

# **MSCI ESG Research Controversies and Global Norms**

Executive Summary Methodology

MSCI ESG Research

July 2020

<b>Contents</b>		
	Controversies Overview	3
	Product Features	4
	Coverage Universe	5
	Controversies Research Process and Methodology	5
	Definition of a Controversy Case	6
	Categorization by Pillar and Key Performance Indicator	6
	Assessing Individual Controversies	6
	Assessment of Controversy Severity: The Severity Matrix	6
	Extenuating and Exacerbating Circumstances	7
	Assessment of Controversy Type: Structural vs. Non-Structural	8
	Assessment of Controversy Status	8
	Determination of Controversy Case Score and Flag	9
	Upgrading and Archiving	10
	Assessing KPI, Sub-Pillar, Pillar, and Overall Performance	11
	KPI Performance: Severity, Type, Pattern Score, and Flag	11
	Pillar and Sub-Pillar Performance: Score and Flag	12
	Overall Performance: Score and Flag	12
	Quality Review	12
	Ongoing Monitoring and Updates	12
	Corporate Actions and Related Changes	13
	Company Reports	14
	Global Norms Overview	15
	Signals	16

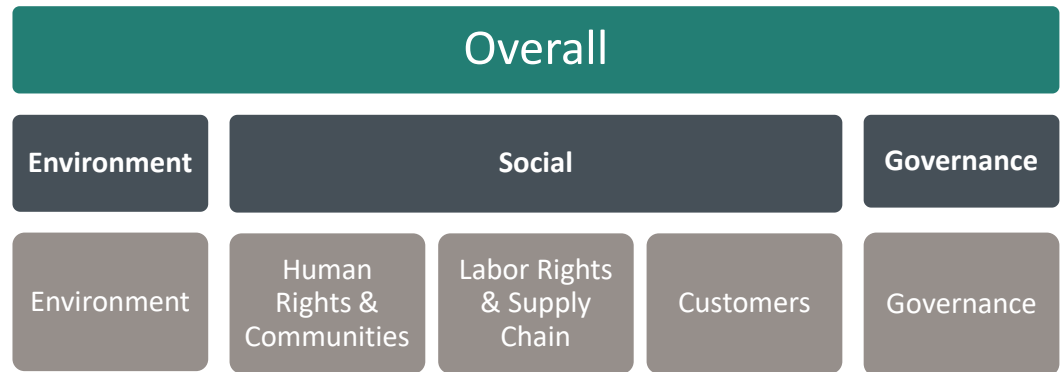
## Controversies Overview

MSCI ESG Controversies is designed to provide timely and consistent assessments of ESG controversies involving publicly traded companies and fixed income issuers. The evaluation framework used in ESG Controversies is designed to be consistent with international norms represented in numerous widely accepted global conventions, including the Universal Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and the UN Global Compact.

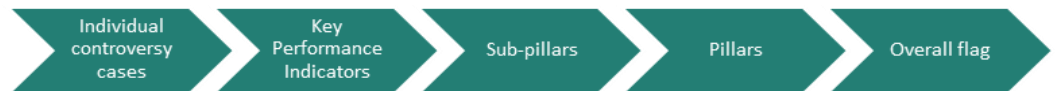
MSCI ESG Research analysts investigate and assess controversies involving the impact of company operations, governance practices, and/or products and services that allegedly violate national or international laws, regulations, and/or other commonly accepted global norms.

MSCI ESG Research signals the severity of the assessment through color-coded alerts and a zero to 10 score. Red (0) indicates at least one very severe controversy. Orange (1) indicates one or more major controversies that approach the criteria for a red flag. Yellow (2/3/4) indicates noteworthy controversies. Green (5 and above) indicates either less significant controversies or none at all.

The ESG Controversies analytical framework organizes controversies within the three pillars of Environment, Social, and Governance. The Social pillar is further divided into three sub-pillars representing different stakeholders:



Each sub-pillar consists of a set of Key Performance Indicators (KPIs). All assessed controversy cases are associated with at least one KPI. For any KPI with three or more controversy cases that carry an assessment of Moderate or worse, MSCI makes a one-point deduction from the score at the KPI level to reflect the pattern of cases. As such, all company flags are determined by either the most severe individual controversy case, or by the existence of a pattern of multiple cases in the same KPI.



## Product Features

MSCI ESG Controversies clients have access to over 12,500 company reports. Each company report includes assessments and narratives of any relevant ESG controversies.

- MSCI ESG Controversies clients also gain access to multiple levels of flags and scores for each company, including:
- Overall company score and flag;
- Scores and flags for each of the three ESG pillars;

- Scores and flags for each of the five stakeholder sub-pillars;
- Scores and flags for each Key Performance Indicator;
- Scores, flags, and assessments of each individual controversy case;
- Indication of UN Global Compact compliance status per the MSCI ESG Research methodology.

MSCI ESG Controversies scores, flags, and reports are currently available on MSCI’s proprietary platform, MSCI ESG Manager, as well as through direct data feeds, FactSet, StyleResearch, and MSCI’s BarraOne, Barra Portfolio Manager and Risk Manager platforms. The MSCI ESG Manager platform also provides the ability to set and receive customized email alerts for important ESG developments.

## Coverage Universe

As of July 2020, ESG Controversies covers companies included in the MSCI ACWI Investable Market Indexes (IMI), additional small cap companies, and 95% by market value of the Barclays Global Aggregate – Corporate Index.

## Controversies Research Process and Methodology

MSCI ESG Research analysts identify new controversy cases and update existing cases by researching company public documents, media sources, and nongovernmental organization (NGO) publications. For each new case, analysts determine:

- The appropriate KPI and sub-pillar that covers the controversy
- The **severity** of the case (Very Severe, Severe, Moderate and Minor)
- The **status** of the case - Concluded or Ongoing
- The **type** of case - whether or not a controversy is based on underlying management problems at the company

- Analysts also write a narrative for all Severe and Very Severe cases and some Moderate cases.

## Definition of a Controversy Case

A controversy case is defined as an instance or ongoing situation in which company operations and/or products allegedly have a negative environmental, social, and/or governance impact. Cases include alleged company violations of existing laws and/or regulations; or an alleged company action or event that violates accepted international norms, including but not limited to norms represented by global conventions such as the UN Global Compact.

A case is typically a single event such as a spill, accident, regulatory action, or a set of closely linked events or allegations such as health and safety fines at the same facility, multiple allegations of anti-competitive behavior related to the same product line, multiple community protests at the same company location, or multiple individual lawsuits alleging the same type of discrimination.

## Categorization by Pillar and Key Performance Indicator

Each controversy case is classified by a ESG pillar (Environment, Social, or Governance) and an ESG sub-pillar (Environment, Customers, Human Rights & Community, Labor Rights & Supply Chain, and Governance) depending on the primary stakeholder effected. Within each sub-pillar there are multiple KPIs(a total of 28) that provide a more nuanced classification of the case, depending on the type of allegations or controversial event.

## Assessing Individual Controversies

### Assessment of Controversy Severity: The Severity Matrix

Each controversy case is assessed for the severity of its impact on society or the environment and consequently rated **Very Severe** (reserved for 'worst of the worst' cases), **Severe**, **Moderate**, or **Minor**.

To reach these assessments, each case is analyzed along two dimensions. First, we determine the **nature of impact** on a scale ranging

from minimal to very serious harm. Second, we determine the **scale of impact**, on a scale ranging from low to extremely widespread.



These assessments are combined in the matrix below to reach an initial determination of severity, with multiple possible scenarios able to yield the same severity assessment through various combinations of scale and nature of impact.

### Controversy Severity Matrix

	Very Serious	Serious	Medium	Minimal
Extremely widespread	Very Severe	Very Severe	Severe	Moderate
Extensive	Very Severe	Severe	Moderate	Moderate
Limited	Severe	Moderate	Minor	Minor
Low	Moderate	Moderate	Minor	Minor

### Extenuating and Exacerbating Circumstances

While the initial severity assessment is determined by a controversy case’s placement on the matrix, certain circumstances may warrant a final

assessment that is more or less severe. The following rules allow for such adjustments.

**Extenuating Circumstances:**

The company’s responsibility for the impact is indirect or difficult to determine or the controversy took place more than 5 years ago, even if negative impacts are ongoing.

**Exacerbating Circumstances:**

The potentially impacted stakeholder (e.g. population, ecosystem, or property) is especially vulnerable, there is evidence that the company knowingly broke the law, the company knowingly disregarded human or environmental wellbeing, or the activity is extremely controversial despite the nature or scale of impact.

**Assessment of Controversy Type: Structural vs. Non-Structural**

Each controversy case is assessed to determine whether it is the result of underlying problems or structural failings at the company:

- **Structural:** There is evidence of an underlying problem at the company – poor culture, or lack of adequate governance and oversight – that is responsible for or contributed to the occurrence of the controversy, or if the incident could have been avoided had there been appropriate governance and oversight procedures or a better compliance culture at the company.
- **Non-Structural:** The controversy appears to have come about because of isolated bad actors or random misfortune rather than poor culture or governance failures, or if better culture or governance and oversight could not reasonably have been expected to prevent it.

As events unfold or additional information becomes available, the controversy case type is reassessed as warranted.

**Assessment of Controversy Status**

Each controversy case is assessed for its status:



- **Ongoing:** The case is active, with the last known development occurring *within the last two years*.
- **Concluded:** The case has been resolved, closed, or withdrawn. See below for explanation of how *Concluded* cases are upgraded over time and eventually archived.
- **Historical Concern:** The case concluded more than three years ago but is high profile and forms an important part of the company's ESG history. These cases remain in the company's profile but do *not* affect the scoring.

The status of a case is updated on the basis of new developments and regular research and review.

### Determination of Controversy Case Score and Flag

Individual controversy cases are scored based on a combination of severity, type, and status. For cases within a given severity, those that are Ongoing score lower than those that are Concluded, and those that are Structural score lower than those that are Non-Structural. Thus, for example, among Moderate cases, those that are also Concluded and Non-Structural receive the highest score while those that are simultaneously Ongoing and Structural receive the lowest score. The sole exceptions to this rule are the Very Severe cases, all of which score 0.

Case level flags correspond to scores as indicated in the table below.

SCORE	SEVERITY	TYPE	STATUS
0	Very Severe	Non-Structural	Concluded
	Very Severe	Non-Structural	Ongoing
	Very Severe	Structural	Concluded
	Very Severe	Structural	Ongoing
1	Severe	Structural	Ongoing
2	Severe	Structural	Concluded
	Severe	Non-Structural	Ongoing
3	Severe	Non-Structural	Concluded
4	Moderate	Structural	Ongoing
5	Moderate	Structural	Concluded
	Moderate	Non-Structural	Ongoing
6	Moderate	Non-Structural	Concluded
7	Minor	Structural	Ongoing
8	Minor	Structural	Concluded
	Minor	Non-Structural	Ongoing
9	Minor	Non-Structural	Concluded
10	None	NA	NA

### Upgrading and Archiving

A *Concluded* controversy retains its final severity assessment for one year from the date of conclusion, at which point it is upgraded by one severity level (e.g. from Severe to Moderate). The following year the case will be upgraded again or be archived, depending on the severity level.

**Minor Controversies:** All Minor controversies are archived after one year, regardless of status, unless developments warrant a downgrade to a more severe case.

**Very Severe Controversies:** Very Severe controversies that have concluded will only be upgraded if certain criteria are first met. For example, has the company appropriately responded to the controversy, and are there any new allegations or developments related to it. Conversely, a Very Severe controversy may be upgraded before it is concluded if the company has taken appropriate steps to remediate the situation and avoid future recurrences. Upgrades, downgrades, and reaffirmation of a Very Severe assessment all require committee approval (See Quality Review below).

## Assessing KPI, Sub-Pillar, Pillar, and Overall Performance

We assign scores and flags at the case, KPI, sub-pillar, pillar, and overall company levels. Scores range from 0-10, where 0 represents the worst controversies and 10 means no controversy. Flags (red, orange, yellow, or green) are assigned based on the score. At each level, the score is driven by the lowest-scoring component below it.

### KPI Performance: Severity, Type, Pattern Score, and Flag

**KPI Severity:** The KPI severity assessment looks at the company’s most severe controversy categorized under the respective KPI.

**KPI Type:** If a controversy categorized by a KPI is considered “Structural,” then the KPI type is “Structural.” But all the controversy cases under the KPI have to be “Non-Structural” if the KPI type is to be Non-Structural.

**KPI Score:** The KPI score is derived from the lowest scoring controversy case under the KPI.. If the company has a pattern of controversies categorized under a specific KPI (three or more non-Minor active cases), the KPI score is derived from the lowest scoring individual controversy case score minus one additional point.

**KPI Flag:** The KPI flag is derived directly from the KPI score, per the table below.

KPI SCORE	KPI FLAG
0	RED
1	ORANGE
2	YELLOW
3	YELLOW
4	YELLOW
5	GREEN
6	GREEN
7	GREEN
8	GREEN
9	GREEN
10	GREEN

## Pillar and Sub-Pillar Performance: Score and Flag

Each of the three pillars and the five stakeholder sub-pillars receives a score and flag based on the scores and flags of the KPIs that fall within each.

The sub-pillar score is driven by the lowest scoring KPI within the pillar, and flag is driven by the score. For the Environment and Governance pillars, the sub-pillar and the pillar are the same. For the Social pillar, there are three sub-pillars, and the Social pillar score and flag are derived from the lowest scoring sub-pillar within the Social pillar.

## Overall Performance: Score and Flag

Each company receives an overall score and flag based on our assessment of performance across the three pillars (E, S, and G), with the score driven by the lowest scoring pillar. Each company additionally receives an indication of UN Global Compact compliance status per MSCI ESG Research methodology: Fail, Watch List, or Pass.

## Quality Review

Quality review for ESG Controversies is governed by the ESG Controversies Methodology Committee (CMC) and the ESG Ratings Review Committee (RRC). The CMC has direct oversight of the content of the ESG Controversies product. The ESG Ratings Review Committee (RRC) has oversight over all MSCI ESG Research products.

## Ongoing Monitoring and Updates

### News Monitoring and Case Reviews

Companies within the ESG Controversies coverage universe are reviewed, updated and published on an ongoing basis. Controversy assessments, scores, and flags can change as part of two research and update processes.

- **Daily and Monthly updates:** On a daily basis, the analyst team checks global, regional, and national news sources, as well as

government and NGO reports, for significant new controversies, or material developments in existing controversies, for all companies in the coverage universe.

- **Case Reviews:** Individual controversy cases for which a recent update has not been found via the daily updates process are periodically reviewed. The timing of these reviews is determined by the assessment level of existing cases. For example, Very Severe cases are reviewed on a quarterly basis, while Severe cases are reviewed annually.

## Corporate Actions and Related Changes

Additionally, throughout the year, updates are made to reflect any corporate actions and changes to index constituents. These include:

### **New additions to the ESG Controversies' coverage universe:**

- Companies added to the MSCI World Index, MSCI Emerging Markets (EM) Index, or the MSCI USA Investible Markets Index (IMI) are researched within one quarter of when they are added.
- New companies added to other indexes in the MSCI ESG Controversies coverage universe are researched within two quarters of when they are added.

### **Spin-offs / Mergers:**

- If the spun-off entity is in the MSCI World Index, MSCI EM Index, or the MSCI USA IMI, it is researched as a stand-alone entity within one quarter of its inception.
- If the spun-off entity is in any other indexes in the MSCI ESG Controversies coverage universe, it will be researched at the time that its industry peers receive a full annual review.
- If a merger creates a new entity that is in the MSCI World Index, the merged entity is researched and rated within one quarter of its merger.
- If the merger creates a new entity that is in any of the other Indexes in the MSCI ESG Controversies coverage universe, it is researched at the time that its industry peers receive a full annual review.

### **Acquisitions:**

- If the company making the acquisition has an existing MSCI ESG Controversies report, the company’s assessment will account for the performance of the newly acquired entity at the time of the next full review for the company.
- If the company making the acquisition does not have an existing MSCI ESG Controversies report the company is considered a “new” entity, even if the newly acquired entity has a report,. If the new entity is in the MSCI World Index, MSCI EM Index or the MSCI USA IMI, it is researched and rated within one quarter of its acquisition. If the new entity is in other MSCI indexes in the MSCI ESG Controversies coverage, it is researched at the time that its industry peers on that Index receive a full review.

### Company Reports

Companies vary in the extent to which they are involved in controversies, and the controversies themselves vary in severity and complexity. As such, the length of narrative that analysts write per controversy also varies. Across our coverage universe, however, all ESG Controversies company reports will cover the following:

- Lowest score (0-10) and lowest flag (red/orange/yellow/green) overall.
- Score and flag for each of the three pillars: Environment, Social, and Governance
- Score and flag for each of the five stakeholder sub-pillars: Environment, Customers, Human Rights & Community, Labor Rights & Supply Chain, and Governance
- Score, flag, assessment of severity, and type for each of the 28 KPIs
- Global Compact Compliance: An indication of UN Global Compact compliance status per MSCI ESG Research Global Norms Screening methodology: Fail, Watch List, or Pass
- Count of total controversies and controversies by severity within each ESG pillar (Environment, Social, and Governance) and within each KPI

- Last update: indicates the date a substantive update was made to the company report.
- Most recent updates, if any (last 12 months)
- Most significant controversies
- Additional details on each controversy case:
- ESG Management for companies with red or yellow flags: a brief description and assessment of the company’s efforts to manage risks within each ESG Pillar (Environment, Social, and Governance). This information is sourced from MSCI ESG Research’s ESG Rating product, and is included in the reports to provide context for the company’s controversy involvement.
- Performance summary listing all KPIs with their assessment, score, and flag for an easy overall view

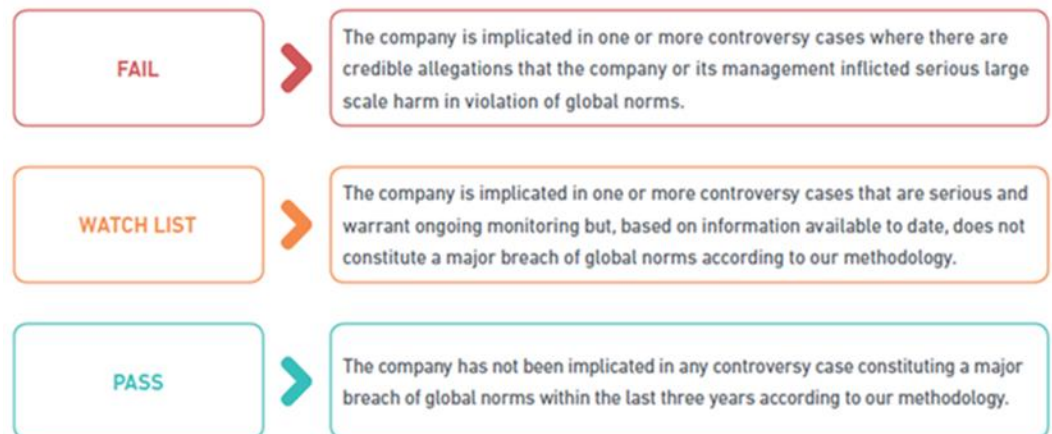
## Global Norms Overview

MSCI ESG Research’s Global Norms Screening is designed to provide timely and consistent assessments of publicly traded companies’ and fixed income issuers’ misalignment with or violations of select individual global norms and conventions, including the United Nations Global Compact Principles (UNGC), the International Labour Organization’s (ILO) conventions, and the United Nations Guiding Principles on Business and Human Rights (UNGPR). Drawing from the cases captured by MSCI ESG Research’s Controversies product, MSCI ESG Research’s Global Norms Screening provides an overall Pass, Fail, or Watch List signal, based on the severity of any related alleged violations in which a company is implicated. A single alleged violation / case that meets Watch List or Fail criteria in any area covered by the framework of a particular norm is sufficient for the company to receive the assessment, though some companies may be involved in more than one controversy that meets the criteria. The signal given for each Global Norms Screen is based solely on content that is covered by that norm’s framework.

<b>Global Compact Compliance</b>	<ul style="list-style-type: none"> <li>• Human Rights</li> <li>• Environment</li> </ul>	<ul style="list-style-type: none"> <li>• Labor Rights (Core)</li> <li>• Bribery &amp; Corruption</li> </ul>
<b>Human Rights Compliance</b>	<ul style="list-style-type: none"> <li>• Human Rights</li> </ul>	<ul style="list-style-type: none"> <li>• Labor Rights (Broad)</li> </ul>
<b>Labor Compliance – Broad</b>	<ul style="list-style-type: none"> <li>• Child Labor</li> <li>• Discrimination</li> <li>• Health &amp; Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Forced Labor</li> <li>• Collective Bargaining</li> <li>• Working Hours</li> </ul>
<b>Labor Compliance – Core</b>	<ul style="list-style-type: none"> <li>• Child Labor</li> <li>• Discrimination</li> </ul>	<ul style="list-style-type: none"> <li>• Forced Labor</li> <li>• Collective Bargaining</li> </ul>

### Signals

In order to provide investors clearer signals related to a company’s alleged violation of one of the above global norms, MSCI ESG Research analysts monitor company, government, media and NGO sources to determine if a company has faced a significant controversy related to one of the areas listed above. Companies with a Red flagged controversy in a relevant category are flagged as a “Fail” under the Global Norms Screen. For companies with an Orange flag in a relevant controversy category it is flagged as “Watchlist.” For companies with a Yellow or Green flag the company receives a “Pass.”





## 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 ESG RESEARCH PRODUCTS AND SERVICES

MSCI ESG Research products and services are provided by MSCI ESG Research LLC, and are designed to provide in-depth research, ratings and analysis of environmental, social and governance-related business practices to companies worldwide. ESG ratings, data and analysis from MSCI ESG Research LLC are also used in the construction of the MSCI ESG Indexes. MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc.

### 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](http://www.msci.com).

## 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. 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](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 [www.msci.com](http://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>.