METHODOLOGY BOOK FOR:

- MSCI EUROPE SELECT GREEN EX CONTROVERSIES INDEX
- MSCI USA SELECT GREEN EX CONTROVERSIES INDEX
- MSCI EUROPE SELECT GREEN 50 5% DECREMENT INDEX
- MSCI EUROPE SELECT GREEN 50 5% DECREMENT INDEX (GROSS)
- MSCI USA SELECT GREEN 50 3% DECREMENT INDEX

August 2019
CONTENTS

1 Introduction .................................................................................................................. 3

2 MSCI ESG Research ...................................................................................................... 4
   2.1 MSCI ESG Business Involvement Screening Research ........................................ 4

3 Constructing the Indexes ............................................................................................... 5
   3.1 Eligible Universe Screening .................................................................................... 5
   3.2 Business Involvement Exclusions .......................................................................... 6
   3.3 Security Selection .................................................................................................... 6
   3.4 Applying the Capping ............................................................................................. 6
   3.5 Applying the Decrement ......................................................................................... 6

4 Maintaining the Indexes ................................................................................................. 8
   4.1 Quarterly Index Reviews ........................................................................................ 8
   4.2 Ongoing Event Related Changes ........................................................................... 8

Appendix 1 – Screening Criteria ...................................................................................... 10
1 INTRODUCTION

The MSCI Europe Select Green ex Controversies Index and the MSCI USA Select Green ex Controversies Index (herein, ‘MSCI Select Green ex Controversies Indexes’) aims to represent the performance of a selection of securities from their parent index that offer products and services that contribute to an environmentally sustainable economy through efficient use of limited global natural resources. The MSCI Select Green ex Controversies Indexes also exclude companies that are involved in the production of controversial, nuclear or conventional weapons, as well as those that are involved in environmental controversies. The Indexes are free-float market capitalization weighted.

The MSCI Europe Select Green 50 5% Decrement Index, MSCI Europe Select Green 50 5% Decrement Index (Gross) and the MSCI USA Select Green 50 3% Decrement Index (herein, ‘MSCI Select Green 50 Decrement Indexes’) aim to represent the performance of the largest 50 stocks by free-float market capitalization from the MSCI Select Green ex Controversies Indexes. The MSCI Select Green 50 Decrement Indexes aim to avoid concentration by capping the weight of securities within the index to a maximum of 5%, while applying a constant markdown (‘synthetic dividend’) on an annual basis, expressed as a percentage of performance.
2 MSCI ESG RESEARCH

The MSCI Select Green ex Controversies Indexes and the MSCI Select Green 50 Decrement Indexes use company research provided by MSCI ESG Research LLC. In particular, these indexes use the MSCI Business Involvement Screening Research product.

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 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 INDEXES

The MSCI Select Green ex Controversies Indexes and the MSCI Select Green 50 Decrement Indexes are constructed from their respective parent indexes, as shown in the table below (each a “Parent Index”):

<table>
<thead>
<tr>
<th>Index Name</th>
<th>Parent Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI Europe Select Green ex Controversies Index</td>
<td>MSCI Europe IMI</td>
</tr>
<tr>
<td>MSCI Europe Select Green 50% Decrement Index</td>
<td></td>
</tr>
<tr>
<td>MSCI Europe Select Green 50% Decrement Index (Gross)</td>
<td></td>
</tr>
<tr>
<td>MSCI USA Select Green ex Controversies Index</td>
<td>MSCI USA IMI</td>
</tr>
<tr>
<td>MSCI USA Select Green 50% Decrement Index</td>
<td></td>
</tr>
</tbody>
</table>

The following steps are applied at initial construction as well as subsequent Quarterly and Semi-Annual Index Reviews of the “MSCI Select Green ex Controversies Index”.

- Eligible Universe Screening
- Business Involvement Exclusions

In addition to the above steps, the following steps are applied to the MSCI Select Green ex Controversies Index at initial construction as well as subsequent Quarterly and Semi-Annual Index Reviews to construct the “MSCI Select Green 50 Decrement Index”.

- Security Selection
- Applying the Capping
- Applying the Decrement

3.1 ELIGIBLE UNIVERSE SCREENING

The eligible universe for the MSCI Select Green ex Controversies Index is obtained by applying the MSCI Global Environment Index Methodology¹ on the Parent Index, with a customization to include companies that derive 10% of more of their revenue cumulatively from the five CleanTech (CT) themes as noted in Section 3.3 of the MSCI Global Environment Index Methodology.

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3.2 BUSINESS INVOLVEMENT EXCLUSIONS

From the eligible universe, companies are excluded based on their involvement in the production of controversial, nuclear and conventional weapons, as well as those involved in environmental controversies. The details of these criteria are described in Appendix 1.

The securities included after the application of the above exclusions are weighted in proportion of their free-float adjusted market capitalization to form the “MSCI Select Green ex Controversies Index”.

The following steps are then applied to the MSCI Select Green ex Controversies Index to construct the MSCI Select Green 50 Decrement Index.

3.3 SECURITY SELECTION

The largest 50 securities ranked in the descending order of their free-float adjusted market capitalization are selected for inclusion in the Index.

3.4 APPLYING THE CAPPING

The maximum weight of any security in the Index is capped at 5% in accordance with the MSCI Capped Indexes methodology\(^2\). The excess weight of the capped securities is distributed among the remaining constituents in proportion of their free float market capitalization.

3.5 APPLYING THE DECREMENT

The MSCI Decrement Indexes methodology\(^3\) is applied on the capped Index to construct the MSCI Select Green 50 5% Decrement Index using the following parameters.

<table>
<thead>
<tr>
<th>MSCI Europe Select Green 50 5% Decrement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sr. No. Methodology Parameter</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>


\(^3\) Please refer to the MSCI Decrement Indexes Methodology at [http://www.msci.com/index-methodology](http://www.msci.com/index-methodology).
### METHODOLOGY BOOK FOR THE MSCI EUROPE SELECT GREEN EX CONTROVERSIES INDEX, THE MSCI USA SELECT GREEN EX CONTROVERSIES INDEX, THE MSCI EUROPE SELECT GREEN 50 5% DECREMENT INDEX, THE MSCI USA SELECT GREEN 50 3% DECREMENT INDEX | AUGUST 2019

Information Classification: GENERAL

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Methodology Parameter</th>
<th>Parameter Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Index Floor</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Decrement Frequency</td>
<td>Daily</td>
</tr>
</tbody>
</table>

**MSCI Europe Select Green 50 5% Decrement Index (Gross)**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Methodology Parameter</th>
<th>Parameter Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Currency of Calculation</td>
<td>EUR</td>
</tr>
<tr>
<td>2</td>
<td>Return Variant of the Parent Index</td>
<td>Daily Gross Total Return</td>
</tr>
<tr>
<td>3</td>
<td>Decrement Type</td>
<td>Fixed Percentage</td>
</tr>
<tr>
<td>4</td>
<td>Decrement Application</td>
<td>Geometric</td>
</tr>
<tr>
<td>5</td>
<td>Decrement Value</td>
<td>5%</td>
</tr>
<tr>
<td>6</td>
<td>Day-count Convention</td>
<td>Actual / 365</td>
</tr>
<tr>
<td>7</td>
<td>Index Floor</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Decrement Frequency</td>
<td>Daily</td>
</tr>
</tbody>
</table>

**MSCI USA Select Green 50 3% Decrement**:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Methodology Parameter</th>
<th>Parameter Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Currency of Calculation</td>
<td>USD</td>
</tr>
<tr>
<td>2</td>
<td>Return Variant of the Parent Index</td>
<td>Daily Net Total Return</td>
</tr>
<tr>
<td>3</td>
<td>Decrement Type</td>
<td>Fixed Percentage</td>
</tr>
<tr>
<td>4</td>
<td>Decrement Application</td>
<td>Geometric</td>
</tr>
<tr>
<td>5</td>
<td>Decrement Value</td>
<td>3%</td>
</tr>
<tr>
<td>6</td>
<td>Day-count Convention</td>
<td>Actual / 365</td>
</tr>
<tr>
<td>7</td>
<td>Index Floor</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Decrement Frequency</td>
<td>Daily</td>
</tr>
</tbody>
</table>
### 4 MAINTAINING THE INDEXES

#### 4.1 QUARTERLY INDEX REVIEWS

The MSCI Select Green ex Controversies and the MSCI Select Green 50 Decrement Indexes are reviewed on a quarterly basis as described in Section 3, coinciding with the May and November Semi-Annual Index Reviews and the February and August Quarterly Index Reviews of the Parent Index.

The pro forma Indexes are typically announced nine business days before the effective date.

In general, MSCI uses MSCI ESG Research data (including MSCI ESG Ratings, MSCI ESG Controversies Scores and MSCI Business Involvement Screening Research) as of the end of the month preceding the Index Reviews. For some securities, such data may not be published by MSCI ESG Research by the end of the month preceding the Index Review. For such securities, MSCI will use ESG data published after the end of month, when available.

#### 4.2 ONGOING EVENT RELATED CHANGES

The general treatment of corporate events in the MSCI Select Green ex Controversies and the MSCI Select Green 50 Decrement 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.

The following section briefly describes the treatment of common corporate events within the MSCI Select Green ex Controversies and the MSCI Select Green 50 Decrement Indexes.

No new securities will be added to the Indexes between Index Reviews. For cases where additions are noted below, securities will be added to the index only if added to the parent index.

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</td>
</tr>
</tbody>
</table>
will not be added to the Index at the time of event implementation.

**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 be removed from the Index if there are changes in its characteristics (country, sector, size segment, etc.) Reevaluation for 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 1 – SCREENING CRITERIA

Companies, whose activities meet the following values based criteria, as determined by MSCI ESG Research LLC, are excluded from the Index:

- **Nuclear Weapons**
  - All companies that manufacture nuclear warheads and/or whole nuclear missiles.
  - All companies that manufacture components that were developed or are significantly modified for exclusive use in nuclear weapons (warheads and missiles).
  - All companies that manufacture or assemble delivery platforms that were developed or significantly modified for the exclusive delivery of nuclear weapons.
  - All companies that provide auxiliary services related to nuclear weapons, such as repairing and maintaining nuclear weapons, providing overhaul and upgrade services (including engineering), stockpiling and stewardship, R&D work, testing and simulations, etc.
  - All companies that manufacture components that were not developed or not significantly modified for exclusive use in nuclear weapons (warheads and missiles), i.e., these components can be used in both nuclear and conventional weapons.
  - All companies that manufacture or assemble delivery platforms that were not developed or not significantly modified for the exclusive delivery of nuclear weapons. i.e., these platforms are capable of delivering conventional weapons.
  - All companies that manufacture components for dual-use delivery platforms.

- **Conventional Weapons**
  - All companies that earn revenue from the production of conventional weapons.
  - All companies that earn revenue from weapons systems, components, and support systems and services.
- Environment Controversy
  - All companies marked with a Red, Orange or Yellow flag for Environment Controversies.
The following sections have been modified since September 2018:

Update to include the index construction and maintenance parameters for:

- MSCI Europe Select Green 50 5% Decrement Index (Gross)
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