INDEX METHODOLOGY



# MSCI GLOBAL SOCIALLY RESPONSIBLE INDEXES METHODOLOGY

November 2014



CONTENTS	1 In <sup>-</sup>	trod	uction	4	
	2 MSCI ESG Research				
	2.1	MS	CI ESG Intangible Value Assessment	5	
	2.2	MS	CI ESG Impact Monitor	5	
	2.3	MS	CI ESG Business Involvement Screening Research	5	
	3 Co	onsti	ructing the MSCI Global Socially Responsible Indexes	7	
	3.1	Un	derlying Universe	7	
	3.2	Elig	gibility Criteria	7	
	3.2	2.1	Values-Based Exclusions	7	
	3.2	2.2	ESG Ratings Eligibility	7	
	3.2	2.3	ESG Controversy Score Eligibility	8	
	3.3	Ind	ex Construction	8	
	4 M	aint	aining the MSCI Global Socially Responsible Indexes	10	
	4.1	An	nual Index Review	10	
	4.1	L.1	Annual Index Reconstitution: Ranking and Selection	10	
	4.2	Qu	arterly Index Reviews	11	
	4.3	On	going Event-Related Maintenance	11	
	4.3	3.1	IPOs and other Early Inclusions	11	
	4.3	3.2	Additions and Deletions due to Corporate Events	12	
	Appendix 1: Values Based Exclusion Criteria				
	Appendix 2: Guidelines on achieving the target sector coverage of				
	25%				
	Appendix 3: Methodology Transition				
	Appendix 4: Initial Construction of the MSCI Emerging Markets				
	Socially Responsible Index at launch 1				



Appendix 5: MSCI Extended Global Socially Responsible Index...... 18



# 1 INTRODUCTION

Globally, institutional investors are increasingly seeking to invest in companies that operate in accordance with their values and meet stringent best-of-class criteria for managing their environmental, social and governance (ESG) risks and opportunities.

Examples of values driven investing include the avoidance of companies that sell products that have high negative social impact (for example – alcohol, gambling, and tobacco), a commitment to high human rights standards in a company's supply chain, and general adherence to established international normative standards of corporate behavior as represented by organizations such as the UN Global Compact.

The MSCI Global Socially Responsible (SRI) Indexes exclude companies that are inconsistent with specific values based criteria focused on products with high negative social or environmental impact. Additionally, these indexes target companies with high Environmental, Social and Governance (ESG) ratings relative to their sector peers, to ensure the inclusion of the best-in-class companies from an ESG perspective. Further, these Indexes aim to target sector weights that reflect the relative sector weights of the underlying MSCI Global Investable Market Indexes to limit the systematic risk introduced by the ESG selection process. Overall the MSCI Global Socially Responsible Indexes target coverage of 25% of the underlying MSCI parent index ("Parent Index").

Currently MSCI constructs MSCI Global Socially Responsible Indexes for the Standard sizesegment in all Developed Markets and Emerging Markets.



## 2 MSCI ESG RESEARCH

The MSCI Global Socially Responsible Indexes use company ratings and research provided by MSCI ESG Research. In particular, these indexes use the following three MSCI ESG Research products: MSCI ESG Intangible Value Assessment, MSCI ESG Impact Monitor, and MSCI ESG Business Involvement Screening Research.

For details on MSCI ESG Research's full suite of ESG products, please refer to: http://www.msci.com/products/esg/about msci esg research.html

#### 2.1 MSCI ESG INTANGIBLE VALUE ASSESSMENT

MSCI ESG Intangible Value Assessment (IVA) company reports provide research, analysis and ratings of how well companies manage their most material environmental, social and governance risks and opportunities.

MSCI ESG IVA provides an overall company ESG rating a seven point scale from 'AAA' to 'CCC'. In addition, the product provides scores and percentiles indicating how well a company manages each key issue relative to industry peers.

For more details on MSCI ESG IVA, please refer to http://www.msci.com/resources/factsheets/MSCI\_ESG\_IVA.pdf

#### 2.2 MSCI ESG IMPACT MONITOR

MSCI ESG Impact Monitor company reports include 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 Impact Monitor 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.

For more details on MSCI ESG Impact Monitor, please refer to http://www.msci.com/resources/factsheets/MSCI\_ESG\_Impact\_Monitor.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. Investors can access the BISR data via data feeds or MSCI ESG Manager to help satisfy client investment guidelines, implement client mandates, and manage potential ESG portfolio risks.



For more details on MSCI ESG Business Involvement Screening Research, please refer to <a href="http://www.msci.com/resources/factsheets/MSCI\_ESG\_BISR.pdf">http://www.msci.com/resources/factsheets/MSCI\_ESG\_BISR.pdf</a>



# **3** CONSTRUCTING THE MSCI GLOBAL SOCIALLY RESPONSIBLE INDEXES

#### 3.1 UNDERLYING UNIVERSE

The selection universe for the MSCI Global Socially Responsible Indexes is defined by the constituents of the MSCI Global Investable Market Indexes (GIMI).

#### 3.2 ELIGIBILITY CRITERIA

The MSCI Global Socially Responsible Indexes use company ratings and research provided by MSCI ESG Research to determine eligibility.

#### 3.2.1 VALUES-BASED EXCLUSIONS

The MSCI Global Socially Responsible Indexes use MSCI ESG Business Involvement Screening Research to identify companies that are involved in the following business activities. Companies that meet the business involvement criteria are excluded from the MSCI Global Socially Responsible Indexes. Please refer to Appendix 1 for details on these criteria.

- Alcohol
- Gambling
- Tobacco
- Military Weapons
- Civilian Firearms
- Nuclear Power
- Adult Entertainment
- Genetically Modified Organisms

#### 3.2.2 ESG RATINGS ELIGIBILITY

The MSCI Global Socially Responsible Indexes use MSCI ESG Intangible Value Assessment research to identify companies that demonstrated an ability to manage their ESG risks and opportunities. Existing constituents of the MSCI Global Socially Responsible Indexes are required to have an IVA rating above B to remain in the index, while companies that are currently not constituents of the MSCI Global Socially Responsible Indexes are required to have an IVA rating above B to remain in the index.



#### 3.2.3 ESG CONTROVERSY SCORE ELIGIBILITY

MSCI Global Socially Responsible Indexes use MSCI ESG Impact Monitor research to identify those companies that are involved in very serious controversies involving the environmental, social, or governance impact of their operations and/or products and services. Impact Monitor overall company scores fall on a 0-10 scale, with "0" being the most severe controversy. Existing constituents of the MSCI Global Socially Responsible Indexes are required to have an Impact Monitor score above 1 to remain in the index, while companies that are currently not constituents of the MSCI Global Socially Responsible Indexes are required to have an Impact Monitor score above 3 to be considered eligible for addition.

#### 3.3 INDEX CONSTRUCTION

Currently MSCI constructs MSCI Global Socially Responsible Indexes for the Standard sizesegment in all Developed Markets and Emerging Markets.

The MSCI Global Socially Responsible Indexes for the Standard size segment are constructed at a regional level, with the exception of North America which is built separately for Canada and the USA. Each regional SRI index targets 25% of the free float adjusted market capitalization of each Global Industry Classification Standard (GICS<sup>®</sup>) sector of the underlying MSCI parent index ("Parent Index").

The following regional SRI Indexes are aggregated to construct the MSCI World SRI Index.

MSCI Regional SRI Index	Region	Parent Index
MSCI Pacific SRI Index	Developed Asia Pacific	MSCI Pacific Index
MSCI Europe & Middle East SRI Index	Developed Europe & Middle East	MSCI Europe & Middle East Index
MSCI Canada SRI Index	Canada	MSCI Canada Index
MSCI USA SRI Index	USA	MSCI USA Index



The following regional SRI Indexes are aggregated to construct the MSCI EM SRI<sup>1</sup> Index.

MSCI Regional SRI Index	Region	Parent Index
MSCI Emerging Markets Asia SRI Index	Emerging Asia	MSCI Emerging Markets Asia Index
MSCI Emerging Markets Europe, Middle East & Africa SRI Index	Emerging Europe, Middle East & Africa	MSCI Emerging Markets Europe, Middle East & Africa Index
MSCI Emerging Markets Latin America SRI Index	Emerging Latin America	MSCI Emerging Markets Latin America Index

The MSCI World SRI Index and the MSCI EM SRI Index are aggregated to construct the MSCI ACWI SRI Index.

<sup>&</sup>lt;sup>1</sup> Please refer to Appendix 4 for details of the initial construction of the MSCI Emerging Markets SRI Index at launch.



# 4 MAINTAINING THE MSCI GLOBAL SOCIALLY RESPONSIBLE INDEXES

#### 4.1 ANNUAL INDEX REVIEW

The MSCI Global Socially Responsible Indexes are reconstituted on an annual basis in May to coincide with the May Semi-Annual Index Review of the Parent Index, and the changes are implemented at the end of May. The pro forma indexes are in general announced nine business days before the effective date. Ratings, scores and exclusionary screens provided by MSCI ESG Research (IVA, Impact Monitor, and Business Involvement Screening Research) for the Annual Index Review are taken as of the end of April.

#### 4.1.1 ANNUAL INDEX RECONSTITUTION: RANKING AND SELECTION

The composition of the index is reassessed in order to target 25% free float-adjusted cumulative market capitalization of each sector of the Parent Index.

#### 4.1.1.1 ELIGIBILITY

All securities that are part of the pro forma Parent Index and satisfy the criteria described in Section 3 are eligible for inclusion in the index.

#### 4.1.1.2 RANKING

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

- IVA Rating
- Current index membership
- IVA industry-adjusted scores
- Decreasing free float adjusted market capitalization.

#### 4.1.1.3 SELECTION

Constituents for the regional MSCI Socially Responsible Index are then selected from the ranked universe in the following order until 25% coverage by cumulative free-float adjusted market capitalization target is reached:

- Securities in the top 17.5%
- 'AAA' and 'AA' rated securities in the top 25%
- Current index constituents in the top 32.5%



• Remaining securities in the eligible universe

Please see Appendix 2 for additional details on the ranking and selection rules.

#### 4.2 QUARTERLY INDEX REVIEWS

The MSCI Global Socially Responsible Indexes are also reviewed on a quarterly basis to coincide with the regular Index Reviews of the Parent Indexes. The changes are implemented at the end of February, August and November. The pro forma indexes are in general announced nine business days before the effective date.

ESG IVA ratings, ESG Impact Monitor assessments, and BISR data used for the Quarterly Index Reviews are taken as of the end of the month preceding the Index Reviews, i.e., January, July and October.

At the Quarterly Index Reviews, existing constituents are deleted from the MSCI Global Socially Responsible Indexes if they do not meet the eligibility criteria described in Section 3. Existing constituents that meet the eligibility criteria are retained in the index.

At the Quarterly Index Reviews, all companies that are currently not constituents, and meet the criteria mentioned in Section 3 are eligible for addition to the index. Additions are made only to those sectors where the current market capitalization coverage is less than 22.5%, until the 25% target is reached.

Market price movements may cause small deviations in the sector coverage between two Index Reviews and so a buffer of 10% is used on the target coverage of 25% to define under-representation, in order to minimize turnover.

#### 4.3 ONGOING EVENT-RELATED MAINTENANCE

The MSCI Corporate Events Methodology is applied for the maintenance of the MSCI Global Socially Responsible Indexes between Index Reviews.

#### 4.3.1 IPOS AND OTHER EARLY INCLUSIONS

IPOs and other newly listed securities, which have been added to the Parent Index, are considered for inclusion to the MSCI Global Socially Responsible Indexes at the time of their inclusion in the Parent Index. These securities are added to the MSCI Global Socially Responsible Indexes only if they meet the eligibility criteria described in Section 3 and the market capitalization coverage of the sector to which the security belongs is less than 22.5%.



#### 4.3.2 ADDITIONS AND DELETIONS DUE TO CORPORATE EVENTS

Deletions from the Parent Index following a corporate event will be simultaneously deleted from the MSCI Global Socially Responsible Indexes. Additions to the Parent Index following corporate events related to existing constituents (such as spin-offs) will not be automatically added to the MSCI Global Socially Responsible Indexes. These Parent Index additions will be considered for addition at the next index review according to the rules outlined in Sections 4.1 or 4.2.



# **APPENDIX 1: VALUES BASED EXCLUSION CRITERIA**

Companies whose activity is inconsistent with the following values based criteria are excluded from the MSCI Global Socially Responsible Indexes:

- Alcohol
  - All companies classified as a "Producer" that earn either 5% or more revenue or more than \$500 million in revenue from alcohol-related products.
- Gambling
  - All companies classified as involved in "Operations" and "Support" that earn 5% or more in revenue, or more than \$500 million in revenue, from gambling-related products
- Tobacco
  - All companies classified as a "Producer"
  - All classified as "Distributor", "Retailer", and "Supplier" that earn 15% or more in revenue from tobacco-related products

#### • Military Weapons

- All companies classified as involved in manufacturing of "Nuclear Weapons", or "Nuclear Weapons Components"
- All companies classified as involved in manufacturing of "Chemical and Biological Weapons" or "Chemical and Biological Weapons Components
- All companies classified as a "Manufacturer of Cluster Bombs"
- All companies classified as a "Manufacturer of Landmines"
- All companies classified as a "Manufacturer of Depleted Uranium Weapons"
- All companies that earn 5% or more in revenue, or more than \$500 million in revenue, from manufacturing of Weapons, Weapons Components, and/or Weapons Support Systems and Services
- Civilian Firearms
  - All companies classified as a "Producer"
  - All companies classified as a "Retailer" that earn 5% or more in revenue, or more than \$20 million in revenue, from civilian firearms-related products



#### • Nuclear Power

- All companies classified as a nuclear "Utility"
- All companies classified as involved in uranium mining
- All companies classified as involved in designing nuclear reactors
- All companies classified as involved in enrichment of fuel for nuclear reactors
- All companies classified as a "Supplier" to the nuclear power industry that earn 15% or more in revenue from nuclear-power related products.
- Adult Entertainment
  - All companies classified as a "Producer" that earn more than 5% in revenue, or more than \$500 million in revenue, from this adult entertainment materials
- Genetically Modified Organisms (GMO)
  - Companies that derive any revenue from activities like genetically modifying plants, such as seeds and crops, and other organisms intended for agricultural use or human consumption
  - Companies that are only involved in GMO Research & Development activities are not excluded



# APPENDIX 2: GUIDELINES ON ACHIEVING THE TARGET SECTOR COVERAGE OF 25%

The MSCI Global Socially Responsible Indexes target 25% of the free float adjusted market capitalization of each Global Industry Classification Standard (GICS<sup>®</sup>) sector of the Parent Index. The underlying principle in the construction of the index is to achieve sector coverage closest to 25%, while aiming to maintain index stability.

The following guidelines are used in achieving the target sector coverage of 25%:

- For each sector, the constituents of the Parent Index are first ranked based on the company level ESG Rating and then by decreasing free float adjusted market capitalization.
- In case of two companies with the same ESG Rating, an existing index constituent is given preference to maintain index stability. Between two existing constituents with the same ESG Rating, the company with the higher ESG Score is given preference. For two existing index constituents with the same ESG score, the larger company by free-float adjusted market capitalization is given preference.
- The cumulative sector coverage at each rank is calculated.
- All companies classified in a sector for which the cumulative coverage is less than 25% will be considered for inclusion in the SRI index in order of decreasing ESG scores.
- MSCI defines the company that increases the cumulative sector coverage above 25% as the 'marginal company'.
- If the marginal company is a current SRI index constituent, then it is retained in the SRI index even though it may result in a cumulative sector coverage significantly higher compared to the 25% target. This is aimed at ensuring better index stability and lower turnover.
- If the marginal company is a non-index constituent, then the marginal company will be included in the SRI index only if the absolute difference between the resulting coverage of including the marginal company and the 25% target is lower than the absolute difference between the resulting coverage of not including the marginal company and the 25% target.
- The minimum cumulative sector coverage is set to 22.5%.
- The marginal company will be added to the SRI index if its non-inclusion would result in cumulative sector coverage of less than 22.5%.



### **APPENDIX 3: METHODOLOGY TRANSITION**

The MSCI Global Socially Responsible Indexes transitioned to the methodology described in this book at the May 2012 Index Review. The MSCI Global Socially Responsible Indexes were previously constructed using the Global Socrates ESG ratings. Any company that had an ESG rating of 'BB' or lower was not eligible for inclusion in the MSCI Global Socially Responsible Indexes. The underlying universe for the MSCI Global SRI was defined by the constituents of the MSCI Global ESG Indexes. The MSCI Global Socially Responsible Indexes were constructed by targeting 50% of the free float adjusted market capitalization of each Global Industry Classification Standard (GICS) sector of the underlying MSCI regional ESG Index.



# APPENDIX 4: INITIAL CONSTRUCTION OF THE MSCI EMERGING MARKETS SOCIALLY RESPONSIBLE INDEX AT LAUNCH

The MSCI Emerging Markets Socially Responsible Index was launched with an initial construction as of the November 2013 Index Review.

In order to achieve free float-adjusted market capitalization coverage close to the target of 25% at launch, the entry rules for the MSCI Emerging Markets SRI Index were slightly relaxed at the initial construction. Specifically, the IVA rating threshold was lowered to a minimum rating of 'BBB' at the initial construction instead of the threshold of a minimum ESG rating of 'A'. The Impact Monitor threshold was not relaxed and was kept at a minimum of '4'.

Note that this relaxation was done only for the initial construction. Since the November 2013 SAIR, the MSCI Emerging Markets SRI Index has been maintained using the same set of rules described in Section 4.



# APPENDIX 5: MSCI EXTENDED GLOBAL SOCIALLY RESPONSIBLE INDEX

The MSCI Extended Global Socially Responsible Indexes are constructed with an aim to reflect the performance of companies that are consistent with specific values based criteria, have high minimum level of ESG performance. The Index is also designed to more broadly cover the underlying investment universe. Extended SRI Indexes can be constructed on the Standard or the IMI size-segment in Developed and Emerging Markets.

Companies that fail the values based exclusion criteria as described in Section 3 are excluded from the MSCI Extended Global Socially Responsible Indexes. Any company that has an ESG rating of 'BB' or lower or has an Impact Monitor controversy assessment as very severe (Impact Monitor score of 1 or below) is not eligible for inclusion in the MSCI Extended Global Socially Responsible Indexes.

The MSCI Extended Global Socially Responsible Indexes target 50% of the free float adjusted market capitalization of each Global Industry Classification Standard (GICS<sup>®</sup>) sector of the Parent Index. The MSCI Extended Global SRI Indexes follows the same index review cycle and corporate events treatment as the MSCI SRI Indexes as described in section 4.

MSCI currently offers the following Extended SRI Indexes:

1. MSCI UK IMI Extended SRI Index



#### The following sections have been modified since March 2014:

Appendix 5: MSCI Extended Global Socially Responsible Index

• Addition of appendix 5 containing the methodology details of MSCI Extended Global Socially Responsible Indexes

#### The following sections have been modified since September 2014:

Section 2: MSCI ESG Research and Section 3: Constructing the MSCI Global Socially Responsible Indexes

• Clarification of MSCI Global Sustainability Index construction rules

Section 4: Maintaining the MSCI Global Socially Responsible Indexes

• Enhancement of treatment of corporate events

Appendix I: Values Based Exclusion Criterion

• Correction to the Values Based Exclusion Criterion



# 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
Sao 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 *

#### **ABOUT MSCI**

For more than 40 years, MSCI's researchbased indexes and analytics have helped the world's leading investors build and manage better portfolios. Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research.

Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research.

MSCI serves 98 of the top 100 largest money managers, according to the most recent P&I ranking.

For more information, visit us at www.msci.com.

#### 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 *
Tokyo	+ 81 3 5290 1555

\* = toll free



# NOTICE AND DISCLAIMER

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

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

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

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

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

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

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

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

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research Inc. 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 Inc. 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, FEA, InvestorForce, 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.