7</sup> Defined in the MSCI Fixed Income Index Calculation Methodology available at: <https://www.msci.com/index-methodology>.

<sup>8</sup> Defined in the MSCI Fixed Income Index Calculation Methodology available at: <https://www.msci.com/index-methodology>.

<sup>9</sup> Please refer to Appendix IV for more details.

- MSCI ESG Score
- MSCI Controversy Score

For the treatment of unrated companies in the calculation of target metrics for the optimization, please refer to Appendix II.

### 3 Maintaining the Index

- The composition of the Indexes is reviewed monthly, with an effective rebalancing impact on the first business day of the month (Rebalancing Date). For clarification, bonds are added to the Index at the closing of the last business day of every month, however, the return impact is on the first business day of the month.
- In general, change in the index composition is based on latest<sup>10</sup> data available (including MSCI ESG & Climate data) three days prior to the Rebalancing Date, which is defined as the Cut-Off Date. Any inclusion or exclusion criteria satisfied for a given security in the universe, after the Cut-Off Date (T-3), will generally become effective at the following monthly rebalancing; should conditions remain unchanged. In exceptional cases, for instance, cases of input data correction, MSCI can reduce the Cut-Off Date for Index rebalancing from T-3 to T-2, T-1 or T. In such instances, MSCI will notify Index clients of such changes via announcement.
- MSCI will disclose proforma Index rebalancing results starting the second business day of each month. MSCI will freeze the pro forma Index rebalancing results as of the Cut-Off Date.
- Bonds are added to or deleted from the Index only on monthly rebalancing dates. For the existing Index components any changes to Index eligibility will only be reflected in the next monthly rebalancing.
- Any inclusion or exclusion criteria satisfied for a given security in the universe, after the Cutoff Date, will generally become effective at the following monthly rebalancing; should conditions remain unchanged.
- Any cash that accrues within the index each month is re-invested on a pro-rata basis across the index constituents on the effective date of rebalancing. In essence, cash in the Index is swept out on rebalancing and the opening Index portfolio on the Rebalancing Date starts with zero accrued cash balance.
- Specific variants of total return calculation of the Index on the Rebalancing Date may be adjusted for transaction costs<sup>11</sup> as securities are added to the Index at the offer price.

<sup>10</sup> ESG and Climate data will utilize the most recent, quality-assured information available. For index rebalancing, the latest data that has successfully undergone quality assurance checks will be employed. In cases where recent data changes are still undergoing verification, only data that has passed the quality assurance process will be considered.

<sup>11</sup> Refer to the MSCI Fixed Income Index Calculation Methodology for detail. Available at <https://www.msci.com/Index-methodology>



For further information on index total return calculation and corporate events handling please refer to the MSCI Fixed Income Index Calculation Methodology<sup>12</sup>. For the holiday calendar used in the index, please refer to the MSCI Fixed Income Data Methodology<sup>13</sup>. MSCI leverages the GICS®<sup>14</sup> sector classification framework for MSCI Corporate Bond Indexes as well. Please refer to MSCI GICS Methodology<sup>15</sup> for details

---

<sup>12</sup> Refer to the MSCI Fixed Income Index Calculation Methodology for detail. Available at <https://www.msci.com/Index-methodology>

<sup>13</sup> The methodologies are available at: <https://www.msci.com/Index-methodology>.

<sup>14</sup> GICS, the global industry classification standard jointly developed by MSCI Inc. and S&P Dow Jones Indices

<sup>15</sup> The GICS methodology is available at: <https://www.msci.com/gics>

## 4 MSCI ESG Research

The Indexes are products of MSCI Inc. that utilize information such as company ratings and research produced and provided by MSCI ESG Research LLC (MSCI ESG Research), a subsidiary of MSCI Inc. In particular, the Indexes use the following MSCI ESG Research products: MSCI Climate Change Metrics, MSCI Climate Value-at-Risk, MSCI ESG Sustainable Impact Metrics, MSCI ESG Controversies and MSCI ESG Business Involvement Screening Research. MSCI Indexes are administered by MSCI Limited and MSCI Deutschland GmbH.

### 4.1 MSCI Climate Change Metrics

MSCI Climate Change Metrics provides climate data and tools to support institutional investors seeking to integrate climate risk and 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, alignment 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.

#### 4.1.1. Greenhouse Gas (GHG) Emissions

MSCI ESG Research collects reported emissions and uses proprietary estimation methodologies that follows the GHG Protocol in including carbon dioxide (CO<sub>2</sub>) and the five other principal GHGs: hydrofluorocarbons (HFCs), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Emissions of these other gases are accounted for in terms of the quantity of CO<sub>2</sub> that has an equivalent global warming potential.

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

### 4.2 MSCI ESG Ratings

MSCI ESG Ratings aim to measure entities' management of environmental, social and governance risks and opportunities. MSCI ESG Ratings use a weighted average key issue calculation that is normalized by industry to arrive at an industry-adjusted ESG score (0-10), which is then translated to 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/legal/disclosures/esg-disclosures>.

### 4.3 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.

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

<https://www.msci.com/legal/disclosures/esg-disclosures>.

### 4.4 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

<https://www.msci.com/legal/disclosures/esg-disclosures>.

## Appendix I: ESG-based Exclusion 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.

### **"Most Restrictive" screen applied:**

#### **1. Controversial Weapons:**

All companies with any tie to Controversial Weapons as defined below:

- Cluster Bombs
  - MSCI ESG Research's cluster bomb research identifies companies that are involved in the production of cluster bombs and munitions, or the essential components of these products.
- Landmines
  - MSCI ESG Research's landmines research identifies companies that are involved in the production of anti-personnel landmines, anti-vehicle landmines, or the essential components of these products.
- Depleted Uranium Weapons
  - MSCI ESG Research's depleted uranium weapons research identifies companies involved in the production of depleted uranium weapons and armor.
- Chemical and Biological Weapons
  - MSCI ESG Research's chemical and biological weapons research identifies companies that are involved in the production of chemical and biological weapons, or the essential components of these products.
- Blinding Laser Weapons
  - MSCI ESG Research's blinding laser weapons research identifies companies that are involved in the production of weapons utilizing laser technology to cause permanent blindness.

- Non-Detectable Fragments
  - MSCI ESG Research's non-detectable fragments research identifies companies that are involved in the production of weapons that use non-detectable fragments to inflict injury.
- Incendiary Weapons (White Phosphorus)
  - MSCI ESG Research's incendiary weapons research identifies companies that are involved in the production of weapons using white phosphorus

**Involvement criteria:**

- Producers of weapons
- Producers of key components of the weapons (only applies to cluster bombs, landmines, depleted uranium weapons as well as chemical and biological weapons)
- Ownership of 20% or more of a weapons or components producer

The minimum limit is raised to 50% for financial companies having an ownership in a company that manufactures controversial weapons or key components of controversial weapons

- Owned 50% or more by a company involved in weapons or components production

**Revenue limits:**

- Any identifiable revenues, i.e., zero tolerance

**"Highly Restrictive" screen applied:**

**2. 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.

**3. 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.

**"No specific restrictiveness level applied:**

**4. 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.

**5. Thermal Coal Power**

- All companies deriving 5% or more aggregate revenue (either reported or estimated) from thermal coal mining and unconventional oil and gas extraction.

**6. ESG Controversy Score ("Red Flags")**

Companies assessed as having involvement in ESG controversies that are classified as Red Flags (MSCI ESG Controversy Score of 0). A Red Flag indicates an ongoing, Very Severe ESG controversy implicating a company directly through its actions, products, or operations.

## Appendix II: Calculation of Target Metrics

### Calculation of absolute GHG Emission

For Parent Index constituents where the Scope 1+2 absolute GHG Emission is not available, the average Scope 1+2 absolute GHG Emission of all the constituents of the Parent Index in the same GICS Industry Group in which the constituent belongs is used.

$$\text{Security Level absolute GHG Emission} = \text{Scope 1 + 2 Carbon Emissions}$$

$$\text{Weighted Average absolute GHG Emission of Parent Index} = \sum (\text{Weight in Parent Index} * \text{Security Level GHG Emission})$$

$$\text{Weighted Average absolute GHG Emission of Derived Index} = \sum (\text{Index Weight} * \text{Security Level GHG Emission})$$

### Calculation of Potential Carbon Emissions

If Potential Carbon Emissions data is not available, MSCI uses zero fossil fuel reserves.

$$\text{Security Level Potential Carbon Emissions (PCE)} = \text{Absolute Potential Emissions}$$

$$\text{Weighted Average Potential Emissions of Parent Index} = \sum (\text{Weight in Parent Index} * \text{Security Level PCE})$$

$$\text{Weighted Average Potential Emissions of Derived Index} = \sum (\text{Index Weight} * \text{Security Level PCE})$$

### Calculation of Green Revenue

#### Green Revenue

For each constituent in the Parent Index, the Green Revenue% is calculated as the cumulative revenue (%) from the six Clean Tech themes which are as follows:

- Alternative Energy – products and services that support the transmission, distribution and generation of renewable energy and alternative fuels to reduce carbon and pollutant emissions in supporting affordable and clean energy to combat climate change.
- Energy Efficiency – products, and services that support the maximization of productivity in labor, transportation, power and domestic applications with minimal energy consumption to ensure universal access to affordable, reliable and modern energy services.
- Sustainable Water – products, services, infrastructure projects and technologies that resolve water scarcity and water quality issues, through minimizing and monitoring current water demand, improving the quality and availability of water supply to improve resource management in both domestic and industrial use.
- Green Building – design, construction, redevelopment, retrofitting, or acquisition of green-certified properties to promote mechanisms for raising capacity for effective climate change mitigation and adaptation.
- Pollution Prevention – products, services, infrastructure projects and technologies that reduces volume of waste materials through recycling, minimizes introduction of toxic substances, and offers remediation of existing contaminants such as heavy metals and organic pollutants in various environmental media to significantly address pollution in all levels and its negative effects.
- Sustainable Agriculture - revenues from forest and agricultural products that meet environmental and organic certification requirements to address significantly biodiversity loss, pollution, land disturbance, and water overuse.

In cases where Green Revenue% is unavailable for a security, it is considered to be zero.

The Weighted Average Green Revenue% is calculated as:

$$= \sum (Weight\ in\ Index * Green\ Revenue\%)$$



## Appendix III: Parent Indexes

No.	Index Name	Parent Index
1.	MSCI GBP IG Climate Solutions Target Select Screens Corporate Bond Index	MSCI GBP IG Corporate Bond Select Index <sup>16</sup> (MSCI Index Code: 746074)
2.	MSCI USD+EUR+GBP IG Climate Solutions Target Select Screens Corporate Bond Index	MSCI USD+EUR+GBP IG Corporate Bond Select Index <sup>17</sup> (MSCI Index Code: 746073)

<sup>16</sup> The Methodology of MSCI GBP IG Corporate Bond Select Index is available at: <https://www.msci.com/Index-methodology>

<sup>17</sup> The Methodology of MSCI USD+EUR+GBP IG Corporate Bond Select Index is available at: <https://www.msci.com/Index-methodology>

## Appendix IV: New release of Barra® Optimizer

A major new release of the relevant Barra Optimizer may replace the former version within a suitable timeframe.

## Appendix V: Methodology Set

The Indexes are governed by a set of methodology and policy documents ("Methodology Set"), including the present Index methodology document as mentioned below.

- Description of methodology set – <https://www.msci.com/index/methodology/latest/FIInfo>
- MSCI Fixed Income Data Methodology – <https://www.msci.com/index/methodology/latest/FIDATA>
- MSCI Fixed Income Calculation Methodology – <https://www.msci.com/index/methodology/latest/FIINDEXCALC>
- MSCI Fixed Income Glossary of Terms – <https://www.msci.com/index/methodology/latest/FIGLOSS>
- MSCI Fixed Income Index Policies – <https://www.msci.com/index/methodology/latest/FIINDEXPOLICY>
- ESG Factors in Methodology\*

The Methodology Set for the Indexes can be accessed from MSCI's webpage <https://www.msci.com/index-methodology> in the section 'Search Methodology by Index Name or Index Code'.

\* 'ESG Factors in Methodology' contains the list of environmental, social, and governance factors considered, and how they are applied in the methodology (e.g., selection, weighting or exclusion). It can be accessed in the Methodology Set as described above.

## Appendix VI: Changes to the Document

**The following sections have been updated effective January 2024:**

- Updated the footnote corresponding to Section 2.3, Table 1, Constraints 3 and 4, to explain the treatment for missing ESG Scores.
- Added Appendix V to include the Methodology Set

**The following sections have been updated effective July 2025:**

- The Index Names were updated, effective July 2025; MSCI ESG Climate Solutions Target Select Corporate Bond Indexes has been renamed as MSCI Climate Solution Target Select Screens Indexes Methodology.
- Added Section 2.5 to clarify treatment of companies with ratings and research not available from MSCI ESG Research.
- Updated links for ESG Data Disclosures in Section 4.
- Updated the branding template.

## Contact Us

### About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 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](http://www.msci.com).  
[msci.com/contact-us](http://msci.com/contact-us)

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>.

### AMERICA

United States	+ 1 888 588 4567 *
Canada	+ 1 416 687 6270
Brazil	+ 55 11 4040 7830
Mexico	+ 52 81 1253 4020

### EUROPE, MIDDLE EAST & AFRICA

South Africa	+ 27 21 673 0103
Germany	+ 49 69 133 859 00
Switzerland	+ 41 22 817 9777
United Kingdom	+ 44 20 7618 2222
Italy	+ 39 02 5849 0415
France	+ 33 17 6769 810

### EUROPE, MIDDLE EAST & AFRICA

China	+ 86 21 61326611
Hong Kong	+ 852 2844 9333
India	+ 91 22 6784 9160
Malaysia	1800818185 *
South Korea	+ 82 70 4769 4231
Singapore	+ 65 67011177
Australia	+ 612 9033 9333
Taiwan	008 0112 7513 *
Thailand	0018 0015 6207 7181 *
Japan	+ 81 3 4579 0333

\* 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 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 may include "Signals," defined as quantitative attributes or the product of methods or formulas that describe or are derived from calculations using historical data. Neither these Signals nor any description of historical data are intended to provide investment advice or a recommendation to make (or refrain from making) any investment decision or asset allocation and should not be relied upon as such. Signals are inherently backward-looking because of their use of historical data, and they are not intended to predict the future. The relevance, correlations and accuracy of Signals frequently will change materially.

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. The calculation of indexes and index returns may deviate from the stated methodology. 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](http://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 [msci.com](http://msci.com).

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. 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 a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such, provided that applicable products or services from MSCI ESG Research may constitute investment advice. 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. MSCI ESG and climate ratings,

research and data are produced by MSCI ESG Research LLC, a subsidiary of MSCI Inc. MSCI ESG Indexes, Analytics and Real Estate are products of MSCI Inc. that utilize information from MSCI ESG Research LLC. MSCI Indexes are administered by MSCI Limited (UK) and MSCI Deutschland GmbH. Please note that the issuers mentioned in MSCI ESG Research materials sometimes have commercial relationships with MSCI ESG Research and/or MSCI Inc. (collectively, "MSCI") and that these relationships create potential conflicts of interest. In some cases, the issuers or their affiliates purchase research or other products or services from one or more MSCI affiliates. In other cases, MSCI ESG Research rates financial products such as mutual funds or ETFs that are managed by MSCI's clients or their affiliates, or are based on MSCI Inc. Indexes. In addition, constituents in MSCI Inc. equity indexes include companies that subscribe to MSCI products or services. In some cases, MSCI clients pay fees based in whole or part on the assets they manage. MSCI ESG Research has taken a number of steps to mitigate potential conflicts of interest and safeguard the integrity and independence of its research and ratings. More information about these conflict mitigation measures is available in our Form ADV, available at <https://adviserinfo.sec.gov/firm/summary/169222>.

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 S&P Global Market Intelligence. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and S&P Global Market Intelligence.

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.

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>.