MSCI Emerging Markets Select ESG Leaders Low Carbon Impact G Series Index

December 2022
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1 Introduction

The MSCI Emerging Markets Select ESG Leaders Low Carbon Impact G Series Index (the 'Index') is designed to represent the performance of companies that have high Environmental, Social and Governance (“ESG”) ratings relative to their sector peers, seeking to include best-in-class companies from an ESG perspective. The Index also aims to reflect a lower carbon exposure than that of the broad market, by selecting companies with low carbon emissions relative to sales and those with low Potential Carbon Emissions per dollar of market capitalization. Additionally, the Index applies certain values-based exclusion criteria. Finally, the weights of securities are tilted in proportion of the aggregated Sustainable Impact Revenue\(^1\) Contribution from the below components:

- Alternative Energy
- Energy Efficiency
- Green Building
- Pollution Prevention
- Major Disease Treatment
- Nutrition

\(^1\) For more details on Sustainable Impact Revenue, please refer to section 2.4 of the MSCI ACWI Sustainable Impact Index Methodology available at [http://www.msci.com/index-methodology](http://www.msci.com/index-methodology).
2 MSCI ESG Research

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

For details on MSCI ESG Research’s full suite of ESG products, please refer to: https://www.msci.com/esg-investing

2.1 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

2.2 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

2.3 MSCI Climate Change Metrics

MSCI Climate Change Metrics is designed to support investors seeking to achieve a range of objectives, including measuring and reporting on climate risk exposure, implementing low carbon and fossil fuel-free strategies, and factoring climate change research into their risk management processes. It provides Carbon Emissions, Fossil Fuel exposure, environmental impact (i.e., clean technology) data and screens, as well as climate-related risk exposure and management assessment on companies such as Low Carbon Transition Scores and Categories.

For more details on MSCI Climate Change Metrics, please refer to https://www.msci.com/climate-change-solutions.
2.4 MSCI ESG Sustainable Impact Metrics

MSCI ESG Research’s Sustainable Impact Metrics is designed to identify companies that currently offer products or services that address at least one of the major social and environmental challenges as defined by the UN Sustainable Development Goals. Designed as a positive screen, it is designed to highlight companies that are deriving sales from products or services that may have a positive impact on society and the environment.

3  Index Construction Methodology

3.1  Applicable Universe
The Applicable Universe includes all the existing constituents of the MSCI Emerging Markets Index excluding securities from Egypt and Pakistan (“Parent Index”). This approach aims to provide an opportunity set with sufficient liquidity and investment capacity.

3.2  ESG Screened Universe
The eligible securities for the Index are selected from the Applicable Universe by applying the MSCI ESG Leaders Indexes Methodology\(^2\) on the Parent Index with the following exception in the screening criteria: The Index will use ESG screening criteria as described in the MSCI SRI Indexes Methodology\(^3\).

Additionally, the Index excludes companies from specific countries\(^4\) based on the below screening criteria:

- **State Owned Enterprise and Dominant Shareholder Screen**: All companies which are State Owned and have a Dominant Shareholder percentage more than 50% are excluded.

- **State Owned Enterprise and Golden Share Screen**: All companies which are State Owned and have a Golden Share are excluded.

3.3  Low Carbon Universe
The Low Carbon Universe is constructed from the ESG Screened Universe by applying the following independent screens:

**Carbon Emission Intensity\(^5\)** Screen: Constituents are ranked in the descending order of the Carbon Emission Intensity and the top 20% of securities by number are excluded. The cumulative weight of securities excluded from any sector is less than

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\(^3\) For a detailed description of the MSCI SRI Indexes Methodology, please refer to the MSCI SRI Indexes Methodology available at [http://www.msci.com/index-methodology](http://www.msci.com/index-methodology).

\(^4\) The list of countries will be provided by Kempen before each semi-annual rebalance.

\(^5\) For more details on Carbon Emission Intensity, please refer to Appendix I.
30% of the weight of the sector in the ESG Screened Universe. In case this limit is reached for any sector, no further securities from that sector are excluded.

**Potential Carbon Emissions per Dollar of Market Capitalization** Screen: Constituents are ranked in the descending order of the Potential Carbon Emissions per dollar of the market capitalization of the company. Securities are excluded until cumulative potential carbon emissions of the excluded securities reaches 50% of the sum of the potential carbon emission of the constituents of the ESG Screened Universe post weighting.

### 3.3.1 Weighting of Securities in the Low Carbon Universe

Weights are tilted in proportion of the Sustainable Impact Tilt Scores and renormalized to ensure that the sum of the weights of all constituents is 100%.

Sustainable Impact Revenue is defined as the aggregated revenue (%) contribution from the below components:

- Alternative Energy
- Energy Efficiency
- Green Building
- Pollution Prevention
- Major Disease Treatment
- Nutrition

Sustainable Impact Tilt Score is awarded depending on the Sustainable Impact Revenue calculated above:

<table>
<thead>
<tr>
<th>Sustainable Impact Revenue</th>
<th>Tilt Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Impact Revenue unavailable / equal to 0</td>
<td>1</td>
</tr>
<tr>
<td>Sustainable Impact Revenue less than 5%</td>
<td>1.25</td>
</tr>
<tr>
<td>Sustainable Impact Revenue between 5% and 20%</td>
<td>1.5</td>
</tr>
<tr>
<td>Sustainable Impact Revenue between 20% and 50%</td>
<td>1.75</td>
</tr>
</tbody>
</table>

---

6 For more details on Potential Carbon Emissions per dollar of Market Capitalization, please refer to Appendix I.

### Final Universe

The Final Universe is constructed by applying a cap of 15% on the weights of individual constituents in the Low Carbon Universe.
4 Maintaining the MSCI Emerging Markets Select ESG Leaders Low Carbon Impact G Series Index

4.1 Annual Index Reviews

The MSCI Emerging Markets Select ESG Leaders Low Carbon Impact G Series Index is reviewed 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. In general, the pro forma indexes are announced nine business days before the effective date.

In general, MSCI uses MSCI ESG Research data (including MSCI Climate Change Metrics, MSCI Climate Value-at-Risk, MSCI ESG Sustainable Impact 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 Indexes.

4.2 Semi-Annual Index Reviews

The Index is also reviewed on a semi-annual basis to coincide with the regular Index Reviews of the Parent Indexes. The changes are implemented at the end of November. The pro forma index is in general announced nine business days before the effective date.

For the Semi-annual Index Reviews, MSCI ESG Ratings, MSCI ESG Controversies Score assessments and MSCI BISR data are taken as of the end of the month preceding the Index Reviews, i.e., October. For some securities, this 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 MSCI ESG Leaders Indexes.

At the Semi-annual Index Review, existing constituents are deleted from the Index if they do not meet the eligibility criteria as described in section 3.2. Existing constituents that meet the eligibility criteria are retained in the Index. Additions of eligible securities are made only to those sectors where the current market capitalization coverage is less than 45%, until the 50% target is reached. Market price movements may cause small deviations in the sector coverage between two Index Reviews. Therefore, to minimize turnover, a buffer of 10% is used on the target coverage of 50% to define under-representation.

Additionally, the Low Carbon Universe is also constructed along with the weighting during the Semi-annual Index Review as described in section 3.3.
4.2 Ongoing Event Related Changes

The general treatment of corporate events in the Indexes 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, as 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.

<table>
<thead>
<tr>
<th>EVENT TYPE</th>
<th>EVENT DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>New additions to the Parent Index</td>
<td>A new security added to the Parent index (such as IPO and other early inclusions) will not be added to the Index.</td>
</tr>
<tr>
<td>Spin-Offs</td>
<td>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.</td>
</tr>
<tr>
<td>Merger/Acquisition</td>
<td>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.</td>
</tr>
</tbody>
</table>
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.

The MSCI Corporate Events methodology book is available at: https://www.msci.com/index-methodology
Appendix I: Calculation of Carbon Exposure Metrics

**Index Carbon Emissions**
- Parent Index Carbon Emissions –
  \[
  \text{Parent Index Carbon Emissions} = \sum_i \left( \frac{\text{Float Market Capitalization} \times \text{Absolute Emissions}}{\text{Issuer Market Capitalization}} \right)
  \]

- Derived Index Carbon Emissions –
  \[
  \text{Derived Index Carbon Emissions} = \sum_i \left( \frac{\text{Derived Index Market Capitalization} \times \text{Absolute Emissions}}{\text{Issuer Market Capitalization}} \right)
  \]

- Parent Index Carbon Emission Intensity is defined as Parent Index Carbon Emissions, as defined above, divided by Parent Index Sales –
  \[
  \frac{\sum_i \left( \frac{\text{Float Market Capitalization} \times \text{Absolute Emissions}}{\text{Issuer Market Capitalization}} \right)}{\sum_i \left( \frac{\text{Float Market Capitalization} \times \text{Sales}}{\text{Issuer Market Capitalization}} \right)}
  \]

- Derived Index Carbon Emissions Intensity is defined as Derived Index Carbon Emissions, as defined above, divided by Derived Index Sales –
  \[
  \frac{\sum_i \left( \frac{\text{Derived Index Market Capitalization} \times \text{Absolute Emissions}}{\text{Issuer Market Capitalization}} \right)}{\sum_i \left( \frac{\text{Derived Index Market Capitalization} \times \text{Sales}}{\text{Issuer Market Capitalization}} \right)}
  \]

**Index Potential Carbon Emissions from Fossil Fuels**
- Parent Index Potential Carbon Emissions from Fossil Fuels –
  \[
  \sum_i \left( \frac{\text{Float Market Capitalization} \times \text{Absolute Potential Emissions}}{\text{Issuer Market Capitalization}} \right)
  \]

- Derived Index Potential Carbon Emissions from Fossil Fuels –
\[
\sum_i \left( \frac{\text{Derived Index Market Capitalization} \times \text{Absolute Potential Emissions}}{\text{Issuer Market Capitalization}} \right)
\]
The following sections have been modified effective November 2022:

- Section 3.2: ESG Screened Universe
  Two new screens have been added
- Appendix I: Calculation of Carbon Exposure Metrics
  Added to reference formulae used for Potential Carbon Emissions per dollar of market capitalization calculation

The following section have been modified effective December 2022:

- Section 3.3: Low Carbon Universe
  Removed reference to the MSCI Global Low Carbon Leaders Indexes Methodology
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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/indexregulation

To learn more, please visit www.msci.com.
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