

# EXPLANATION OF HOW KEY ELEMENTS OF THE BENCHMARK METHODOLOGY REFLECT ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) FACTORS

Solactive L&G Low Carbon Transition Japan GBP Index PR



This document provides an explanation of how the key elements of the benchmark methodology reflect ESG factors. It is compiled in accordance with the requirements of point (d) of Article 13 (1) of Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 (the "Benchmarks Regulation") and of the Commission Delegated Regulation (EU) 2020/1817.

## General Information

<b>Name of the benchmark administrator</b>	Solactive AG
<b>Type of benchmark or family of benchmarks</b>	Equity
<b>Name of the benchmark or family of benchmarks</b>	Solactive L&G Low Carbon Transition Japan GBP Index PR
<b>Does the benchmark methodology for the benchmark or family of benchmarks take into account ESG factors?</b>	Yes

## ESG Factors Applied in the Benchmark Methodology

<b>List of environmental factors considered</b>	<ul style="list-style-type: none"><li>&gt; Exclusion of companies generating revenues (in proportion to their total revenues) &gt;30% from coal mining.</li><li>&gt; For each Index Component a Carbon Score is calculated. The Score Calculation is relative to the region an Index Component is assigned to. Scores for Index Components assigned to North America, Europe ex United Kingdom, United Kingdom, APAC ex Japan, and Japan are relative to all Index Components assigned to any of these Regional Indices taken together as one Regional Index. Scores for Index Components assigned to Emerging Markets are relative to all Index Components assigned to this Regional Index. The Carbon Score calculation uses data provided by the Data Provider and is based on 3 separate scores: Carbon Emissions Intensity Score: Carbon Emissions Intensity is calculated by dividing the cumulative scope 1 and scope 2 emissions by the Enterprise Value including Cash as of the latest fiscal year end of the Index Component. If the Enterprise Value of the Index Component was zero or no Carbon Emissions could be assigned, the Index Component does not receive a Carbon Emissions Intensity or a Carbon Emissions Intensity Score. The Carbon Emissions Intensity of each Index Component is standardized and winsorized in an iterative manner and subsequently standardized and transformed to have boundaries between -1 and 1. Carbon Reserves Intensity Score: The Carbon Reserves Intensity Score equals the Coal Reserves Intensity Score, if available. Otherwise, it equals the Oil &amp; Gas Reserves Intensity Score, if available. If none are available, the Index Components does not receive a Carbon Reserves Intensity Score. For the Coal Reserves Intensity Score, Coal Reserves Intensity is calculated by dividing the coal reserves by the Enterprise Value including Cash as of the latest fiscal year end of the Index Component. If the Enterprise Value of the Index Component was zero or no Coal Reserves could be assigned, the Index Component does not receive a Coal Reserves Intensity or a Coal Reserves Intensity Score. The Coal Reserves Intensity of each Index Component is standardized and winsorized in an iterative manner and subsequently standardized and transformed to have boundaries between -1 and -0.75. For the Oil &amp; Gas Reserves Intensity Score, i.\tOil &amp; Gas Reserves Intensity is calculated by dividing the</li></ul>
---	--



Oil & Gas Reserves by the Enterprise Value including Cash as of the latest fiscal year end of the Index Component. If the Enterprise Value of the Index Component was zero or no Oil & Gas Reserves could be assigned, the Index Component does not receive an Oil & Gas Reserves Intensity or an Oil & Gas Reserves Intensity Score. The Oil & Gas Reserves Intensity of each Index Component is standardized and winsorized in an iterative manner and subsequently standardized and transformed to have boundaries between -0.75 and -0.25. Green Revenue Score: For each Index Component, the cumulative relative green revenue is calculated. If no Green Revenue could be assigned to an Index Component, this does not include revenues of zero, the Index Component does not receive a Green Revenue Score. Green Revenue is defined as revenue attributed to activities benefiting the following objectives, that utilize the UN Sustainable Development Goals (SDG's) as reference framework: Achieving sustainable agriculture and forestry, Conserving water, Promoting sustainable building, Optimising Material Use, Mitigating climate change, Preserving marine ecosystem, Preserving terrestrial ecosystem. The Green Revenue Score for each Index Component is calculated as the minimum of cumulative relative green revenue and 1. The Carbon Score for each Index Component is then calculated by aggregating the available Carbon Intensity Score, the Carbon Reserves Intensity Score, and the Green Revenue Score as a geometric mean.

- > For each security within each Regional Index an initial weight is determined based on its Free Float Market Capitalization. The respective initial weight is then based on a tilting function assigning higher weights to Index Components with higher Carbon Scores.
- > The exponent of the tilting function is the parameter targeted (i.e. solved for) to achieve the overall Carbon Objective for the Index on each Selection Day. The overall Carbon Objective for the Index is to meet the stricter between the Carbon Emissions Intensity Reduction Objective and the Decarbonization Objective on each Selection Day. Carbon Emissions Intensity Reduction Objective (CIRO): the objective for the Index is to have at least 70% lower Carbon Emissions Intensity than the Regional Universe on the Selection Day. In case of the United Kingdom region, the Carbon Emission Intensity Reduction is set to 60% vs its Regional Universe. Decarbonization Objective (DO): On each Selection Day, the objective is to reduce the Carbon Emissions Intensity of the Index by 7% YoY applied semi-annually. This is also adjusted by the performance of the relevant Regional Index between the Base Date and the Selection Day.

<b>List of social factors considered</b>	<ul style="list-style-type: none"> <li>&gt; Exclusion of companies with verified ongoing involvement in the area of controversial weapons (including chemical and biological weapons, cluster munitions, and anti-personnel mines).</li> </ul>
<b>List of governance factors considered</b>	<ul style="list-style-type: none"> <li>&gt; Not applicable.</li> </ul>

## Data and Standards used

<b>Data Input</b>	The data used to construct the index is sourced externally from Institutional Shareholder Services Inc.
-------------------	---



<b>Verification and quality of data</b>	The provider of ESG-related data input is selected by the Administrator based on an assessment of its existing processes in order to ensure the reliability and representativeness of the ESG-related data. The data provider has established processes in accordance with accepted and established market standards that ensure the permanent quality and reliability of the ESG-data provided.
<b>Reference standards</b>	International standards referenced by the index methodology are listed in the respective section above.
<b>Information updated on</b>	27/03/2023
<b>Reason for update:</b>	Initial creation of the report.

# CONTACT

**Solactive AG**  
**German Index Engineering**  
Platz der Einheit 1  
60327 Frankfurt am Main  
Germany

Tel.: +49 (0) 69 719 160 00  
Fax: +49 (0) 69 719 160 25  
Email: [info@solactive.com](mailto:info@solactive.com)  
Website: [www.solactive.com](http://www.solactive.com)

© Solactive AG