The Morningstar® Low Carbon Designation™ is assigned to portfolios that have low carbon-risk scores and low levels of fossil-fuel exposure. The designation is an indicator that the companies held in a portfolio are in general alignment with the transition to a low-carbon economy. The Morningstar® Portfolio Carbon Risk Score™ measures the risk that companies in a portfolio face from the transition to a low-carbon economy. The Morningstar® Portfolio Fossil Fuel Involvement™ percentage assesses the degree to which a portfolio is exposed to thermal coal extraction and power generation, oil and gas production and power generation, and oil and gas products & services.

**Morningstar Portfolio Carbon Risk Score**

The Morningstar Portfolio Carbon Risk Score is the asset-weighted carbon-risk score of the equity or corporate-bond holdings in a portfolio (long positions only), averaged over the trailing 12 months. To calculate the portfolio carbon-risk scores, Morningstar uses Sustainalytics’ company carbon-risk ratings, which indicate the risk that companies face from the transition to a low-carbon economy.

Sustainalytics’ assessment of a company’s carbon risk is based on:

- The firm’s exposure to carbon-related risks throughout the value chain
- Sustainalytics’ view on the degree to which the firm’s activities and products will be targeted for alignment with a low-carbon economy
- The firm’s ability to manage, and the quality of its management approach, to reduce carbon risks

Sustainalytics arrives at a company’s carbon-risk ratings by evaluating carbon intensity, fossil-fuel involvement, stranded assets exposure, mitigation strategies, and green solutions.

To receive a Morningstar Portfolio Carbon Risk Score, at least 67% of portfolio assets must have a carbon-risk rating from Sustainalytics. The percentage of assets covered is rescaled to 100% before calculating the score.
Morningstar Portfolio Carbon Risk Score =

\[ \sum_{i=1}^{n} w_i \cdot CCRR \]  

Where:

\- \( n \) = number of securities in the portfolio
\- \( w_i \) = asset weight of security \( i \)

\( CCRR \) = Company Carbon Risk Rating

Scores range from 0 to 100, where lower scores are better, indicating lower carbon risk. Scores may be interpreted as follows, both for Sustainalytics company ratings and Morningstar portfolio scores:

<table>
<thead>
<tr>
<th>Score</th>
<th>Carbon-Risk Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Negligible</td>
</tr>
<tr>
<td>&gt;0-9.99</td>
<td>Low</td>
</tr>
<tr>
<td>10-25.99</td>
<td>Medium</td>
</tr>
<tr>
<td>30-49.99</td>
<td>High</td>
</tr>
<tr>
<td>50+</td>
<td>Severe</td>
</tr>
</tbody>
</table>

**Morningstar Portfolio Fossil Fuel Involvement**

Morningstar Portfolio Fossil Fuel Involvement is the portfolio’s percentage exposure to fossil fuels, averaged over the trailing 12 months. Companies with fossil-fuel involvement are defined as those deriving at least 5% of their revenue from the following activities: thermal coal extraction, thermal coal power generation, oil and gas production, and oil and gas power generation. Companies deriving at least 50% of their revenue from oil and gas products & services are also included.

**Morningstar Low Carbon Designation**

The Morningstar Low Carbon Designation is given to portfolios that have low carbon-risk scores and low levels of exposure to fossil fuels. It is intended to allow investors to easily identify low-carbon funds across the global universe. The designation is an indicator that the companies held in a portfolio are in general alignment with the transition to a low-carbon economy.

To receive the designation, a portfolio must meet two criteria:

- A 12-month trailing average Morningstar Portfolio Carbon Risk Score below 10; such portfolios are considered to have low carbon risk
- A 12-month trailing average exposure to fossil fuels less than 7% of assets, which is approximately a 33% underweighting to the global equity universe; a portfolio’s fossil-fuel exposure is a key driver of its overall carbon intensity
Funds receive the Low Carbon designation based on the most recent quarterly calculations of their 12-month trailing average Morningstar Portfolio Carbon Risk Scores and Morningstar Portfolio Fossil Fuel Involvement. Funds holding the Low Carbon designation that no longer meet the criteria will not receive the designation for the subsequent quarter.

**Update Frequency**

All Morningstar Portfolio Carbon Metrics, including the Morningstar Portfolio Carbon Risk Score, Morningstar Portfolio Fossil Fuel Involvement, and the Morningstar Low Carbon Designation, are calculated quarterly. Portfolio carbon metric calculations will be completed on the sixth business day in February, May, August, and November. Morningstar Portfolio Carbon Risk Score and Morningstar Portfolio Fossil Fuel Involvement 12-month trailing average scores are also calculated at that time each quarter.
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