

MSCI ACWI EU PARIS ALIGNED REQUIREMENTS INDEX METHODOLOGY

July 2021

Contents	1	Introduction.....	3
	2	MSCI ESG Research.....	4
	2.1	MSCI Climate Change Metrics.....	4
	2.2	MSCI ESG Controversies.....	5
	2.3	MSCI ESG Business Involvement Screening Research	5
	3	Constructing the Index.....	6
	3.1	Applicable Universe.....	6
	3.2	Eligible Universe	6
	3.3	Security Selection and Weighting	7
	3.4	Optimization Constraints	7
	3.5	Determining the Optimized Index	8
	3.6	Phase-in of Scope 3 emissions	9
	4	Maintaining the Index	11
	4.1	Semi-Annual Index Reviews	11
	4.2	Ongoing Event Related Changes	11
		Appendix I: Calculation of Target Metrics	13
		Appendix II: Barra Equity Model Used in The Optimization	16
		Appendix III: New release of Barra® Equity Model or Barra® Optimizer.....	17

1 Introduction

Two new categories of climate benchmark were created by the EU Benchmark Regulation (EU delegated acts)¹ which sets out the minimum standards for such indexes. The two benchmark types are EU Climate Transition Benchmarks (CTBs) and EU Paris-Aligned Benchmarks (PABs).

The MSCI ACWI EU Paris Aligned Requirements Index (“The Index”) is designed to meet the minimum standards of the EU Paris-Aligned Benchmark (PAB). The Index is constructed from MSCI ACWI (“The Parent Index”) using an optimization-based approach³ and aims to:

- Reduce the weighted average greenhouse gas intensity by 50% compared to the underlying investment universe.
- Reduce the weighted average greenhouse gas (GHG) intensity by 7% on an annualized basis
- Achieve a modest tracking error compared to the Parent Index and low turnover.
- Exclude companies involved in Controversial Weapons businesses, Very Severe ESG Controversies, Severe Environmental Controversies, Tobacco Manufacturing, Thermal Coal, Oil & Gas and Fossil Fuel-based power generation.

Additionally, the index implements a phase-in of Scope 3 Emissions as detailed in section 3.6 of this methodology.

¹ [Regulation \(EU\) 2016/1011 as amended by Regulation \(EU\) 2019/2089](#)

³ In case there are changes in the EU delegated acts and an update to the Index methodology is required, MSCI will issue an announcement prior to implementing the changes in the methodology. MSCI will not conduct a formal consultation for such an update.

2 MSCI ESG Research

MSCI ESG Research provides in-depth research, ratings and analysis of the environmental, social and governance-related business practices of thousands of companies worldwide. It consists of an integrated suite of tools and products to efficiently manage research, analysis and compliance tasks across the spectrum of ESG factors.

The Index uses company ratings and research provided by MSCI ESG Research. In particular, this index uses the following MSCI ESG Research products: MSCI Climate Change Metrics, MSCI ESG Controversies and MSCI ESG Business Involvement Screening Research.

For details on MSCI ESG Research’s full suite of ESG products, please refer to:

<https://www.msci.com/esg-investing>

2.1 MSCI CLIMATE CHANGE METRICS

MSCI Climate Change Metrics provides climate data & tools to support investors integrating climate risk & opportunities into their investment strategy and processes. It supports investors seeking to achieve a range of objectives, including measuring and reporting on climate risk exposure, implementing low carbon and fossil fuel-free strategies, align 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>

2.2 MSCI ESG CONTROVERSIES

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

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

http://www.msci.com/resources/factsheets/MSCI_ESG_BISR.pdf

2.3 MSCI ESG BUSINESS INVOLVEMENT SCREENING RESEARCH

MSCI ESG Business Involvement Screening Research (BISR) aims to enable institutional investors to manage environmental, social and governance (ESG) standards and restrictions reliably and efficiently.

For more details on MSCI ESG Business Involvement Screening Research, please refer to: http://www.msci.com/resources/factsheets/MSCI_ESG_BISR.pdf

3 Constructing the Index

3.1 APPLICABLE UNIVERSE

The Applicable Universe includes all the existing constituents of the MSCI ACWI Index (“Parent Index”).

3.2 ELIGIBLE UNIVERSE

The Eligible Universe is constructed from the Applicable Universe by excluding securities of companies based on the exclusion criteria below

1. **Controversial Weapons:** All companies involved in Controversial Weapons as defined by the methodology of the MSCI Ex-Controversial Weapons Indexes.
2. **ESG Controversies:** All companies having faced very severe controversies pertaining to ESG issues – Defined as companies with an ESG Controversy Score of 0.
3. **Environmental Harm:** All companies having faced very severe and severe controversies pertaining to Environmental issues – Defined as companies with an Environment Controversy Score of 0 or 1.
4. **Tobacco:** All companies that are involved in the manufacturing of Tobacco products
5. **Thermal Coal Mining:** All companies deriving 1% or more revenue (either reported or estimated) from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties. It excludes revenue from metallurgical coal, coal mined for internal power generation (e.g. in the case of vertically integrated power producers), intra-company sales of mined thermal coal, and revenue from coal trading (either reported or estimated)
6. **Oil & Gas:** All companies deriving 10% or more revenue from oil and gas related activities, including distribution / retail, equipment and services, extraction and production, pipelines and transportation and refining but excluding biofuel production and sales and trading activities.

7. **Power Generation:** All companies deriving 50% or more revenue from thermal coal based power generation, liquid fuel based power generation and natural gas based power generation⁹.

3.3 SECURITY SELECTION AND WEIGHTING

Securities in the Eligible Universe are selected and weighted following an optimization based approach.

3.4 OPTIMIZATION CONSTRAINTS

At each Semi-Annual Index Review, the index is constructed using an optimization process that aims to achieve replicability and investability as well as minimize ex-ante tracking error relative to the Parent Index subject to the following constraints:

1. Climate 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 I.

Table 1: Constraints imposed to meet climate objectives

No.	Climate Objectives	Threshold
1.	Minimum reduction in Greenhouse Gas (GHG) Intensity (Scope 1+2+3 ¹⁰) relative to the Reference Index	50%
2.	Minimum average reduction (per annum) in GHG Intensity relative to GHG Intensity of the index at the Base Date ¹¹	7%
3.	Minimum active weight in High Climate Impact Sector relative to Reference Index as defined in Appendix I	0%

⁹ As per https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter7.pdf, thermal coal based power generation, liquid fuel based power generation and natural gas based power generation have median lifecycle emissions exceeding 100gCO₂/kWh.

¹⁰ Prior to the May 2020 Semi-Annual Index Review (SAIR) of the Index, the Weighted Average Carbon Emissions Intensity has been calculated based on Scope 1+2 Emissions.

¹¹ For more details on Base Date, please refer to section 3.6.

Table 1: Constraints imposed to meet diversification objectives

No.	Diversification Objective	Threshold
4.	Constituent Active Weight relative to the Parent Index	+/- 2%
5.	Security Weight as a multiple of its weight in the Parent Index	20x
6.	Active Sector Weights (the Energy GICS Sector is not constrained) relative to the Parent Index	+/-5%
7.	Active Country Weights relative to the Parent Index ¹²	+/-5%
8.	One Way Turnover	5%
9.	Common Factor Risk Aversion	0.0075
10.	Specific Risk Aversion	0.075

During the Semi-Annual 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 20%
- Relax the active sector weight constraint in steps of 1% up to +/-20%
- The one-way index turnover constraint and the active sector weight 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 Semi-Annual Index Review.

DETERMINING THE OPTIMIZED INDEX

The Index is constructed using the Barra Open Optimizer¹³ in combination with the relevant Barra Equity Model. The optimization uses universe of eligible securities and the specified optimization objectives and constraints to determine the constituents of the Indexes.

¹² 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.

¹³ Please refer to Appendix II and III for more details.

3.6 PHASE-IN OF SCOPE 3 EMISSIONS

As per the EU Delegated Acts, Scope 3 Emissions may be phased-in as per an implementation schedule, based on the companies’ NACE classifications. NACE¹⁴ is the European Union’s classification of economic activities. Index aims to phase-in Scope 3 emissions as per the same implementation schedule. The table below details the NACE Divisions for which the Scope 3 emissions would be considered (“Target Divisions”) based on the corresponding Sem-Annual Index Review dates.

Table 3: Phase-in of Scope 3 emissions

Period	Target Divisions	Base Date
Up to but not including the May 2020 SAIR	Scope 3 Emissions are not considered for any NACE Division	November 2013 SAIR
From the May 2020 up to but not including the November 2022 SAIR	Scope 3 Emissions to be considered only for Divisions 05 to 09 and 19 and 20	May 2020 SAIR
From the November 2022 SAIR up to but not including the November 2024 SAIR	In addition to the above NACE Divisions, Scope 3 Emissions to be considered for Divisions 10 to 18, 21 to 33, 41, 42 and 43, 49 to 53 and Division 81	November 2022 SAIR
From the November 2024 SAIR onwards	Scope 3 Emissions to be considered for all NACE Divisions	November 2024 SAIR

¹⁴ For further details regarding NACE, please refer to https://ec.europa.eu/eurostat/statistics-explained/index.php?title=NACE_background

MSCI uses the following steps to identify the GICS Sub-Industries which map to the Target Divisions for each of the Phase-In periods.

1. MSCI has published a mapping¹⁵ between the NACE classes and GICS Sub-Industry.
2. Based on this mapping, for each GICS Sub-Industry, the number of NACE Classes which fall under the Target Divisions (N_T) are identified.
3. If a GICS Sub-Industry is mapped to any NACE class falling under the “Target Divisions” ($N_T > 0$), Scope 3 Emissions are considered for all constituents of the Applicable Universe which belong to the given GICS Sub-Industry.

Additionally, when the Target Divisions are updated as per the above Phase-In Schedule, a new Base Date will be implemented at the first Semi-Annual Index Review (SAIR) of that period –

- The One-way Index Turnover Constraint (Diversification Objective 8) will be relaxed to 100%
- The 7% Minimum average reduction (per annum) in GHG Intensity relative to GHG Intensity of the index at the Base Date (Climate Objective 2) will not be applied. Instead, going forward, the GHG Intensity (described further below) as of the first SAIR of the period will be used to calculate the 7% average reduction trajectory for subsequent rebalances.

¹⁵ This mapping is available in the [Handbook of Climate Transition Benchmarks, Paris-Aligned Benchmark and Benchmarks' ESG Disclosures](#)

4 Maintaining the Index

4.1 SEMI-ANNUAL INDEX REVIEWS

The Index is rebalanced on a semi-annual basis, as of the close of the last business day of May and November, coinciding with the May and November Semi-Annual Index Review of the MSCI Global Investable Market Indexes. The pro forma Index is in general announced nine business days before the effective date.

In general, MSCI uses MSCI ESG Research data (including MSCI Climate Change Metrics, MSCI ESG Controversies and MSCI Business Involvement Screening Research) as of the end of the month preceding the Index Reviews for the rebalancing of the Index.

4.2 ONGOING EVENT RELATED CHANGES

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.

Additionally, if the frequency of Index Reviews in the Parent Index is greater than the frequency of Index Reviews in the Index, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the Index.

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.

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. 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 book under the sections detailing the treatment of events in Capped Weighted and Non-Market Capitalization Weighted indexes.

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

Appendix I: Calculation of Target Metrics

Calculation of GHG Intensity

For Parent Index constituents where the Scope 1+2+3 Emissions Intensity is not available, the average Scope 1+2+3 Emissions Intensity of all the constituents of the MSCI ACWI in the same GICS Industry Group in which the constituent belongs is used.

Security Level GHG Intensity =

$$\frac{\text{Scope 1 + 2 + 3 Carbon Emissions} * (1 + EVIAF)}{\text{Enterprise Value} + \text{Cash (in M\$)}}$$

Enterprise Value Inflation Adjustment Factor (EVIAF) =

$$EVIAF = \left(\frac{\text{Average (Enterprise Value} + \text{Cash)}}{\text{Previous (Average (Enterprise Value} + \text{Cash))}} \right) - 1$$

Weighted Average GHG Intensity of Parent Index =

$$\sum (\text{Weight in Parent Index} * \text{Security Level GHG Intensity})$$

Weighted Average GHG Intensity of Derived Index =

$$\sum (\text{Index Weight} * \text{Security Level GHG Intensity})$$

Calculation of Average Decarbonization

On average, the Indexes follow a 7% decarbonization trajectory since the Base Date. The Weighted Average GHG Intensity at the Base Date (W_1) is used to compute the target Weighted Average GHG Intensity at any given Semi-Annual Index Review (W_t) as per the below formula.

$$W_t = W_1 * 0.93^{\frac{(t-1)}{2}}$$

Where 't' is the number of Semi-Annual Index Reviews since the Base Date.

Thus, for the 3rd Semi-Annual Index Review since the Base Date (t=3), the target Weighted Average GHG Intensity will be $W_1 * 0.93$.

Climate Impact Sectors

NACE¹⁶ is the European Union’s classification of economic activities. As per the draft DA, stocks in the NACE Section codes A, B, C, D, E, F, G, H, L are classified as “High Climate Impact” sector and other stocks are classified ‘Low Climate Impact’ sector. The GICS¹⁷ Sub-Industry code for each security is mapped to the corresponding “Climate Impact Sector” using a mapping. This mapping is constructed in the following steps:

1. MSCI has published a mapping¹⁸ between the NACE classes and GICS Sub-Industry.
2. For each GICS Sub-Industry, the number of NACE classes which fall under the High Climate Impact Sector (say the number of classes is N_H) and Low Climate Impact Sector (say the number of classes is N_L) is identified
3. If all the NACE classes for a given GICS Sub-Industry are identified in the High Climate Impact Sector ($N_L = 0$), then the GICS Sub-Industry is mapped to the High Climate Impact Sector. Conversely, if all the NACE classes for a given GICS Sub-Industry are identified in the Low Climate Impact Sector ($N_H = 0$) then the GICS Sub-Industry is mapped to the Low Climate Impact Sector
4. In case a GICS Sub-Industry is mapped to some NACE classes in the High Climate Impact Sector and the others in the Low Climate Impact Sector, the GICS Industry is mapped to the Climate Impact Sector in the following manner:
 - a. **$N_H \geq N_L$** : If the number of NACE classes in the High Climate Impact Sector is at least equivalent to the number of NACE classes in the Low Climate Impact Sector, the GICS Sub-Industry is mapped to the High Climate Impact Sector
 - b. **$N_H < N_L$** : If the number of NACE classes in the High Climate Impact Sector is less than the number of NACE classes in the Low Climate Impact Sector, the GICS Sub-Industry is mapped to the Low Climate Impact Sector
5. Using the GICS Sub-Industry to Climate Impact Sector mapping created in Step 4, and the security-level GICS Sub-Industry, each security in the Parent

¹⁶ For further details regarding NACE, please refer to https://ec.europa.eu/eurostat/statistics-explained/index.php?title=NACE_background

¹⁷ For further information regarding GICS, please refer to <https://www.msci.com/gics>

¹⁸ This mapping is available in the [Handbook of Climate Transition Benchmarks, Paris-Aligned Benchmark and Benchmarks’ ESG Disclosures](#)

Index is classified in either High Climate Impact Sector or Low Climate Impact Sector

Appendix II: Barra Equity Model Used in The Optimization

The MSCI Climate Paris Aligned Indexes currently use an optimization setup using the MSCI Barra Global Equity Model for Long-Term Investors (GEMTL).

Appendix III: New release of Barra® Equity Model or Barra® Optimizer

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

Contact us

clientservice@msci.com

AMERICAS

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

EUROPE, MIDDLE EAST & AFRICA

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

ASIA PACIFIC

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

* = toll free

ABOUT MSCI

MSCI is a leader 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.

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>.

To learn more, please visit 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 re-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. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.
- The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.
- Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.
- Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.
- MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of www.msci.com.
- MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.
- Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.
- MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data, reports and ratings based on published methodologies and available to clients on a subscription basis. We do not provide custom or one-off ratings or recommendations of securities or other financial instruments upon request.

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