

MSCI ACWI IMI SDG 7 Affordable and Clean Energy Select Index Methodology

August 2023

Contents

1	MSCI ACWI IMI SDG 7 Affordable and Clean Energy Select Index.....	3
2	Constructing the MSCI ACWI IMI SDG 7 Affordable and Clean Energy Select Index	4
2.1	Selection Universe.....	4
2.2	Filtered Universe.....	4
2.2.1	ESG Filter.....	4
2.2.2	Country filter	5
2.3	SDG Impact Universe	5
2.4	SDG Thematic Universe	5
2.4.1	Thematic selection criteria	6
2.5	Weighting Scheme	6
2.5.1	Security Weighting	6
2.5.2	Component Weighting	7
2.5.3	Minimum Weight Filter.....	7
2.5.4	Issuer Capping.....	7
3	Maintaining the MSCI ACWI IMI SDG 7 Affordable and Clean Energy Select Index.	8
3.1	Semi-Annual Index Review	8
3.2	Quarterly Index Reviews.....	8
3.3	Ongoing Event-Related Maintenance	8
4	MSCI ESG Research.....	10
4.1	MSCI Impact Solutions: Sustainable Impact Metrics.....	10
4.2	MSCI Impact Solutions: SDG Alignment.....	10
4.3	MSCI ESG Ratings	11
4.4	MSCI ESG Controversies	11
4.5	MSCI ESG Business Involvement Screening Research.....	11
4.6	MSCI Climate Change Metrics	11
	Appendix 1: ESG Exclusions Criteria	13
	Changes to this Document	17

1 MSCI ACWI IMI SDG 7 Affordable and Clean Energy Select Index

The MSCI ACWI IMI SDG 7 Affordable and Clean Energy Select Index (the 'Index'¹) aims to represent the performance of a set of companies from MSCI ACWI IMI that are associated with positive contribution to SDG 7² through their products or services, as defined using the following measures:

- Alternative Energy
- Demand-side Management
- Smart Grid
- Other Energy Storage
- Hydro Power Generation

The Index also supplements these measures using exposures from the MSCI ACWI IMI Clean Energy Infrastructure Index, as well as applies a set of exclusions criteria to filter companies based on certain business activities, involvement in controversies, ESG rating, or misalignment with any of the 17 SDGs. Additionally, the Index utilizes a combination of weighting strategies at both security and component levels, as well as applies a minimum weight filter and issuer capping.

¹ The Index is governed by a set of methodology and policy documents ("Methodology Set"), including the present index methodology document. The Methodology Set for the Index can be accessed from MSCI's webpage <https://www.msci.com/index-methodology> in the section 'Search Methodology by Index Name or Index Code'.

The Methodology Set includes a document 'ESG Factors in Methodology' that contains the list of environmental, social, and governance factors considered, and how they are applied in the methodology (e.g., selection, weighting or exclusion).

² SDG 7 refers to one of the 17 United Nations Sustainable Development Goals, as part of the 2030 Agenda for Sustainable Development, which aims to ensure access to affordable, reliable, sustainable and modern energy for all. (<https://sdgs.un.org/goals/goal7>)

2 Constructing the MSCI ACWI IMI SDG 7 Affordable and Clean Energy Select Index

2.1 Selection Universe

The underlying universe for the Index is defined by the constituents of the MSCI ACWI Investable Market Indexes (IMI, the 'Parent Index'), from which three separate universes of stocks are constructed (as described in sections 2.2 to 2.4).³

2.2 Filtered Universe

2.2.1 ESG Filter

The Index uses MSCI ESG Ratings, MSCI ESG Controversies, MSCI ESG Business Involvement Screening Research, MSCI Climate Change Metrics, and MSCI Impact Solutions' SDG Alignment to determine eligibility. The exclusions filters are as follows:

Business Involvement-based Criteria

- Controversial Weapons
- Nuclear Weapons
- Conventional Weapons
- Civilian Firearms
- Tobacco
- Adult Entertainment
- Alcohol
- Gambling
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Fossil Fuel Reserves Ownership
- Fossil Fuel Extraction
- Oil Sands Extraction
- Thermal Coal-based Power Generation

Other ESG/SDG Criteria

- UN Global Compact Violations
- ESG Controversies Score

³ See Section 4 for further information regarding the ESG and climate data used in the Index that MSCI Limited sources 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. MSCI Limited is the benchmark administrator for the MSCI indexes.

- Environmental Controversy Score
- ESG Ratings
- SDG Net Alignment

Please refer to Appendix 1 for details on these criteria.

2.2.2 Country filter

Securities listed on local exchanges in any of the below select countries⁴ are excluded from the final index:

- India
- Saudi Arabia
- Kuwait
- Pakistan
- Egypt

2.3 SDG Impact Universe

The Index uses MSCI Impact Solutions' Sustainable Impact Metrics and MSCI Climate Change Metrics to identify companies that have exposure to products and services that aim to contribute to the UN Sustainable Development Goal 7 – Affordable and Clean Energy. Companies in the Filtered Universe that have an aggregated revenue percentage of 50% or more from the following categories ('SDG Revenue') are included in the SDG Impact Universe:

- Alternative Energy
- Demand-side Management
- Smart Grid
- Other Energy Storage
- Hydro Power Generation

2.4 SDG Thematic Universe

The SDG Thematic Universe is constructed by selecting companies in the Filtered Universe (Section 2.2) that are not part of the SDG Impact Universe (Section 2.3) and are assessed to have high exposure to the clean energy infrastructure theme. The theme consists of the following business activities:

- Batteries
- Smart Grids
- Future Fuels and Technology

⁴ If securities listed in Kazakhstan, Kenya, Ukraine, Russia, or Vietnam are added to MSCI ACWI IMI, they will be excluded from the Index

MSCI may seek input from outside market experts on the ongoing evolution of the themes underlying the Index. However, such input is advisory only in nature. MSCI alone decides whether to use such input at all or to what extent. Receipt of such input, like any other feedback on MSCI indexes, may or may not lead to a change to the Index or Index methodology.

2.4.1 Thematic selection criteria

The selection rules are in accordance with sections 2.1 to 2.3.1 of the MSCI ACWI IMI Clean Energy Infrastructure Index methodology⁵ but applies the following variations:

- **Component Selection**

The Alternative Energy and Energy Efficiency components as per Section 2.1 of the MSCI ACWI IMI Clean Energy Infrastructure Index methodology are excluded.

- **Relevance Score Threshold**

Companies are selected if they have relevance score of 50% or more instead of any Relevance Score for the Future Fuels & Tech component as per Section 2.2 of the MSCI ACWI IMI Clean Energy Infrastructure Index methodology

- **Additional ESG Filter**

Companies that do not have any revenue from products, services, and projects that contribute to SDG 7, as defined in Section 2.3, are excluded from the Eligible Universe.

2.5 Weighting Scheme

The Index constituents that are determined to be part of the SDG Impact and SDG Thematic universes are weighted as follows:

2.5.1 Security Weighting

- **SDG Impact Universe**

Securities that meet the selection criteria outlined in Section 2.3 are weighted by the product of the aggregated SDG Revenue and their free float-adjusted market capitalization. The weights are then normalized to sum to 100%.

- **SDG Thematic Universe**

Securities that meet the selection criteria outlined in Section 2.4 are weighted by the product of the Relevance Score and their free float-adjusted market capitalization. The weights are then normalized to sum to 100%.

⁵ Please refer to the MSCI ACWI IMI Clean Energy Infrastructure Index methodology at <https://www.msci.com/index-methodology>

2.5.2 Component Weighting

Each component is scaled down to the following proportion:

Component	Component Weight
SDG Impact	75%
SDG Thematic	25%

2.5.3 Minimum Weight Filter

The Index applies a filter whereby each newly added constituent's weight is held at a minimum threshold of 2 basis points, whereas an existing constituent can be retained in the Index at a minimum threshold of 1 basis point. Securities that do not meet the threshold specified are deleted from the final Index. The weights are then normalized to sum to 100%.

2.5.4 Issuer Capping

The maximum weight of any issuer in the Index is then capped at 4.5% in accordance with the MSCI Capped Indexes methodology⁶. The excess weight of the capped issuers is distributed among the remaining constituents in proportion of their existing weights in the Index⁷.

⁶ Please refer to the MSCI Capped Indexes methodology at www.msci.com/index-methodology

⁷ Issuer capping may result in a drift in the component weights, as well as in a potential breach of the minimum weight filter described in Section 2.5.3.

3 Maintaining the MSCI ACWI IMI SDG 7 Affordable and Clean Energy Select Index

3.1 Semi-Annual Index Review

The Index is reviewed on a semi-annual basis, as of the close of the last business day of May and November, coinciding with the May and November Index Reviews of the Parent Index. The pro forma index is generally announced nine business days before the effective date.

As a rule, MSCI uses MSCI ESG Research data (including MSCI Impact Solutions, MSCI ESG Ratings, MSCI ESG Controversies, 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 Index. For some securities, such data may not be published by MSCI ESG Research by the end of the month preceding the Index Review. For such securities, MSCI will use ESG data published after the end of month, when available, for the rebalancing of the Index.

At each Semi-Annual Index Review, the Filtered, SDG Impact, and SDG Thematic universes are updated based on the criteria outlined in sections 2.2 to 2.4.

3.2 Quarterly Index Reviews

The Index is 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 and August. The pro forma indexes are generally announced nine business days before the effective date.

At the Quarterly Index Reviews, the Index is not reconstructed. However, the issuer capping rule described in Section 2.5.4 is applied.

3.3 Ongoing Event-Related Maintenance

The general treatment of corporate events in the Index aims to minimize turnover outside of Index Reviews. The methodology aims to appropriately represent an investor's participation in an event based on relevant deal terms and pre-event weighting of the index constituents that are involved. Further, changes in index market capitalization that occur as a result of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

The following section briefly describes the treatment of common corporate events within the Index.

No new securities will be added (except where noted below) to the Index between Index Reviews. Parent Index deletions will be reflected simultaneously.

There are no deletions from the Index between Index Reviews on account of a security becoming ineligible because of reduced SDG revenue falling below the threshold, decrease in MSCI ESG Controversies Score, change in SDG Alignment assessment, and/or change in business involvement.

EVENT TYPE

EVENT DETAILS

New additions to the Parent Index

A new security added to the Parent Index (such as IPO and other early inclusions) will not be added to the index.

Spin-Offs

All securities created as a result of the spin-off of an existing Index constituent will be added to the Index at the time of event implementation if the spin-off security is also added to the Parent Index. Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.

Merger/Acquisition

For Mergers and Acquisitions, the acquirer's post event weight will account for the proportionate amount of shares involved in deal consideration, while cash proceeds will be invested across the Index.

If an existing Index constituent is acquired by a non-Index constituent, the existing constituent will be deleted from the Index and the acquiring non-constituent will not be added to the Index.

Changes in Security Characteristics

A security will continue to be an Index constituent if there are changes in characteristics (country, sector, size segment, etc.). Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.

Further detail and illustration regarding specific treatment of corporate events relevant to this Index can be found in the MSCI Corporate Events Methodology.

The MSCI Corporate Events methodology book is available at:
<https://www.msci.com/index-methodology>.

4 MSCI ESG Research

The Index is a product of MSCI Inc. that utilizes 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 Index uses the following MSCI ESG Research products: MSCI Impact Solutions, MSCI ESG Ratings, MSCI ESG Controversies, MSCI ESG Business Involvement Screening Research, and MSCI Climate Change Metrics.

4.1 MSCI Impact Solutions: Sustainable Impact Metrics

MSCI Impact Solutions' Sustainable Impact Metrics is designed to identify companies that derive revenue from products or services with positive impact on society and the environment. The Sustainable Impact Metrics are comprised of six Environmental Impact categories and seven Social Impact categories arranged by theme.

MSCI Sustainable Impact Taxonomy

Pillar	Themes	Categories
Environmental Impact	Climate Change	1. Alternative energy 2. Energy efficiency 3. Green building
	Natural capital	4. Sustainable water 5. Pollution prevention 6. Sustainable agriculture
Social Impact	Basic needs	7. Nutrition 8. Major Disease Treatment 9. Sanitation 10. Affordable Real Estate
	Empowerment	11. SME Finance 12. Education 13. Connectivity – Digital divide

Under each of the actionable environmental and social impact themes, MSCI ESG Research has identified specific categories of products and services that it has determined companies can offer as potential solutions to environmental and social challenges.

More detailed taxonomy for each category can be found in Section 4.4 of the MSCI ACWI Sustainable Impact Index Methodology available at <https://www.msci.com/index-methodology>.

4.2 MSCI Impact Solutions: SDG Alignment

MSCI Impact Solutions' SDG Alignment is designed to provide a holistic view of companies' net contribution – both positive and negative – towards addressing each of the 17 UN Sustainable Development Goals (SDGs). SDG Alignment assessments and scores include analysis of companies' operations, products and services, policies, and practices and their net contribution – positive and adverse – to addressing key global challenges.

The MSCI SDG Alignment framework provides 17 SDG Net Alignment scores and 17 SDG Net Alignment assessments (including Strongly Aligned, Aligned, Neutral, Misaligned and Strongly Misaligned) for each of the 17 global goals. In addition, the model offers assessments and scores

for two dimensions, product alignment and operation alignment, for each company and for each of the 17 goals.

For more details on MSCI Impact Solutions including MSCI SDG Alignment, please refer to <https://www.msci.com/our-solutions/esg-investing/impact-solutions>.

4.3 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/esg-and-climate-methodologies>.

4.4 MSCI ESG Controversies

MSCI ESG Controversies provide assessments of controversies concerning the potential negative environmental, social, and/or governance impact of company operations, products and services. The evaluation framework used in MSCI ESG Controversies is designed to be consistent with international norms represented by the UN Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and the UN Global Compact. MSCI ESG Controversies Score falls on a 0-10 scale, with "0" being the most severe controversy.

The MSCI ESG Controversies methodology can be found at: <https://www.msci.com/esg-and-climate-methodologies>.

4.5 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.

4.6 MSCI Climate Change Metrics

MSCI Climate Change Metrics provide climate data & tools to support institutional investors seeking to integrate climate risk & opportunities into their investment strategy and processes. This includes investors seeking to achieve a range of objectives, including measuring and reporting on climate risk exposure, implementing low carbon and fossil fuel-free strategies, 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.



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

Appendix 1: ESG Exclusions Criteria

Companies are excluded based on the following MSCI Business Involvement Screening Research, MSCI Climate Change Metrics, MSCI ESG Controversies, MSCI ESG Ratings and MSCI SDG Alignment filters:

BUSINESS INVOLVEMENT-BASED CRITERIA

- **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
- **Conventional Weapons**
 - All companies deriving 5% or more revenue from the production of conventional weapons
 - All companies deriving 5% or more aggregate revenue from weapons systems, components, and support systems and services

- **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
- **Tobacco**
 - All companies that manufacture tobacco products, such as cigars, blunts, cigarettes, e-cigarettes, inhalers, beedis, kreteks, smokeless tobacco, snuff, snus, dissolvable and chewing tobacco. This category also covers companies that grow or process raw tobacco leaves
 - All companies deriving 5% or more aggregate revenue from the production, distribution, retail, supply, and licensing of tobacco-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
- **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
- **Gambling**
 - All companies deriving 5% or more revenue from ownership of operation of gambling-related business activities
 - All companies deriving 15% or more aggregate revenue from gambling-related business activities
- **Genetically Modified Organisms (GMO)**
 - All companies deriving 5% or more revenue from activities like genetically modifying plants, such as seeds and crops, and other organisms intended for agricultural use or human consumption

- **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 15% or more aggregate revenue from nuclear power activities

- **Fossil Fuel Reserves Ownership**

- All companies with evidence of owning proven & probable coal reserves and/or proven oil and natural gas reserves used for energy purposes, as defined by the methodology of the MSCI Global Ex Fossil Fuels Indexes available at <https://www.msci.com/index-methodology>

- **Fossil Fuel Extraction**

- All companies deriving any revenue (either reported or estimated) from thermal coal mining or 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.

- **Oil Sands Extraction**

- All companies deriving 5% or more revenue (either reported or estimated) from oil sands extraction for a set of companies that own oil sands reserves and disclose evidence of deriving revenue from oil sands extraction. It does not cover revenue from non-extraction activities (e.g. exploration, surveying, processing, refining); ownership of oil sands reserves with no associated extraction revenues; revenue from intra-company sales

- **Thermal Coal-based Power Generation**

- All companies deriving 5% or more revenue (either reported or estimated) from the thermal coal-based power generation

OTHER ESG/SDG CRITERIA

- **United Nations Global Compact Compliance**
 - All companies that fail to comply with the United Nations Global Compact principles
- **ESG Controversies Score**
 - All 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.
- **Environmental Controversy Score**
 - All companies assessed as having involvement in environmental controversies that are classified as Red (MSCI Environmental Controversy Score of 0) or Orange Flags (score of 1).
 - A Red Flag indicates an ongoing, Very Severe environmental controversy implicating a company directly through its actions, products, or operations.
 - An Orange Flag indicates an ongoing Severe environmental controversy implicating a company directly, or a Very Severe environmental controversy that is either partially resolved or indirectly attributed to the company's actions, products, or operations.
- **ESG Ratings**
 - All companies assessed as having an MSCI ESG Rating of 'B' and 'CCC'
- **SDG Net Alignment**
 - All companies that are assessed as Strongly Misaligned and Misaligned on their Net Alignment to any of the 17 SDGs

Note on Unrated Securities or Securities with Missing Coverage:

Companies that are not assessed on MSCI ESG Research's ESG Controversies, ESG Ratings, and SDG Alignment are excluded from the Filtered Universe.

Changes to this Document

The following sections have been modified as of August 2023:

Section 2.2.1 and Appendix 1

- Updated to reflect the lower threshold for the Conventional Weapons and Thermal Coal Mining criteria
- Updated to reflect the addition of the Environmental Controversy Score, Adult Entertainment, Alcohol, Gambling, Genetically Modified Organisms, Nuclear Power, Fossil Fuel Reserves Ownership, and Unconventional Oil & Gas Extraction criteria
- The MSCI ESG Controversies-related language was updated to reflect MSCI ESG Research's enhancement to the underlying MSCI ESG Controversies framework

Section 2.4.1

- Updated to reflect the updated sections of the linked index methodology

Section 3.1

- The Methodology book was updated to reflect the transition of the MSCI Global Investable Market Indexes (GIMI) to Quarterly Comprehensive Index Reviews.
- All references to "Semi-Annual Index Reviews" and "Quarterly Index Reviews" of the MSCI GIMI were replaced with "Index Reviews".

Section 4

- ESG Research Section moved to the end (changed from Section 2 to Section 4)

Contact us

msci.com/contact-us

AMERICAS

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

EUROPE, MIDDLE EAST & AFRICA

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

ASIA PACIFIC

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

* toll-free

About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 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.

The process for submitting a formal index complaint can be found on the index regulation page of MSCI's website at: <https://www.msci.com/index-regulation>

Notice and disclaimer

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

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

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

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

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

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

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

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

Index returns do not represent the results of actual trading of 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.

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.

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).

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>.