

# MSCI GLOBAL CLIMATE INDEX METHODOLOGY

August 2014



# **CONTENTS** 1 Constructing the MSCI Global Climate Index...... 4 2.1 Underlying Universe......4 2.2 Eligibility Criteria ...... 4 2.3 Maintaining the MSCI Global Climate Index ...... 5 3.1 Quarterly Index Reviews ...... 5 3.2 Ongoing Event-Related Maintenance ...... 5 Appendix 1: Climate Change Themes...... 6



# 1 INTRODUCTION

The MSCI Global Climate Index is an equal weighted index, which is designed for investors seeking a global basket of companies that are leaders in mitigating immediate and long-term causes of climate change. The constituent companies in the MSCI Global Climate Index have pure play involvement in themes such as renewable energies, future fuels, clean technology and efficiency.

The MSCI Global Climate Index is based on the concept of the climate solutions value chain. The sources of climate change are widely distributed across the economy – transportation, factories, and commercial and residential buildings are the main sources of greenhouse gases – and climate change affects every sector. Consequently, the solutions to climate change will be broadly distributed across the economy – technology, materials, manufacturing, transportation, energy generation, construction, demand for clean/green energy and implementation of process efficiencies.



# 2 CONSTRUCTING THE MSCI GLOBAL CLIMATE INDEX

#### 2.1 UNDERLYING UNIVERSE

The selection universe for the MSCI Global Climate Index is the MSCI World Investable Market Index (IMI).

#### 2.2 ELIGIBILITY CRITERIA

Companies in the underlying universe that participate in activities classified into the following three categories are identified for inclusion in the index:

- Renewable Energy Development of renewable energy technology; generation of power using renewable sources; or consumption of energy generated from renewable sources.
- Clean Technology and Efficiency Development of clean technologies, (i.e., technologies that increase energy efficiency or reduce harmful emissions); or use of best practices in the adoption of clean technologies.
- Future Fuels Use or development of fuel cells, clean fuels (e.g., hydrogen) or cleaner alternatives to petroleum and coal (e.g., natural gas, biofuels).

Please refer to Appendix 1 for a detailed description of these theme categories.

# 2.3 INDEX CONSTRUCTION

The objective of the Index is to identify 100 companies that are global leaders in addressing the conditions that contribute to climate change. Companies involved in the above three categories of activities are further analyzed for their leadership position in the industry. To qualify for inclusion in the MSCI Global Climate Index, indicators such as strategic commitment, investment in research and development, market share, intellectual property and reputation of companies are evaluated. This evaluation is done, both on an absolute basis and in a relative context compared to sector and/or thematic peers, to determine the final constituents of the MSCI Global Climate Index.



# 3 MAINTAINING THE MSCI GLOBAL CLIMATE INDEX

### 3.1 QUARTERLY INDEX REVIEWS

The composition of the MSCI Global Climate Index is reviewed on a quarterly basis to coincide with the regular Index Reviews (Semi-Annual Index Reviews in May and November and Quarterly Index Reviews in February and August) of the MSCI Global Investable Market Indexes. The changes are implemented at the end of February, May, August and November.

At each Index Review, constituents may be removed from the MSCI Global Climate Index due to declining company involvement in a specific theme. Any constituent that is deleted from the underlying index as a result of the Quarterly Index Review of the Global Investable Market Indexes is also deleted from the MSCI Global Climate Index.

Companies that qualify for inclusion to the MSCI Global Climate Index as described in Section 2.3 are then added to the index to restore the number of companies back to 100. All the companies in the index are restored to an equal weight (i.e., 1% for each company in the MSCI Global Climate Index with 100 companies) based on prices as of 9 business days prior to the effective date as per the MSCI Equal Weighted Index methodology.

Constituent weights between Quarterly Index Reviews fluctuate based on price performance.

#### 3.2 ONGOING EVENT-RELATED MAINTENANCE

The MSCI Corporate Events Methodology is applied for the maintenance of the MSCI Global Climate Index between Index Reviews. There are no additions to the MSCI Global Climate Index outside the regular index reviews. New additions to the underlying index due to corporate events are not added simultaneously to the MSCI Global Climate Index, but may be considered for inclusion at the following Index Review. However, companies d from the underlying index between Index Reviews are also deleted at the same time from the MSCI Global Climate Index.

When the number of companies in the MSCI Global Climate Index falls below 100 due to corporate events, no additions will be made to restore the number of companies to 100 until the next Quarterly Index Review.

The technical details relating to the handling of specific corporate event types can be found in the MSCI Corporate Events Methodology book available at: http://www.msci.com/products/indexes/size/standard/methodology.html



# **APPENDIX 1: CLIMATE CHANGE THEMES**

The MSCI Global Climate Index is constructed to provide exposure to climate change themes such as:

- Renewable Energy
- Clean Technology and Efficiency
- Future Fuels

A brief description of each of these themes is included below.

# **RENEWABLE ENERGY (RE)**

RE includes companies whose products or practices involve renewable energy sources, which include solar, wind, geothermal, hydroelectric, and tidal or wave power

- Develop technologies for generating energy from renewable sources;
- Generate electricity from renewable energy sources; or
- Consume energy generated from renewable sources.

This category may also include companies that supply materials, specific-use parts, and services to original equipment manufacturers and generators of power from renewable energy sources.

# **CLEAN TECHNOLOGY AND EFFICIENCY (CTE)**

CTE includes companies (other than RE companies) whose products or practices reduce greenhouse gas emissions through:

- Technologies for producers or consumers that make more efficient use of fossil fuels;
- Products that make more efficient use of current fossil-fuel technologies; or
- Practices and policies that reduce the demand for fossil fuels.

Such clean technologies include hybrid (gas-electric) vehicles, cogeneration, energy-efficient ("green") building materials and buildings and cleaner-burning boiler technologies, among others. Practices and policies include emissions credit trading, noteworthy consumer education, demand management services (utilities), advanced metering, fleet management, innovative environmental management systems, and transportation (commuter, flying) decisions.



# **FUTURE FUELS (FF)**

FF includes companies that develop, promote, or use any energy alternatives to coal, crude oil, and gasoline not among the renewable energy sources, including biofuels, biomass, hydrogen fuel cells and fuel-cell-related technology and infrastructure.

FF also includes companies engaged in the production and use of natural gas. Natural gas is considered to be a "transitional" fuel because it is the cleanest burning of the fossil fuels and is expected to play a critical role in reducing GHGs in the transition to a post-petroleum economy. Types of natural gas companies eligible for the GC100 include:

- Exploration and production companies whose primary business is in natural gas
- Natural gas pipeline and distribution companies; or
- Utilities that supply natural gas or generate a high proportion of their power from natural gas-fired plants.

This category may also include companies that develop and market beneficial fuels such as:

- Bio-fuels (i.e. liquid fuels derived from biomass) such as biodiesel and ethanol;
- Gas to liquids (GTL);
- Compressed natural gas (CNG), liquefied natural gas (LNG), natural gas liquids (NGL) and other by-products of natural gas production;
- Clean-burning synthetic fuels; or
- Landfill methane.



# The following sections have been modified since November 2013:

Section 2.3: Index Construction, Section 3.1: Quarterly Index Reviews and Section 3.2: Ongoing Event-Related Maintenance

• Clarification of index construction rules



# **CONTACT US**

#### **AMERICAS**

clientservice@msci.com

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 *

# **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

<sup>\* =</sup> toll free

#### **ABOUT MSCI**

For more than 40 years, MSCI's research-based 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 <a href="https://www.msci.com">www.msci.com</a>.



# 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

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.