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Introduction

Index Objective and Highlights

Each index in the S&P Carbon Efficient Index Series measures the performance of companies in a respective underlying index, excluding companies classified as high non-disclosing carbon emitters, while overweighting or underweighting those companies that have lower or higher levels of greenhouse gas (GHG) emissions per unit of revenue as defined in Eligibility Criteria and Index Construction. Constituents’ weights are adjusted within each Global Industry Classification Standard (GICS)® Industry Group to reflect each company’s relative carbon-to-revenue footprint. Each index also seeks to maintain the respective industry group weights of its underlying index, as of the rebalancing reference date. The S&P/NZX 50 Portfolio Carbon Efficient Index also seeks to maintain weights according to the underlying index, but caps single constituent weights at 5%.

Index Series

The index series includes the following indices:

- S&P Global LargeMidCap Carbon Efficient
- S&P Global SmallCap Carbon Efficient
- S&P Global Ex-Japan LargeMidCap Carbon Efficient
- S&P/JPX Carbon Efficient
- S&P Developed LargeMidCap Carbon Efficient
- S&P Emerging LargeMidCap Carbon Efficient
- S&P Europe LargeMidCap Carbon Efficient
- S&P North America LargeMidCap Carbon Efficient
- S&P Asia Pacific LargeMidCap Carbon Efficient
- S&P Latin America LargeMidCap Carbon Efficient
- S&P Global 1200 Carbon Efficient
- S&P 500 Carbon Efficient
- S&P 400 Carbon Efficient
- S&P 600 Carbon Efficient
- S&P Europe 350 Carbon Efficient
- S&P China A Carbon Efficient
- S&P South Africa Domestic Carbon Efficient (DSW)
- S&P South Africa Domestic Carbon Efficient Capped (DSW)
- S&P/NZX 50 Carbon Efficient Index
- S&P/NZX 50 Portfolio Carbon Efficient Index
- S&P/ASX 200 Carbon Efficient Index
- S&P/ASX 300 Carbon Efficient Index
Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein. References throughout the methodology direct the reader to the relevant supporting document for further information on a specific topic. The list of the main supplemental documents for this methodology and the hyperlinks to those documents is as follows:

<table>
<thead>
<tr>
<th>Supporting Document</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P Dow Jones Indices’ Index Mathematics Methodology</td>
<td><a href="#">Index Mathematics Methodology</a></td>
</tr>
<tr>
<td>S&amp;P Dow Jones Indices’ Global Industry Classification Standard (GICS) Methodology</td>
<td><a href="#">GICS Methodology</a></td>
</tr>
</tbody>
</table>

This methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of each index governed by this methodology document. Any changes to or deviations from this methodology are made in the sole judgment and discretion of S&P Dow Jones Indices so that the index continues to achieve its objective.

ASX is a trademark of ASX Limited and is licensed for use by S&P Dow Jones Indices.

JPX is a trademark of Japan Exchange Group, Inc. and has been licensed for use by S&P Dow Jones Indices.

NZX is a trademark of NZX Limited and is licensed for use by S&P Dow Jones Indices.

TOPIX is a trademark of JPX Market Innovation & Research, Inc. and has been licensed for use by S&P Dow Jones Indices.
Eligibility Criteria and Index Construction

Index Universe

At each rebalancing, each index is constructed from the constituents of an underlying index, as detailed below.

<table>
<thead>
<tr>
<th>Index</th>
<th>Underlying Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P Global LargeMidCap Carbon Efficient</td>
<td>S&amp;P Global LargeMidCap</td>
</tr>
<tr>
<td>S&amp;P Global SmallCap Carbon Efficient</td>
<td>S&amp;P Global SmallCap</td>
</tr>
<tr>
<td>S&amp;P Global Ex-Japan LargeMidCap Carbon Efficient</td>
<td>S&amp;P Global Ex-Japan LargeMidCap</td>
</tr>
<tr>
<td>S&amp;P/JPX Carbon Efficient</td>
<td>TOPIX</td>
</tr>
<tr>
<td>S&amp;P Developed LargeMidCap Carbon Efficient</td>
<td>S&amp;P Developed LargeMidCap</td>
</tr>
<tr>
<td>S&amp;P Emerging LargeMidCap Carbon Efficient</td>
<td>S&amp;P Emerging LargeMidCap</td>
</tr>
<tr>
<td>S&amp;P Europe LargeMidCap Carbon Efficient</td>
<td>S&amp;P Europe LargeMidCap</td>
</tr>
<tr>
<td>S&amp;P North America LargeMidCap Carbon Efficient</td>
<td>S&amp;P North America LargeMidCap</td>
</tr>
<tr>
<td>S&amp;P Asia Pacific LargeMidCap Carbon Efficient</td>
<td>S&amp;P Asia Pacific LargeMidCap</td>
</tr>
<tr>
<td>S&amp;P Latin America LargeMidCap Carbon Efficient</td>
<td>S&amp;P Latin America LargeMidCap</td>
</tr>
<tr>
<td>S&amp;P Global 1200 Carbon Efficient</td>
<td>S&amp;P Global 1200</td>
</tr>
<tr>
<td>S&amp;P 500 Carbon Efficient</td>
<td>S&amp;P 500</td>
</tr>
<tr>
<td>S&amp;P 400 Carbon Efficient</td>
<td>S&amp;P MidCap 400</td>
</tr>
<tr>
<td>S&amp;P 600 Carbon Efficient</td>
<td>S&amp;P SmallCap 600</td>
</tr>
<tr>
<td>S&amp;P Europe 350 Carbon Efficient</td>
<td>S&amp;P Europe 350</td>
</tr>
<tr>
<td>S&amp;P China A Carbon Efficient</td>
<td>S&amp;P China A BMI Domestic</td>
</tr>
<tr>
<td>S&amp;P South Africa Domestic Carbon Efficient (DSW)</td>
<td>S&amp;P South Africa Domestic Shareholder Weighted (DSW)</td>
</tr>
<tr>
<td>S&amp;P South Africa Domestic Carbon Efficient Capped (DSW)</td>
<td>S&amp;P South Africa Domestic Shareholder Weighted (DSW)</td>
</tr>
<tr>
<td>S&amp;P/NZX 50 Carbon Efficient</td>
<td>S&amp;P/NZX 50 Index</td>
</tr>
<tr>
<td>S&amp;P/NZX 50 Portfolio Carbon Efficient Index</td>
<td>S&amp;P/NZX 50 Portfolio Index</td>
</tr>
<tr>
<td>S&amp;P/ASX 200 Carbon Efficient</td>
<td>S&amp;P/ASX 200</td>
</tr>
<tr>
<td>S&amp;P/ASX 300 Carbon Efficient</td>
<td>S&amp;P/ASX 300</td>
</tr>
</tbody>
</table>

For more information on an underlying index, please refer to its respective methodology document available at [www.spglobal.com/spdji](http://www.spglobal.com/spdji).

Eligibility Screens

As of the rebalancing reference date, the index universe for each index is screened for the following:

High Non-Disclosing Carbon Emitters. All companies classified, by S&P Trucost Limited ("Trucost"), as a 'High Non-Disclosing Carbon Emitter' are ineligible. Any company in an underlying index whose GHG emissions meet or exceed the threshold (the GHG emissions of the 100th highest ranked company by direct and first tier indirect GHG emissions in the S&P Global LargeMidCap), and which is not

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1 China A-Shares are excluded.
2 The TOPIX is calculated and published by the JPX Market Innovation & Research, Inc. and is a float-adjusted market capitalization weighted index that is a market benchmark with functionality as an investable index, covering an extensive proportion of the Japanese stock market. The underlying index data for S&P/JPX Carbon Efficient is taken from TOPIX as of the rebalance reference date. For more information on the TOPIX, please refer to the Japan Exchange Group (JPX) Web site at [www.jpx.co.jp/english/](http://www.jpx.co.jp/english/).
identified by Trucost as having sufficiently disclosed their GHG emissions as outlined in Disclosure Status, is classified as a high non-disclosing carbon emitter.

**Liquidity.** Non-constituents must satisfy the three-month median daily value traded (3M MDVT) threshold for each index:

<table>
<thead>
<tr>
<th>Index</th>
<th>3M MDVT</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P Global LargeMidCap Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P Global SmallCap Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P Global Ex-Japan LargeMidCap Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P/JPX Carbon Efficient</td>
<td>YEN ¥50 million</td>
</tr>
<tr>
<td>S&amp;P Developed LargeMidCap Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P Emerging LargeMidCap Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P Europe LargeMidCap Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P North America LargeMidCap Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P Asia Pacific LargeMidCap Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P Latin America LargeMidCap Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P Global 1200 Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P 500 Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P 400 Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P 600 Carbon Efficient</td>
<td>USD $3 million</td>
</tr>
<tr>
<td>S&amp;P Europe 350 Carbon Efficient</td>
<td>EUR €3 million</td>
</tr>
<tr>
<td>S&amp;P China A Carbon Efficient</td>
<td>CNY ¥20 million</td>
</tr>
<tr>
<td>S&amp;P South Africa Domestic Carbon Efficient (DSW)</td>
<td>ZAR R3 million</td>
</tr>
<tr>
<td>S&amp;P South Africa Domestic Carbon Efficient Capped (DSW)</td>
<td>ZAR R3 million</td>
</tr>
<tr>
<td>S&amp;P/NZX 50 Carbon Efficient Index</td>
<td>--</td>
</tr>
<tr>
<td>S&amp;P/NZX 50 Portfolio Carbon Efficient Index</td>
<td>--</td>
</tr>
<tr>
<td>S&amp;P/ASX 200 Carbon Efficient Index</td>
<td>--</td>
</tr>
<tr>
<td>S&amp;P/ASX 300 Carbon Efficient Index</td>
<td>--</td>
</tr>
</tbody>
</table>

Companies with fewer than three months’ MDVT data are evaluated over the available period.

**Multiple Share Classes**

All publicly listed multiple share class lines are eligible for index inclusion, subject to meeting the eligibility criteria. For more information regarding the treatment of multiple share classes, please refer to Approach A within the Multiple Share Classes section of the S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology. In the S&P Global Carbon Efficient Index Series, all multiple share class lines are assigned identical carbon-to-revenue footprint. All weight assignments are conducted at the company level.

**Constituent Selection**

As of each rebalancing reference date, select all stocks in the eligible universe and form each index.

**Constituent Weightings**

For each index, as of the rebalancing reference date, constituent weight adjustments are made within each industry group to reduce the portfolio’s overall exposure to GHG emissions per unit of revenue versus that of its underlying index. Each index seeks to maintain the respective GICS industry group weights of its underlying index as of the rebalancing reference date.³

\[
\text{Constituent Weight in Carbon Efficient Index} = \frac{\text{Weight of Constituent in Underlying Index}}{\text{Weight of Underlying Index in Underlying Index}} \times \text{Weight of Constituent in Carbon Efficient Index}
\]

³ If the eligible universe contains fewer industry groups than the underlying index, then the weight of each underlying index’s industry groups with eligible constituents are increased proportionally until the sum equals 100%.
To calculate each constituent’s Carbon Efficient weight with respect to its industry group, the following steps are performed for each industry group:

1. First, the constituents’ weights are calculated with respect to the eligible universe’s industry group:

\[ \text{Constituent Weight in Carbon Efficient Industry Group (without Adjustment)} = \]

2. Next, each of the weights calculated in step 1 are adjusted according to their Carbon Weight Adjustment:

\[ \text{Constituent Weight in Carbon Efficient Industry Group} = \]

\[ \text{Constituent Weight in Carbon Efficient Industry Group (without Adjustment)} \times \]

The Carbon Weight Adjustment is determined by multiplying each company’s Disclosure and TCFD Framework Status-specific Decile Weight Adjustment by its Industry Group Impact Factor as detailed below:

<table>
<thead>
<tr>
<th>Decile Classification</th>
<th>Disclosure Status</th>
<th>GHG Emissions</th>
<th>TCFD Framework</th>
<th>Decile Weight Adjustment</th>
<th>Industry Group Impact Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x0.5</td>
</tr>
<tr>
<td>1st Decile⁶</td>
<td>Disclosed</td>
<td>Integrated</td>
<td>40%</td>
<td>20% 40% 120%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Non-disclosed</td>
<td>Not Integrated</td>
<td>35%</td>
<td>17.5% 35% 105%</td>
<td>2</td>
</tr>
<tr>
<td>2nd Decile</td>
<td>Disclosed</td>
<td>Integrated</td>
<td>30%</td>
<td>15% 30% 90%</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Non-disclosed</td>
<td>Not Integrated</td>
<td>25%</td>
<td>12.5% 25% 75%</td>
<td>2</td>
</tr>
<tr>
<td>3rd Decile</td>
<td>Disclosed</td>
<td>Integrated</td>
<td>20%</td>
<td>10% 20% 60%</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Non-disclosed</td>
<td>Not Relevant</td>
<td>15%</td>
<td>7.5% 15% 45%</td>
<td>2</td>
</tr>
<tr>
<td>4th to 7th Decile⁷</td>
<td>Disclosed</td>
<td>Integrated</td>
<td>15%</td>
<td>5% 10% 30%</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Non-disclosed</td>
<td>Not Relevant</td>
<td>10%</td>
<td>5% 10% 30%</td>
<td>2</td>
</tr>
<tr>
<td>8th Decile</td>
<td>Disclosed</td>
<td>Integrated</td>
<td>-5%</td>
<td>-2.5% -5% -15%</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Non-disclosed</td>
<td>Not Relevant</td>
<td>-10%</td>
<td>-5% -10% -30%</td>
<td>2</td>
</tr>
<tr>
<td>9th Decile</td>
<td>Disclosed</td>
<td>Integrated</td>
<td>-15%</td>
<td>-7.5% -15% -45%</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Non-disclosed</td>
<td>Not Relevant</td>
<td>-20%</td>
<td>-10% -20% -60%</td>
<td>2</td>
</tr>
<tr>
<td>10th Decile</td>
<td>Disclosed</td>
<td>Integrated</td>
<td>-25%</td>
<td>-12.5% -25% -75%</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Non-disclosed</td>
<td>Not Relevant</td>
<td>-30%</td>
<td>-15% -30% -90%</td>
<td>2</td>
</tr>
</tbody>
</table>

3. Finally, the weights calculated in step 2 are adjusted to ensure each industry group’s weights sum to 100%:

---

⁵ The deciles are defined using the S&P Carbon Global Standard. If any company’s carbon to revenue footprint falls on the decile boundary threshold, it is assigned as the next decile.
⁶ 1st decile classification represents companies with the lowest carbon-to-revenue footprint.
⁷ Constituents without coverage by Trucost are assigned to this group (deemed to have ‘Not-disclosed’) and are treated neutrally by receiving a 0% carbon weight adjustment.
If the sum of the weights after step 2 is greater than 100%, then the first of the following steps capable of reducing the sum of the weights to 100% is performed:

- Proportionally reduce the weights of stocks only in deciles 8 to 10
- Proportionally reduce the weights of stocks only in deciles 7 to 10
- Proportionally reduce the weights of stocks only in deciles 6 to 10
- Proportionally reduce the weights of all stocks

If the sum of the weights after step 2 is less than 100%, then the first of the following steps capable of increasing the sum of the weights to 100% is performed:

- Proportionally increase the weights of stocks only in deciles 1 to 3
- Proportionally increase the weights of stocks only in the 4th decile
- Proportionally increase the weights of stocks only in the 5th decile
- Proportionally increase the weights of all stocks

**S&P/NZX 50 Carbon Efficient Index, S&P/NZX 50 Portfolio Carbon Efficient Index, S&P/ASX 200 Carbon Efficient Index, and S&P/ASX 300 Carbon Efficient Index.** For these indices, if any industry group within a sector has fewer than two constituents, the weighting adjustment process attempts to maintain the respective GICS sector weights of its underlying index, as of the rebalancing reference date, as follows:

\[
\text{Constituent Weight in Carbon Efficient Index} = \text{Constituent Weight in Carbon Efficient Sector} \times \text{Underlying Index Sector Weight}
\]

To calculate each constituent’s Carbon Efficient weight with respect to its sector, the following steps are performed for each sector:

1. First, the constituents’ weights\(^8\) are calculated with respect to the eligible universe’s sector, as follows:

\[
\text{Constituent Weight in Carbon Efficient Sector (without Adjustment)} = \frac{\text{Constituent Index Market Cap.}}{\text{Eligible Universe Sector Group Index Market Cap.}}
\]

2. Next, each of the weights calculated in step 1 are adjusted according to their Carbon Weight Adjustment, as follows:

\[
\text{Constituent Weight in Carbon Efficient Sector} = \text{\{}	ext{Constituent Weight in Carbon Efficient Sector (without Adjustment) } \times \text{\}\}
\]

3. Weights calculated in step 2 are adjusted to ensure each sector’s weights sum to 100%, as follows:

   a. If the sum of the weights after step 2 is greater than 100% then the first of the following steps capable of reducing the sum of the weights to 100% is performed:
      - Proportionally reduce the weights of stocks only in deciles 8 to 10
      - Proportionally reduce the weights of stocks only in deciles 7 to 10
      - Proportionally reduce the weights of stocks only in deciles 6 to 10

\(^8\) For the S&P/NZX 50 Portfolio Carbon Efficient Index, Constituent Weight in Carbon Efficient Sector Group (without Adjustment) = Constituent Index Market Cap. / Eligible Universe Sector Group Index Market Cap.
Proportionally reduce the weights of all stocks

b. If the sum of the weights after step 2 is less than 100% then the first of the following steps capable of increasing the sum of the weights to 100% is performed:
  o Proportionally increase the weights of stocks only in deciles 1 to 3
  o Proportionally increase the weights of stocks only in the 4th decile
  o Proportionally increase the weights of stocks only in the 5th decile
  o Proportionally increase the weights of all stocks

Capped Indices

S&P South Africa Domestic Carbon Efficient Capped (DSW) Index. The index is a variation of the S&P South Africa Domestic Carbon Efficient (DSW) Index, where no single stock weighs more than 10% of the index at each rebalancing. The index is re-weighted quarterly effective at the open of the Monday following the third Friday in March, June, September, and December. The price reference date used for weighting is the Wednesday before the first Friday of March and second Friday of June, September, and December.

For the June annual reconstitution, single constituent weights are capped at 10% based on the rebalancing weights for S&P South Africa Domestic Carbon Efficient (DSW) Index as of the reference pricing date.

For the March, September, and December rebalancings, the 10% capping is performed based on the index market capitalization for S&P South Africa Domestic Carbon Efficient (DSW) Index as of the price reference date.

S&P/NZX 50 Portfolio Carbon Efficient Index. At each quarterly rebalancing, the index caps single constituent weights at 5%, effective at the open of the Monday following the third Friday in March, June, September, and December.

For the June annual index reconstitution, single constituent weights are capped at 5% based on the rebalancing weights for S&P/NZX 50 Portfolio Carbon Efficient Index as of the price reference date.

For the March, September, and December rebalancings, the 5% capping is performed based on the index market capitalization as of the price reference date.

Carbon-to-Revenue Footprint

For all indices, constituents within Trucost’s coverage universe are assigned an annual carbon-to-revenue footprint, prior to the annual rebalancing reference date. The carbon-to-revenue footprint metric is calculated by Trucost and is defined as a company’s annual GHG emissions (direct and first tier indirect), expressed as metric tons of carbon dioxide equivalent (tCO₂e) emissions, divided by annual revenues for the corresponding year, expressed in millions of US dollars. At each annual rebalancing, the latest available carbon-to-revenue footprint data with a Trucost financial year of less than four years prior to the rebalancing reference date’s year are used. Any carbon-to-revenue footprint data with a Trucost financial year of four years or more prior to the rebalancing reference date’s year are considered as not covered.

Carbon-to-Revenue Footprint Updates. Each company’s carbon-to-revenue footprint is researched by Trucost annually, within approximately eight months following the company’s fiscal year end. Carbon-to-revenue footprints are updated on an as-needed basis following corporate events (mergers and acquisitions, spin-offs, etc.) and underlying data point revisions. Any update to a company’s carbon-to-revenue footprint is applied at the subsequent annual rebalancing.

For information on Trucost’s methodology, please refer here.

S&P Carbon Global Standard Classification
The S&P Carbon Global Standard is a unique classification system developed specifically for these indices and is used to define the weighting adjustments for a given constituent. The standard considers each company’s carbon-to-revenue footprint relative to, and the range of carbon-to-revenue footprints within, GICS industry group peers, using the S&P Global LargeMidCap as the reference group. The standard also considers the quality of a company’s GHG emissions disclosures.

The S&P Carbon Global Standard is recalculated during each annual rebalancing.

**Decile Classification.** As of the rebalancing reference date, decile thresholds are determined for each GICS industry group based on the carbon-to-revenue footprints of companies in the S&P Global LargeMidCap. These thresholds then serve as the global reference classifications for any company eligible for the indices into its S&P Carbon Global Standard decile, irrespective of its membership of the S&P Global LargeMidCap. The S&P Carbon Global Standard’s decile ranges are published on the S&P DJI website following each annual rebalancing.³

**Disclosure Status.** Companies are further divided into those that have been identified by Trucost as having sufficiently disclosed their GHG emissions ("Disclosed") and those that have not ("Not Disclosed"). The "Disclosed" status is achieved when Trucost identifies companies as having full or partial disclosure in its GHG emissions scope (between scope 1 and 2) that is its largest in absolute terms. Companies identified by Trucost as having sufficiently disclosed their GHG emissions receive an additional increase in their Decile Weight Adjustment.

**TCFD Framework Status.** Companies with a Disclosure Status of “Disclosed” are additionally divided into those that have been identified by S&P Global as having integrated the Taskforce on Climate Related Financial Disclosures (TCFD) framework in their public reporting. Companies identified by S&P Global as having integrated the TCFD framework receive an additional increase in their Decile Weight Adjustment. Companies not covered by this data set will be considered to be Not Integrated. For more details on this data point, please see the “TCFD Disclosure” section of the CSA Companion.

**Industry Group Classification.** As of the rebalancing reference date, each industry group is identified as high, mid, or low impact. This classification is based on the range of carbon-to-revenue footprints across the companies within that industry group in the S&P Global LargeMidCap. The range for each industry group is calculated as the spread between its first and last decile threshold.

Industry groups are classified as follows:

- High impact = Range > 500 (tCO2e / revenue)
- Low impact = Range ≤ 150 (tCO2e / revenue)
- Mid impact = All remaining industry groups

The four components listed above are used to derive the Carbon Weight Adjustments used for constituent weighting in the indices through multiplying the Decile Weight Adjustment by the Industry Group Impact Factor.

**Index Calculations**

The indices calculate by means of the divisor methodology used in all S&P Dow Jones Indices’ equity indices.

*For more information on the index calculation methodology, please refer to the Non-Market Capitalization Weighted Indices section of S&P Dow Jones Indices’ Index Mathematics Methodology.*

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Index Maintenance

Rebalancing

The indices rebalance annually, effective after the close of the third Friday of June. The rebalancing reference date, and the reference universe for constituent selection, is the second Friday of May. Since index shares are assigned based on the reference prices, the actual weight of each stock at the rebalancing differs from these weights due to market movements.

Except for the S&P/NZX 50 Carbon Efficient Index, S&P/NZX 50 Portfolio Carbon Efficient Index, S&P/ASX 200 Carbon Efficient Index, and S&P/ASX 300 Carbon Efficient Index, constituents' weights are calculated using closing prices on the rebalancing reference date. Index share amounts are calculated using closing prices on the Wednesday prior to the first Friday of the rebalancing month (reference prices) and are assigned to each stock to arrive at the weights determined on the rebalancing reference date.

S&P/NZX 50 Carbon Efficient Index, S&P/NZX 50 Portfolio Carbon Efficient Index, S&P/ASX 200 Carbon Efficient Index, and S&P/ASX 300 Carbon Efficient Index. Constituents' index shares are calculated using closing prices on the second Wednesday of the rebalancing month as the reference price. Index shares are calculated and assigned to each stock to arrive at the weights determined on the reference date.

Additions and Deletions

Additions. Except for spin-offs, index additions are generally made only during rebalancings.

Spin-offs. A spin-off is added to all the indices of which the parent is a constituent at a zero price at the market close of the day before the ex-date (with no divisor adjustment). If the spin-off company is to remain in the underlying index, it remains in the corresponding Carbon Efficient index. If the spin-off company is removed from the underlying index after at least one day of regular way trading (with a divisor adjustment), the corresponding Carbon Efficient index will follow the same treatment.

Deletions. Stocks removed from an underlying index are removed from the respective index simultaneously. Between rebalancings, a stock can be deleted from an index due to corporate events such as mergers, takeovers, delistings, suspensions, indefinite suspension, spin-offs/demergers, or bankruptcies, or as part of the quarterly eligibility review process.

Controversies Monitoring

Companies within the indices are monitored daily by RepRisk. RepRisk analyzes companies for related controversies, including a range of issues such as economic crime and corruption, fraud, illegal commercial practices, human rights issues, labor disputes, workplace safety, catastrophic accidents, and environmental disasters. Using this data, each company is assigned a daily RepRisk Index (RRI) indicator. A company with an RRI indicator equal to or above 75 is defined as a risk.

If RepRisk reports a company’s RRI reaches or exceeds 75 the impacted company is removed with a minimum of two business days’ notice after S&P DJI receives notification of the violation. Any company removed as a risk is ineligible for index re-inclusion until the company’s RRI remains below 75 on all days since the previous year’s rebalancing date.

10 Due to market volatility the 2020 rebalancing was delayed, so instead became effective after the close of the third Friday of June with a reference date of the third Friday of May.

11 Except for certain indices, controversies monitoring began in March 2017. For more information, please refer to Appendix II.
For more information on RepRisk, please refer to www.reprisk.com. This service is not considered a direct contribution to the index construction process.

Corporate Actions

Mergers and Acquisitions. In cases of mergers involving two index constituents, the merged company deemed to be the acquirer in the transaction remains in the index, provided it meets all eligibility requirements. If the acquisition payment type is stock based, the acquirer’s index shares increase proportionately to the terms of the transaction. If the acquisition payment type is not stock based, the acquirer’s index shares remain at pre-merger levels.

For more information on Corporate Actions, please refer to the Non-Market Capitalization Indices section of S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology.

Currency of Calculation and Additional Index Return Series

Except for the S&P/NZX 50 Carbon Efficient Index and the S&P/NZX 50 Portfolio Carbon Efficient Index, the indices calculate in U.S. dollars, Japanese yen, and the respective local currency for the regional indices.

WMR foreign exchange rates are taken daily at 4:00 PM London time and used in the calculation of the indices. These mid-market fixings are calculated by WMR based on LSEG data and appear on LSEG pages.

S&P/ASX 200 Carbon Efficient Index and S&P/ASX 300 Carbon Efficient Index. The indices calculate in Australian and U.S. dollars, using spot exchange rates taken at 4:17 PM Sydney Time as supplied by WMR.

S&P/NZX 50 Carbon Efficient Index and S&P/NZX 50 Portfolio Carbon Efficient Index. The indices calculate in New Zealand, Australian, and U.S. dollars, using spot exchange rates taken at 3:00 PM New Zealand Time as supplied by WMR.

In addition to the indices detailed in this methodology, additional return series versions of the indices may be available, including, but not limited to the following: currency, currency hedged, decrement, fair value, inverse, leveraged, and risk control versions. For a list of available indices, please refer to S&P DJI Methodology & Regulatory Status Database.

For information on the calculation of different types of indices, please refer to S&P Dow Jones Indices’ Index Mathematics Methodology.

For the inputs necessary to calculate certain types of indices, including decrement, dynamic hedged, fair value, and risk control indices, please refer to the Parameters documents available at www.spglobal.com/spdji.

Base Date and History Availability

Index history availability, base dates, and base values are shown in the table below.

<table>
<thead>
<tr>
<th>Index</th>
<th>Launch Date</th>
<th>First Value Date</th>
<th>Base Date</th>
<th>Base Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P Global LargeMidCap Carbon Efficient</td>
<td>07/17/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Global SmallCap Carbon Efficient</td>
<td>10/30/2018</td>
<td>06/21/2019</td>
<td>06/21/2019</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Global Ex-Japan LargeMidCap Carbon Efficient</td>
<td>07/17/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P/JPX Carbon Efficient</td>
<td>07/17/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Developed LargeMidCap Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Emerging LargeMidCap Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
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<tr>
<td>S&amp;P Europe LargeMidCap Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P North America LargeMidCap Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>Index</td>
<td>Launch Date</td>
<td>First Value Date</td>
<td>Base Date</td>
<td>Base Value</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------</td>
<td>------------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>S&amp;P Asia Pacific LargeMidCap Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Latin America LargeMidCap Carbon Efficient</td>
<td>01/28/2019</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
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<td>S&amp;P Global 1200 Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P 500 Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P 400 Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P 600 Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
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<td>S&amp;P Europe 350 Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P China A Carbon Efficient</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P South Africa Domestic Carbon Efficient (DSW)</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
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<tr>
<td>S&amp;P South Africa Domestic Carbon Efficient Capped (DSW)</td>
<td>10/22/2018</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P/NZX 50 Carbon Efficient Index</td>
<td>05/03/2021</td>
<td>03/16/2018</td>
<td>03/16/2018</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P/NZX 50 Portfolio Carbon Efficient Index</td>
<td>05/03/2021</td>
<td>03/16/2018</td>
<td>03/16/2018</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P/ASX 200 Carbon Efficient Index</td>
<td>06/28/2021</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P/ASX 300 Carbon Efficient Index</td>
<td>06/28/2021</td>
<td>03/20/2009</td>
<td>03/20/2009</td>
<td>100</td>
</tr>
</tbody>
</table>
Index Data

Calculation Return Types

S&P Dow Jones Indices calculates multiple return types which vary based on the treatment of regular cash dividends. The classification of regular cash dividends is determined by S&P Dow Jones Indices.

- Price Return (PR) versions are calculated without adjustments for regular cash dividends.
- Gross Total Return (TR) versions reinvest regular cash dividends at the close on the ex-date without consideration for withholding taxes.
- Net Total Return (NTR) versions, if available, reinvest regular cash dividends at the close on the ex-date after the deduction of applicable withholding taxes.

In the event there are no regular cash dividends on the ex-date, the daily performance of all three indices will be identical.

For a complete list of indices available, please refer to the daily index levels file (“.SDL”).

For more information on the classification of regular versus special cash dividends as well as the tax rates used in the calculation of net return, please refer to S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology.

For more information on the calculation of return types, please refer to S&P Dow Jones Indices’ Index Mathematics Methodology.
Index Governance

Index Committee

An S&P Dow Jones Indices Index Committee maintains the indices. The committees meet regularly. At each meeting, the Index Committee reviews pending corporate actions that may affect index constituents, statistics comparing the composition of the index to the market, companies that are being considered as candidates for addition to the index, and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting companies, treatment of dividends, share counts or other matters.

S&P Dow Jones Indices considers information about changes to its indices and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

S&P Dow Jones Indices’ Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

*For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology.*
Index Policy

Announcements

All index constituents are evaluated daily for data needed to calculate index levels and returns. All events affecting the daily index calculation are typically announced in advance via the Index Corporate Events report (.SDE), delivered daily to all clients. Any unusual treatment of a corporate action or short notice of an event may be communicated via email to clients.

Pro-forma Files

In addition to the corporate events file (.SDE), S&P Dow Jones Indices provides constituent pro-forma files each time the indices rebalance. The pro-forma file is typically provided daily in advance of the rebalancing date and contains all constituents as well as their corresponding weights and index shares effective for the upcoming rebalancing.

Please visit www.spglobal.com/spdji for a complete schedule of rebalancing timelines and pro-forma delivery times.

Holiday Schedule

The indices are calculated daily, throughout the calendar year. The only days an index is not calculated are on days when all exchanges where an index’s constituents are listed are officially closed or if WMR exchange rates services are not published.

A complete holiday schedule for the year is available at www.spglobal.com/spdji.

Rebalancing

The Index Committee may change the date of a given rebalancing for reasons including market holidays occurring on or around the scheduled rebalancing date. Any such change will be announced with proper advance notice where possible.

Unexpected Exchange Closures

For information on Unexpected Exchange Closures, please refer to S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology.

Recalculation Policy

For information on the recalculation policy, please refer to S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology.

Contact Information

For any questions regarding an index, please contact index_services@spglobal.com.
Index Dissemination

Index levels are available through S&P Dow Jones Indices’ Web site at www.spglobal.com/spdji, major quote vendors, numerous investment-oriented Web sites, and various print and electronic media.

Index Data

Daily constituent and index level data are available via subscription.


Website

For further information, please refer to S&P Dow Jones Indices’ Web site at www.spglobal.com/spdji.
# Appendix I

## Methodology Changes

Methodology changes since July 17, 2018, are as follows:

<table>
<thead>
<tr>
<th>Change</th>
<th>Effective Date (After Close)</th>
<th>Previous</th>
<th>Methodology</th>
<th>Updated</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCFD Framework Status</td>
<td>06/16/2023</td>
<td></td>
<td>Companies with a Disclosure Status of “Disclosed” are additionally divided into those that have been identified by S&amp;P Global Sustainable as having integrated the Taskforce on Climate Related Financial Disclosures (TCFD) framework in their public reporting. Companies identified as having integrated the TCFD framework receive an additional increase in their Decile Weight Adjustment. Companies not covered by this data set are considered to be Not Integrated. For more details on this data point, please see the “TCFD Disclosure” section of the CSA Companion.</td>
<td></td>
</tr>
<tr>
<td>Rebalancing</td>
<td>06/16/2023</td>
<td></td>
<td>The indices rebalance annually, effective after the close of the third Friday of March. The rebalancing reference date, and the reference universe for constituent selection, is the second Friday of February.</td>
<td>The indices rebalance annually, effective after the close of the third Friday of June. The rebalancing reference date, and the reference universe for constituent selection, is the second Friday of May.</td>
</tr>
<tr>
<td>Carbon-to-Revenue Footprint(^{12})</td>
<td>03/18/2022</td>
<td></td>
<td>At each annual rebalancing, the latest available carbon-to-revenue footprint data from Trucost are used.</td>
<td>At each annual rebalancing, the latest available carbon-to-revenue footprint data with a Trucost financial year of less than four years prior to the rebalancing reference date’s year are used. Any carbon-to-revenue footprint data with a Trucost financial year of four years or more prior to the rebalancing reference date’s year are considered as not covered.</td>
</tr>
<tr>
<td>Rebalancing Reference Date, Price Reference Date, and Pro-forma Schedule</td>
<td>03/04/2021</td>
<td></td>
<td>The rebalancing reference date, and the reference universe for constituent selection, is the third Friday of February. Index share amounts are calculated using closing prices on the Wednesday prior to the second Friday of the rebalancing month (reference prices) and are assigned to each stock to arrive at the weights determined on the rebalancing reference date.</td>
<td>The rebalancing reference date, and the reference universe for constituent selection, is the second Friday of February. Index share amounts are calculated using closing prices on the Wednesday prior to the first Friday of the rebalancing month (reference prices) and are assigned to each stock to arrive at the weights determined on the rebalancing reference date.</td>
</tr>
<tr>
<td>Liquidity Screen for Non-Constituents Domiciled in India</td>
<td>03/20/2020</td>
<td></td>
<td>Non-constituents domiciled in India and traded on the BSE are, as of the rebalancing reference date, subject to a liquidity screen based on their three-month median daily value traded from the BSE.</td>
<td>Non-constituents domiciled in India and traded on the BSE are, as of the rebalancing reference date, subject to a liquidity screen based on their aggregate three-month median daily value traded from both the BSE and NSE.</td>
</tr>
<tr>
<td>Mergers and Acquisitions</td>
<td>10/23/2018</td>
<td></td>
<td>In cases of mergers involving two index constituents, the merged company deemed to be the acquirer in the transaction</td>
<td>In cases of mergers involving two index constituents, the merged company deemed to be the acquirer in the transaction remains in the index, provided it meets all eligibility requirements. If the</td>
</tr>
</tbody>
</table>

\(^{12}\) Not applicable to the S&P/NZX 50 Carbon Efficient, S&P/NZX 50 Portfolio Carbon Efficient, S&P/ASX 200 Carbon Efficient, and S&P/ASX 300 Carbon Efficient Indices which have applied the updated methodology since their inception.
<table>
<thead>
<tr>
<th>Change</th>
<th>Effective Date (After Close)</th>
<th>Previous</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>remains in the index, provided it meets all eligibility requirements. The acquirer’s index shares remain at pre-merger levels.</td>
<td>acquisition payment type is stock-based, the acquirer’s index shares increase proportionately to the terms of the transaction. If the acquisition payment type is not stock-based, the acquirer’s index shares remain at pre-merger levels.</td>
</tr>
</tbody>
</table>
Appendix II

Historical Back-test Deviations

Controversies Monitoring. For history prior to launch these indices do not apply controversies monitoring:

- S&P/NZX 50 Carbon Efficient
- S&P/NZX 50 Portfolio Carbon Efficient
- S&P/ASX 200 Carbon Efficient, S&P/ASX 300 Carbon Efficient
- S&P Global SmallCap Carbon Efficient Indices

Annual Rebalancings. Due to market volatility, the 2020 rebalancing was delayed, so instead became effective after the close of the third Friday of June with a reference date of the third Friday of May.
Disclaimer

Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates (“S&P DJI”) defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index’s Launch Date are considered back-tested. S&P DJI defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company’s public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed “Date of introduction”) is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index’s public release date.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index’s launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate certain ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using “Backward Data Assumption” (or pulling back) of ESG data for the calculation of back-tested historical performance. “Backward Data Assumption” is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as “product involvement”) were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on “Backward Data Assumption” please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific
data points and relevant time period for which backward projected data was used. Index returns shown do not represent the results of actual trading of investable assets/securities. S&P DJI maintains the index and calculates the index levels and performance shown or discussed but does not manage any 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 investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US $100,000 investment for a 12-month period (or US $10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US $1,650), the net return would be 8.35% (or US $8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US $5,375, and a cumulative net return of 27.2% (or US $27,200).

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