



Calculation & Benchmark Administration by

**S&P Dow Jones  
Indices**

# **MAC Global Solar Energy Index Family *Benchmark Statement***

**February 20, 2023**

Date of original publication: May 24, 2021

The MAC Global Solar Energy Index Family Benchmark Statement

The MAC Global Solar Energy Index Family ("Indices") is proprietary to MAC Indexing, LLC, which has contracted with S&P DJI Netherlands B.V. (a subsidiary of S&P Dow Jones Indices LLC.) to calculate and administer the Indices

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# Introduction

S&P DJI Netherlands B.V. (S&P DJI), a wholly owned subsidiary of S&P Dow Jones Indices LLC., is the administrator of the MAC Solar Index Family. The MAC Global Solar Energy Index Family is owned by MAC Indexing, LLC (“MAC”). This document is a ‘benchmark statement’, created in accordance with Article 27 of Regulation (EU) 2016/1011 and the supplementary delegated regulation (EU) 2018/1643. This benchmark statement should be read in conjunction with the methodology documents for the MAC Solar Index, which can be found on our Web site at [www.spdji.com](http://www.spdji.com).

This benchmark statement covers non-significant benchmarks as defined by Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016.

## **Objective of Indices**

The MAC Global Solar Energy Index is a rules-based stock index that seeks to track the performance of companies in global solar energy businesses. The universe of companies that may be considered eligible for potential index inclusion is determined by S&P DJI based on factors such as a company’s business description and its most recent reported revenue by segment as described in the Eligibility Criteria section of the index methodology. S&P DJI uses search terms to identify companies that place a degree of importance on solar business activities. The index applies exclusions based on a company’s involvement in specific business activities and includes minimum requirements for the S&P Global Governance and Economic Scores as outlined under Eligibility Criteria in the methodology. The Index is a modified float-adjusted market-capitalization-weighted index subject to Solar Exposure Scores and other constraints as detailed in the methodology.

# Methodology & Index Design Guidelines and Reviews

Each index in the MAC Global Solar Energy Index Family is constructed and maintained by a transparent rules-based methodological approach. Each index methodology is documented and available on our web site, [www.spdji.com](http://www.spdji.com).

All indices in the MAC Global Solar Energy Index Family are overseen by the Index Committee. The Index Committee serves as the index governance body tasked with ensuring that:

- The index objective is clearly stated, and the index is expected to achieve its objective.
- The procedures documented in the methodology are transparent and clearly described.
- The eligible universe, selection criteria and weighting method for constituents are fully detailed and described.
- All aspects of an index – data, calculation, maintenance, presentation and governance – are consistent with S&P DJI practices and any exceptions are explicitly discussed and decided upon by the Index Committee.

Each index in the MAC Global Solar Energy Index Family is rebalanced on a regular schedule.

Index methodologies are reviewed by the Index Committee, as part of the regular index rebalancing process, as well as on at least an annual basis to ensure that the methodology is being applied consistently and allows the index to achieve its stated objective. These reviews may highlight situations where changes in the methodology are necessary to reflect changes in the underlying market. Please see the section on Consultations below for more information on Index Committee reviews and the external consultation process.

# Index Governance

The S&P Custom BA Index Committee (“Index Committee”) maintains the MAC Global Solar Energy Index Family and provides oversight to ensure that S&P DJI policies and procedures are followed. The Index Committee meets at regular intervals. At each meeting, the Index Committee reviews matters that may affect an index within the MAC Global Solar Energy Index Family, including the methodology, constituents 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.

The Index Committee is comprised of full-time professional members of S&P DJI’s staff. S&P DJI’s voting members on the Index Committee are senior employees from the Index Management & Production Group and the Index Governance group. Individuals from these functions have no commercial responsibilities.

Questions of interpretation or possible exceptions to the index methodology are considered by the Index Committee.

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

## **Discretion**

S&P DJI has established a documented rules-based approach for the calculation and maintenance of the indices it administers; rules are set out in the methodology and supplementary documents. This approach seeks to minimize the need for judgement and discretion. In certain circumstances, including complex corporate actions, market disruptions, or where the methodology does not describe, or does not adequately describe an event, the Index Committee may, use discretion to make decisions that differ from the index methodology.

## **Internal Oversight**

The S&P DJI Internal Oversight Committee (“IOC”) provides overall direction and coordination for the oversight of S&P DJI’s benchmark indices in compliance with S&P DJI’s index governance policies, procedures, quality and operational standards and applicable regulatory requirements. The IOC is independent of functions responsible for the day-to-day determination of S&P DJI’s benchmark indices. The IOC comprises representatives from the Compliance, Legal, and Risk functions.

# Index Calculation

## Input Data

The MAC Global Solar Energy Index Family is calculated using official prices sourced via vendors from the eligible stock exchanges. The indices do not use contributed input data.

## Index Divisor

To ensure that an index's value, or level, does not change when stocks are added or deleted, a divisor is adjusted to offset the change in market value of the index. Thus, the divisor plays a critical role in the index's ability to provide a continuous measure of market valuation when faced with changes to the stocks included in the index. In a similar manner, some corporate actions that cause changes in the market value of the stocks in an index should not be reflected in the index level. Adjustments are made to the divisor to eliminate the impact of these corporate actions.

As an example, increasing a company's shares outstanding increases the market capitalization of a market capitalization weighted index. The change to the index market capitalization causes a divisor adjustment in order to maintain the index's level. However, a share change made in an equal weighted index has no divisor adjustment because the shares outstanding changes are offset by an adjustment factor, meaning that there is no change to the index market capitalization.

## Unexpected Exchange Closures

An unexpected market/exchange closure is when a market/exchange fully or partially fails to open or trading is temporarily halted. This can apply to a single exchange or to a market as a whole, when all of the primary exchanges are closed and/or not trading. Unexpected market/exchange closures are usually due to unforeseen circumstances, such as natural disasters, inclement weather, outages, or other events.

## U.S. Securities

To a large degree, S&P DJI is dependent on stock exchanges to provide guidance in the event of an unexpected exchange closure. S&P DJI's decision making is dependent on exchange guidance regarding pricing and mandatory corporate actions.

SEC Rule 123C-Equities provides closing contingency procedures for determining an official closing price for listed securities if the exchange is unable to conduct a closing transaction in one or more securities due to a system or technical issue.

3:00 PM ET is the deadline for an exchange to determine its plan of action regarding an outage scenario. As such, S&P DJI also uses 3:00 PM ET as the cutoff.

If all major exchanges fail to open or unexpectedly halt trading intraday due to unforeseen circumstances, such as natural disasters, inclement weather, outages, or other events, S&P DJI will take the following actions:

- Market Disruption Prior to Open of Trading:
  - (i) If all exchanges indicate that trading will not open for a given day, S&P DJI will treat the day as an unscheduled market holiday. The decision will be communicated to clients as soon as possible through the normal channels. Indices

containing multiple markets will be calculated as normal, provided that at least one market is open that day. Indices which only contain closed markets will not be calculated.

(ii) If exchanges indicate that trading, although delayed, will open for a given day, S&P DJI will begin index calculation when the exchanges open.

- **Market Disruption Intraday:**

(i) If exchanges indicate that trading will not resume for a given day, index levels will be calculated using prices determined by the exchanges based on SEC Rule 123C. Intraday index values will continue to use the last traded composite price until the primary exchange publishes Official Closing Prices.

### **Non-U.S. Securities**

Exchanges outside of the U.S. do not have the same secondary exchange default capabilities as U.S. exchanges. In the event of an unexpected exchange closure, S&P DJI uses the following guidelines:

(i) If an unexpected exchange closure occurs prior to the open of trading and it is indicated that trading will not open for a given day, S&P DJI will treat the day as an unscheduled market holiday.

(ii) If a market disruption occurs intraday, S&P DJI will wait for the impacted exchange to publish a list of closing prices, which will then be used to calculate the closing index values. If no list is published, the last trade for each security before the interruption is used to calculate the index closing value. If no trades were reported for a security, the previous closing price, adjusted for corporate actions, is used for index calculation.

### **Index Corrections**

S&P DJI reserves the right to recalculate an index at its discretion in the event one of the following issues has occurred:

1. Incorrect or revised closing price of one or more constituent securities;
2. Missed corporate event;
3. Incorrect application of corporate action or index methodology;
4. Late announcement of a corporate event;
5. Incorrect calculation or data entry error.

A general description of how these events are handled can be found in the Recalculation Policy section of the S&P Equity Indices Policies and Practices document, located on [www.spdji.com](http://www.spdji.com).

# Consultations

## Communication with Stakeholders and Consultations

S&P DJI communicates and consults with market participants through various channels such as press releases, index announcements, emails and the distribution of data files. In addition, S&P DJI has a designated client service team available to respond to inquiries.

When a material change to the index methodology is considered, S&P DJI publishes a consultation inviting comments from market participants. A material change alters the index objective or changes the methodology in a way that affects the likelihood that the index will achieve its objective. Examples of methodology changes that could impact the index objective include altering rules determining the index universe, the selection of its constituents, or the weighting of its constituents. Consultations are announced through a number of channels, including the S&P DJI Web site, and by email directly to S&P DJI clients. Feedback is accepted only during the posted timeframe. Under normal circumstances, the consultation period is open for a minimum of 30 days from publication. In instances where a material change is deemed to be time sensitive, the Index Committee may determine that a shorter consultation period is required. Time sensitive changes are those that may require consideration or implementation within a shorter timeframe, and where the full consultation time period is not possible. Prior to finalizing its decision, the Index Committee will consider the issues and may request clarifications from respondents as part of this process. All feedback from consultations is reviewed and considered before a final decision is made by the Index Committee. Any changes to an index methodology are announced on the Web site together with the effective date of the change. A summary of the consultation feedback is made available upon request after announcement of the results, with the exception of responses requesting confidentiality. Individual and company names are not provided.

## Internal Reviews of Methodology

**Annual Review Process.** In addition to its daily governance of indices and maintenance of index methodologies, the Index Committee reviews, at least once within any 12 month period, the index methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In the case that an index methodology is reviewed off cycle from the annual review, the Index Committee reserves the right to cancel the annual review if the requested review covers all the relevant issues.



# Index Terminations

S&P DJI and/or the owner of the MAC Global Solar Energy Index Family, MAC, may determine that an index should be discontinued. The circumstances which may lead to the discontinuance of an index are generally outside of S&P DJI's control. Reasons for an index termination could include:

- Fewer than the required number of securities are available for inclusion in an index, such as with size or GICS market segment based indices
- Data required for an index is no longer available or no longer reliable
- Market conditions, regulations or potential index constituents have changed, making it unlikely that the index can achieve its objective
- Declining investor use or interest

All proposals to discontinue an index are assessed to determine any potential impact on the market. S&P DJI may at its option, consult with market participants regarding the index termination.

Index terminations will be announced in advance, and vendors will be notified. Index levels and related data on a discontinued index are retained by S&P DJI.

# Index Usage

S&P DJI acts as the benchmark administrator for the MAC Global Solar Energy Index Family.

S&P DJI is not an investment advisor. Not all uses of an index are appropriate for all users. Market participants should make their own assessment and judgment when selecting an index for their purpose.

Any index and its methodology can be affected by a number of factors, most of which are beyond S&P DJI's control. These may include, but are not limited to, structural changes to the underlying market including decreases in the size and liquidity of the relevant market segment, infrastructure changes, geo-political events, and regulatory changes. These circumstances may result in a material change to the methodology, or in exceptional circumstances, the termination of an index.

If financial product issuers or investment managers choose to use an index, regardless of index family, as the basis of an index-linked financial product or an investment fund, they should consider this possibility, including the potential need to terminate or modify the terms of a financial product resulting from the termination of the calculation of the index. S&P DJI assumes no responsibility for potential use of the indices it administers, regardless of index family, for a particular purpose by users, whether that use is for research, benchmarking, the basis for an index-linked financial product or investment fund, or some other use. The effective representation of a market or strategy is the primary aim for S&P DJI.

# Additional Information

Information regarding rebalancing and other relevant details for the MAC Global Solar Energy Index Family can be found in the methodology document available on [www.spdji.com](http://www.spdji.com). The index methodology should be read in conjunction with supporting documents, which detail corporate action treatment, policies and procedures, float adjustment methodology, index calculations, and other pertinent information. These documents can be found on the Governance page of [www.spdji.com](http://www.spdji.com).

Index ISINs, if available, can be obtained by contacting [index\\_services@spglobal.com](mailto:index_services@spglobal.com).

# Appendix

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE BENCHMARK STATEMENT <sup>1</sup>		
SECTION 1 – CONSIDERATION OF ESG FACTORS		
1.	<b>Name of the benchmark administrator</b>	S&P DJI Netherlands B.V.
2.	<b>Underlying asset class of the ESG benchmark<sup>2</sup></b>	Equity
3.	<b>List of the benchmark or family of benchmarks covered by this Benchmark Statement:</b>	For a list of the benchmarks within this family, please refer to the <a href="#">SPDJI Custom BA for MAC Regulatory Report</a> .
4.	<b>Are there in the portfolio of the benchmark administrator any EU Climate Transition Benchmarks, EU Paris-aligned benchmarks, benchmarks that pursue ESG objectives or benchmarks that take into account ESG factors?</b>	Yes  This benchmark statement does not include EU Climate Transition Benchmarks or EU Paris-aligned Benchmarks.  For a list of the EU CTBs and EU PABs, and benchmarks that take in account ESG factors, please refer to the <a href="#">S&amp;P DJI Methodology &amp; Regulatory Database</a> .
5.	<b>Does this benchmark or family of benchmarks pursue ESG objective?</b>	Yes  For a list of the benchmarks within this family that take in account ESG factors, please refer to the <a href="#">SPDJI Custom BA for MAC Regulatory Report</a> .
6.	<b>Where the response to (5) is ‘Yes’, the section below provides information in relation to those ESG factors for the ‘Equity’ benchmarks including those ESG factors listed in Annex II to Delegated Regulation (EU) 2020/1816:</b>	
7.	<b>List of combined ESG factors</b>	Please refer to the <a href="#">SPDJI Custom BA for MAC EU Low Carbon Benchmark Regulation Disclosure Report</a> for the index-level ESG metrics.
	<b>List of environmental factors</b>	Please refer to the <a href="#">SPDJI Custom BA for MAC EU Low Carbon Benchmark Regulation Disclosure Report</a> for the index-level ESG metrics.
	<b>List of social factors</b>	Please refer to the <a href="#">SPDJI Custom BA for HSBC EU Low Carbon Benchmark Regulation Disclosure Report</a> for the index-level ESG metrics

<sup>1</sup> The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.

<sup>2</sup> The ‘underlying assets’ are defined in European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.

	<b>List of governance factors</b>	Please refer to <a href="#">SPDJI Custom BA for MAC EU Low Carbon Benchmark Regulation Disclosure Report</a> for the index-level ESG metrics.
<b>8.</b>	<b>Data and standards used</b>	
a.	Description of data sources used to provide information on the ESG factors in the benchmark statement	Please refer to the <a href="#">S&amp;P DJI ESG Metrics Reference Guide</a> for more information on the metrics and the data sets used to calculate them.
b.	Reference standards and index methodology:	Whilst there are no specific reference standards that apply to the data, where possible, S&P DJI uses international sustainability disclosure frameworks such as, SASB, GRI, UN Global Compact and the recommendations of the Financial Stability Board's Task Force for Climate-related Financial Disclosures as published in the 2017 Final Report.
<b>DISCLOSURES OF THE ALIGNMENT WITH THE OBJECTIVES OF THE PARIS AGREEMENT</b>		
1.	Does the benchmark align with the target of reducing carbon emission or the attainment of the objectives of the Paris Agreement?	No
2.	The temperature scenario, in accordance with international standards, used for the alignment with the target of reducing GHG emissions or attaining the objectives of the Paris Agreement;	Not applicable. The benchmarks do not pursue the objective of seeking to reduce carbon emissions or attaining the objectives of the Paris Agreement and therefore a temperature scenario is not relevant to the benchmarks.
3.	The name of the provider of the temperature scenario used for the alignment with the target of reducing GHG emissions or the attainment of the objectives of the Paris Agreement.	Not applicable.
4.	The methodology used for the measurement of the alignment with the temperature scenario	Not applicable.
5.	The hyperlink to the website of the temperature scenario used.	Not applicable.
<b>Appendix latest update:</b>		February 2022
<b>Appendix first publication:</b>		December 2020

# Disclaimer

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