

S&P/JPX 500 ESG Score Tilted Indices *Methodology*

August 2024

Table of Contents

Introduction	3
Index Objective and Highlights	3
Supporting Documents	3
Eligibility Criteria	5
Index Universe	5
Exclusions Based on Sustainalytics' Global Standards Screening	5
Multiple Classes of Stock	5
Exclusions Based on Controversies: Media and Stakeholder Analysis	5
Index Construction	7
Constituent Selection	7
Constituent Weighting	7
Tilt Scaling Factors	7
Index Calculations	8
Index Maintenance	9
Rebalancing	9
Quarterly UNGC Eligibility Review	9
Ongoing Maintenance	9
Quarterly Updates	9
Additions and Deletions	9
Corporate Actions	9
Currency of Calculation and Additional Index Return Series	9
Base Dates and History Availability	10
Index Data	11
Calculation Return Types	11
Index Governance	12
Index Committee	12
Index Policy	13
Announcements	13
Pro-forma Files	13
Holiday Schedule	13
Rebalancing	13
Unexpected Exchange Closures	13

	Recalculation Policy	13
	Contact Information	13
Index Dissemination		14
	Tickers	14
	Index Data	14
	Website	14
Appendix A		15
	Backward Data Assumption	15
	Designated Datasets Subject to Backward Data Assumption	15
	Exclusions Based on Missing Coverage	15
	Historical Coverage Assessment per Designated Dataset	15
Appendix B		17
	Methodology Changes	17
Disclaimer		18
	Performance Disclosure/Back-Tested Data	18
	Intellectual Property Notices/Disclaimer	19
	ESG Indices Disclaimer	21

Introduction

Index Objective and Highlights

The S&P/JPX 500 ESG Score Tilted Indices measure the performance of securities in the TOPIX 500 (the “underlying index”) that meet the sustainability criteria defined in *Eligibility Criteria*. The indices attempt to improve S&P Global ESG Score exposure with respect to the underlying index by overweighting (underweighting) companies with relatively high (low) S&P Global ESG Scores. Index constituents are weighted based on the constituents’ weights in the underlying index, tilted such that companies with higher or lower S&P Global ESG scores are over or underweighted (“tilted”) while maintaining tilting group neutrality, as described in *Index Construction*. Tilting Groups are the GICS Industry Groups and/or Sectors in the underlying index depending on constituent count and composition.

The weights in any given index can be tilted within each GICS industry group (or sector where necessary) or, alternatively, at the index level. The former allows similar overall industry group (or sector) weights to be maintained with respect to the underlying index.

The indices employ a range of scaling factors that, when applied to the weighting scheme, provide varying magnitudes of tilting. The scaling factor effectively controls the extent to which companies are overweighted or underweighted compared with their underlying index weight. Higher scaling factors imply the tilted index would have relatively greater S&P Global ESG Score exposure improvement, but also greater differences in constituent weights relative to the underlying index.

The indices employ a transparent, rules-based weighting scheme starting from companies’ S&P Global ESG scores, which are then re-standardized. S&P Global Sustainable¹ calculates these scores and derives them from their ‘Corporate Sustainability Assessment’ (CSA). A company’s CSA score is derived using either company-provided data, publicly available information, or a combination thereof.

For information on the TOPIX 500 methodology, please refer to the Japan Exchange Group website at <http://www.jpx.co.jp/english/>.

For more information on the CSA process, please refer to <https://www.spglobal.com/esg/csa/>.

For more information on S&P Global ESG Scores, please refer [here](#).

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:

Supporting Document	URL
S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology	Equity Indices Policies & Practices
S&P Dow Jones Indices’ Index Mathematics Methodology	Index Mathematics Methodology
S&P Dow Jones Indices’ Float Adjustment Methodology	Float Adjustment Methodology
S&P Dow Jones Indices’ Global Industry Classification Standard (GICS) Methodology	GICS Methodology

The methodology is 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.

JPX is a trademark of Japan Exchange Group, Inc. and has been 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

Index Universe

At each rebalancing, the index universe is all constituents of the underlying index.

Exclusions Based on Sustainalytics' Global Standards Screening

Sustainalytics' Global Standards Screening (GSS) provides an assessment of a company's impact on stakeholders and the extent to which a company causes, contributes, or is linked to violations of international norms and standards. The basis of the GSS assessments is the United Nations Global Compact (UNGC) Principles. Information regarding related standards is also provided in the screening, including the Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, as well as their underlying conventions. Sustainalytics classifies companies into the following three statuses:

- **Non-Compliant.** Classification given to companies that do not act in accordance with the UNGC principles and its associated standards, conventions, and treaties.
- **Watchlist.** Classification given to companies that are at risk of violating one or more principles, for which all dimensions for Non-Compliant status could not be established or confirmed.
- **Compliant.** Classification given to companies that act in accordance with the UNGC principles and its associated standards, conventions, and treaties.

As of each rebalancing reference date, exclude the following:

- companies without coverage
- companies classified as Non-Compliant

Please refer to <http://www.sustainalytics.com/> for more information.

Multiple Classes of Stock

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. All publicly listed multiple share class lines of a company are assigned and assessed using the same S&P Global ESG score.

Exclusions Based on Controversies: Media and Stakeholder Analysis

In addition to the above, S&P Global uses RepRisk for daily filtering, screening, and analysis of ESG risk incidents and controversial activities related to companies within the indices¹.

In cases where risks are presented, S&P Global releases a Media and Stakeholder Analysis (MSA) which includes 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.

¹ RepRisk, an ESG data science company, leverages the combination of AI and machine learning with human intelligence to systematically analyze public information in 23 languages and identify material ESG risks. With daily data updates across 100+ ESG risk factors, RepRisk provides consistent, timely, and actionable data for risk management and ESG integration across a company's operations, business relationships, and investments.

The Index Committee reviews constituents that have been flagged by S&P Global's MSA to evaluate the potential impact of controversial company activities on the composition of the indices. If the Index Committee decides to remove a company in question, that company is ineligible for re-entry into the index for at least one full calendar year, beginning with the subsequent rebalancing.

For more information on RepRisk, please refer to www.reprisk.com. This service is not considered a direct contribution to the index construction process.

Index Construction

Constituent Selection

At each rebalancing, select the eligible constituents of the underlying index and form each index.

Constituent Weighting

At each rebalancing, the weights of all tilting groups are neutral to their weights in the eligible universe. Constituents' weights in each tilting group are determined using an ESG Tilt Score (S_i).

Each ESG Tilt Score (S_i) is calculated as follows:

- a. The S&P Global ESG Score for each company is transformed into an ESG z-score (Z_i) at the underlying index level by:
 - i. Dividing by 100 and taking the inverse of the normal cumulative distribution function with a mean of zero and a standard deviation of one.
 - ii. The ESG z-score (Z_i) for each security is re-standardized using the mean and standard deviation of the available S&P Global ESG z-scores for the unique companies within the index universe before applying exclusions based on Sustainalytics' Global Standards Screening and controversies.
- b. If a company does not have an S&P Global ESG Score, it will be assigned an ESG z-score (Z_i) set as equal to the lowest available ESG z-score value from the companies within its Tilting Group. If no companies have scores within the Tilting Group, the company will be assigned an ESG z-score of zero.
- c. The ESG z-score (Z_i) for each company is transformed into the ESG Tilt Score (S_i) as follows:
 - If $Z_i > 0$, $S_i = 1 + \lambda Z_i$
 - If $Z_i < 0$, $S_i = 1/(1 - \lambda Z_i)$
 - If $Z_i = 0$, $S_i = 1$

Where λ = Tilt Scaling Factor (as defined in the table below).

Tilt Scaling Factors

S&P ESG Tilted Index	Tilt Scaling Factor	Tilting Group
S&P/JPX 500 ESG Score Tilted (0.25) Index	0.25	Industry Group or Sector
S&P/JPX 500 ESG Score Tilted (0.5) Index	0.5	Industry Group or Sector
S&P/JPX 500 ESG Score Tilted (1.0) Index	1.0	Industry Group or Sector
S&P/JPX 500 ESG Score Tilted (2.0) Index	2.0	Industry Group or Sector

Each index is Industry Group / Sector Tilted, with the Tilting Groups determined on each rebalancing reference date as follows:

- Where a GICS Sector contains any GICS Industry Group with fewer than two S&P Global ESG Scores available, the GICS Sector is the Tilting Group.
- For the remaining Sectors (if any) where all Industry Groups have at least two S&P Global ESG scores, the Industry Groups each form individual Tilting Groups.

After the Tilting Group(s) are determined as above, the constituent weights are calculated as follows:

1. A Tilting Group's weight in the index is calculated as the sum of constituents' weights in the Tilting Group divided by the sum of all index constituents' weights in the eligible universe.

$$Weight_{Tilting\ Group} = \frac{\sum Index\ Weight, \text{ for all constituents in Tilting Group}}{\sum Index\ Weight, \text{ for all index constituents}}$$

2. Within each Tilting Group, constituents' weights are multiplied by their company ESG Tilt Score (S_i). The constituents' weights within the Tilting Group are determined by dividing the constituent's tilted weight by the sum of all tilted weights within the Tilting Group.

$$Weight_{Constituent\ in\ Tilting\ Group} = \frac{Constituent\ Index\ Weight * S}{\sum Index\ Weight * S, \text{ for all constituents in Tilting Group}}$$

3. To ensure Tilting Group neutrality, the final constituent weight in each index is the product of Step 1 and Step 2 above.

$$Weight_{Constituent} = Weight_{Tilting\ Group} * Weight_{Constituent\ in\ Tilting\ Group}$$

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.

Index Maintenance

Rebalancing

The indices rebalance semi-annually, effective after the close of the last business day of May and November. The rebalancing reference date is the last trading day of April and October.

Quarterly UNGC Eligibility Review

The index reviews index constituents for ongoing eligibility under the UNGC exclusion criteria and removes, without replacement, all ineligible companies effective after the close of the third Friday of March, June, September, December using a reference date for as of after the close of the last business day of the previous month. The review does not consider or include coverage changes.

Ongoing Maintenance

Index constituents are drawn from the underlying index. Specific changes to index constituents, such as share changes, Investable Weight Factor (IWF) changes, dividend distributions, and price adjustments, follow the treatment for Market Capitalization Indices defined in S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

For more information on Share Updates, Float Adjustment, and IWFs, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology and S&P Dow Jones Indices' Float Adjustment Methodology.

The indices are reviewed on an ongoing basis to account for corporate events such as mergers, takeovers, delistings, suspensions, spin-offs/demergers, or bankruptcies. Changes to index composition and related weight adjustments are made as soon as they are effective. These changes are typically announced prior to the implementation date.

Quarterly Updates

Changes to a constituent's shares and IWF as a result of the quarterly updates are effective after the close on the third Friday in March, June, September, and December.

Additions and Deletions

Additions. Except for spin-offs, no stocks are added to the indices between rebalancings. Spinoffs from the eligible universe are added to the index at the same AWF as the parent, and are evaluated for continued index inclusion at the subsequent rebalancing.

Deletions. Between rebalancings, a stock can be deleted from an index due to corporate events such as mergers, takeovers, delistings, suspensions, spin-offs/demergers, or bankruptcies.

In addition, at the discretion of the Index Committee, a deletion may occur if an MSA is raised.

Corporate Actions

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

Currency of Calculation and Additional Index Return Series

The indices calculate in Japanese yen and U.S. dollars.

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 the [S&P DJI Methodology & Regulatory Status Database](#).

For information on various index calculations, 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 Dates and History Availability

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

Index	Launch Date	First Value Date	Base Date	Base Value
S&P/JPX 500 ESG Score Tilted (0.25) Index	03/28/2022	05/31/2010	05/31/2010	1000
S&P/JPX 500 ESG Score Tilted (0.5) Index	03/28/2022	05/31/2010	05/31/2010	1000
S&P/JPX 500 ESG Score Tilted (1.0) Index	03/28/2022	05/31/2010	05/31/2010	1000
S&P/JPX 500 ESG Score Tilted (2.0) Index	03/28/2022	05/31/2010	05/31/2010	1000

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 Index Committee meets 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.

Press releases are posted on our Web site, www.spglobal.com/spdji, and are released to major news services.

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 calculate 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 (see codes below), numerous investment-oriented Web sites, and various print and electronic media.

Tickers

The table below lists headline indices covered by this document. All versions of the below indices that may exist are also covered by this document. Please refer to the [S&P DJI Methodology & Regulatory Status Database](#) for a complete list of indices covered by this document.

Index	Return Type	BBG
S&P/JPX 500 ESG Score Tilted (0.25) Index (JPY)	Price Return Total Return Net Total Return	SPJPELJP SPJPELJT SPJPELJN
S&P/JPX 500 ESG Score Tilted (0.25) Index (USD)	Price Return Total Return Net Total Return	SPJPELUP SPJPELUT SPJPELUN
S&P/JPX 500 ESG Score Tilted (0.5) Index (JPY)	Price Return Total Return Net Total Return	SPJPEMJP SPJPEMJT SPJPEMJN
S&P/JPX 500 ESG Score Tilted (0.5) Index (USD)	Price Return Total Return Net Total Return	SPJPEMUP SPJPEMUT SPJPEMUN
S&P/JPX 500 ESG Score Tilted (1.0) Index (JPY)	Price Return Total Return Net Total Return	SPJPEAJP SPJPEAJT SPJPEAJN
S&P/JPX 500 ESG Score Tilted (1.0) Index (USD)	Price Return Total Return Net Total Return	SPJPEAUP SPJPEAUT SPJPEAUN
S&P/JPX 500 ESG Score Tilted (2.0) Index (JPY)	Price Return Total Return Net Total Return	SPJPEHJP SPJPEHJT SPJPEHJN
S&P/JPX 500 ESG Score Tilted (2.0) Index (USD)	Price Return Total Return Net Total Return	SPJPEHUP SPJPEHUT SPJPEHUN

Index Data

Daily constituent and index level data are available via subscription.

For product information, please contact S&P Dow Jones Indices, www.spglobal.com/spdji/en/contact-us.

Website

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

Appendix A

Backward Data Assumption

The indices employ a “Backward Data Assumption” method for some datapoints used in the derivation of historical index membership prior to the Live Data Effective Date (defined below). The “Backward Data Assumption” method involves applying the earliest available actual live data point for an index constituent to all prior, historical instances of that constituent in the index universe.

Backward Data Assumption affects only the historical, hypothetical constituents of any index back-test. Only actual live data is ever used in live index rebalancings and in the historical rebalancing calculation of an index after its Live Data Effective Date.

For more information on S&P DJI’s principles and processes for using Backward Data Assumption, please refer to the [FAQ](#).

Designated Datasets Subject to Backward Data Assumption

The Backward Data Assumption within the historical back-test, with respect to the indices identified above, applies only to designated datasets and associated time horizons as defined below. For each designated dataset, all historical rebalancing events prior to the Live Data Reference Date listed below are subject to use of the Backward Data Assumption.

Data Provider	Designated Dataset	Live Data Reference Date	Live Data Effective Date
S&P DJI	S&P DJI ESG Score	04/30/2020	06/01/2020
Sustainalytics	Global Standard Screening	04/30/2020	06/01/2020

The Live Data Reference Date refers to the first rebalancing reference date from which only actual live data is used.

The Live Data Effective Date refers to the first date from which index constituents are determined solely on actual live data for each respective dataset.

Exclusions Based on Missing Coverage

This index excludes companies based on missing coverage with respect to the designated datasets above. However, for rebalancing dates prior to each respective Live Data Reference Date, the eligibility of companies is determined based on the coverage after applying the Backward Data Assumption and is not dictated by actual live data coverage.

Historical Coverage Assessment per Designated Dataset

S&P DJI ESG Score Coverage (with respect to underlying index universe):

S&P/JPX 500 ESG Score Tilted Indices

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data		After Using the Data Assumption	
		Stock Count	Index Weight	Stock Count	Index Weight
5/31/2010	495	324	93.3%	485	99.7%
11/30/2010	500	324	92.9%	492	99.8%
5/31/2011	498	332	92.0%	490	99.8%
11/30/2011	500	330	91.4%	495	99.8%
5/31/2012	499	290	90.1%	496	99.9%

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
11/30/2012	501	289	89.4%	498	99.9%
5/31/2013	502	317	91.9%	499	99.9%
11/29/2013	500	317	91.8%	497	99.9%
5/30/2014	502	318	92.1%	499	99.9%
11/28/2014	501	318	91.8%	498	99.9%
5/29/2015	502	350	93.9%	499	99.9%
11/30/2015	500	349	93.3%	499	100.0%
5/31/2016	503	387	95.7%	502	100.0%
11/30/2016	500	384	95.4%	499	100.0%
5/31/2017	499	472	99.2%	498	100.0%
11/30/2017	500	473	99.1%	499	100.0%
5/31/2018	501	483	99.4%	500	100.0%
11/30/2018	501	482	99.3%	500	100.0%
5/31/2019	500	485	99.6%	499	100.0%
11/29/2019	500	483	99.4%	499	100.0%
5/29/2020	498	497	100.0%	n/a	n/a
11/30/2020	499	499	100.0%	n/a	n/a
5/31/2021	496	496	100.0%	n/a	n/a
11/30/2021	500	497	99.9%	n/a	n/a

Sustainalytics Global Standards Screening Coverage (with respect to underlying index universe):

S&P/JPX 500 ESG Score Tilted Indices

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
5/31/2010	495	325	92.5%	484	99.6%
11/30/2010	500	327	92.7%	492	99.7%
5/31/2011	498	325	92.4%	490	99.7%
11/30/2011	500	325	91.8%	495	99.7%
5/31/2012	499	335	92.5%	496	99.8%
11/30/2012	501	329	91.5%	498	99.8%
5/31/2013	502	380	94.1%	499	99.8%
11/29/2013	500	379	94.1%	497	99.8%
5/30/2014	502	386	94.5%	499	99.8%
11/28/2014	501	444	97.1%	499	99.9%
5/29/2015	502	443	96.7%	500	99.9%
11/30/2015	500	454	98.2%	499	99.9%
5/31/2016	503	457	98.0%	502	99.9%
11/30/2016	500	453	98.2%	500	100.0%
5/31/2017	499	463	98.8%	499	100.0%
11/30/2017	500	465	98.7%	500	100.0%
5/31/2018	501	500	99.9%	501	100.0%
11/30/2018	501	500	99.9%	501	100.0%
5/31/2019	500	499	99.3%	500	100.0%
11/29/2019	500	498	99.3%	499	99.9%
5/29/2020	498	496	99.9%	n/a	n/a
11/30/2020	499	499	100.0%	n/a	n/a
5/31/2021	496	496	100.0%	n/a	n/a
11/30/2021	500	500	100.0%	n/a	n/a

Appendix B

Methodology Changes

Methodology changes since March 28, 2022, are as follows:

Change	Effective Date (After Close)	Previous	Methodology Updated
ESG Score Data	05/31/2024	The index uses S&P DJI ESG Scores as part of the constituent selection process.	The index uses S&P Global ESG Scores as part of the constituent selection process.
Quarterly UNGC Eligibility Review	05/31/2024	--	The index reviews index constituents for ongoing eligibility under the UNGC exclusion criteria and removes, without replacement, all ineligible companies effective after the close of the third Friday of March, June, September, December using a reference date for as of after the close of the last business day of the previous month. The review does not consider or include coverage changes

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 by 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. Also, the treatment of corporate actions in back-tested performance may differ from treatment for live indices due to limitations in replicating index management decisions. 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).

Intellectual Property Notices/Disclaimer

© 2024 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, MBX, MCDX, PRIMEX, HHPI, and SOVX are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P DJI does not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P DJI is impersonal and not tailored to the needs of any person, entity, or group of persons. S&P DJI receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P DJI does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P DJI makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P DJI is not an investment advisor, commodity trading advisor, fiduciary, "promoter" (as defined in the Investment Company Act of 1940, as amended) or "expert" as enumerated within 15 U.S.C. § 77k(a), and S&P DJI makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P DJI is not a tax advisor. Inclusion of a security, commodity, crypto currency, or other asset within an index is not a recommendation by S&P DJI to buy, sell, or hold such security, commodity, crypto currency, or other asset, nor is it considered to be investment or trading advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse engineered, reproduced, or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P DJI. The Content shall not be used for any unlawful or unauthorized purposes. S&P DJI and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness, or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of

the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" "WHERE IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIMS ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special, or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related information and other analyses, including ratings, research and valuations are generally provided by licensors and/or affiliates of S&P Dow Jones Indices, including but not limited to S&P Global's other divisions such as S&P Global Market Intelligence. Any credit-related information and other related analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. Any opinion, analyses and rating acknowledgement decisions are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Dow Jones Indices does not assume any obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P DJI does not act as a fiduciary or an investment advisor. While S&P DJI has obtained information from sources it believes to be reliable, S&P DJI does not perform an audit or undertake independent verification of any information it receives. S&P DJI reserves the right to vary or discontinue any index at any time for regulatory or other reasons. Various factors, including external factors beyond S&P DJI's control might necessitate material changes to indices.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Global Ratings reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Global Ratings, disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof. Affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Global Ratings are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global Ratings publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

S&P Global keeps certain activities of its various divisions and business units separate from each other to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions, and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate, or otherwise address.

Some indices use the Global Industry Classification Standard (GICS®), which was developed by, and is the exclusive property and a trademark of, S&P Global and MSCI. Neither MSCI, S&P DJI nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability, or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P DJI, any of their affiliates or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

S&P Dow Jones Indices products are governed by the terms and conditions of the agreements under which they may be provided. A license is required from S&P Dow Jones Indices to display, create derivative works of and/or distribute any product or service that uses, is based upon and/or refers to any S&P Dow Jones Indices and/or index data.

ESG Indices Disclaimer

S&P DJI provides indices that seek to select, exclude, and/or weight index constituents based on, but not limited to, certain environmental, social or governance (ESG) indicators, or a combination of those indicators, including the following: environmental indicators (including the efficient use of natural resources, the production of waste, greenhouse gas emissions, or impact on biodiversity); social indicators (such as, inequality and investment in human capital); governance indicators (such as sound management structures, employee relations, remuneration of staff, tax compliance, respect for human rights, anti-corruption and anti-bribery matters), specific sustainability or values-related company involvement indicators (for example, production/distribution of controversial weapons, tobacco products, or thermal coal), or controversies monitoring (including research of media outlets to identify companies involved in ESG-related incidents).

S&P DJI ESG indices use ESG metrics and scores in the selection and/or weighting of index constituents. ESG scores or ratings seek to measure or evaluate a company's, or an asset's, performance with respect to environmental, social and corporate governance issues.

The ESG scores, ratings, and other data used in S&P DJI ESG indices is supplied directly or indirectly by third parties (note these parties can be independent affiliates of S&P Global or unaffiliated entities) so an S&P DJI ESG index's ability to reflect ESG factors depends on these third parties' data accuracy and availability.

ESG scores, ratings, and other data may be reported (meaning that the data is provided as disclosed by companies, or an asset, or as made publicly available), modelled (meaning that the data is derived using a proprietary modelling process with only proxies used in the creation of the data), or reported and modelled (meaning that the data is either a mix of reported and modelled data or is derived from the vendor using reported data /information in a proprietary scoring or determination process).

ESG scores, ratings, and other data, whether from an external and/or internal source, is based on a qualitative and judgmental assessment, especially in the absence of well-defined market standards, and due to the existence of multiple approaches and methodologies to assess ESG factors and considerations. An element of subjectivity and discretion is therefore inherent in any ESG score, rating, or other data and different ESG scoring, rating, and/or data sources may use different ESG assessment or estimation methodologies. Different persons (including ESG data ratings, or scoring providers, index administrators or users) may arrive at different conclusions regarding the sustainability or impact of a particular company, asset, or index.

Where an index uses ESG scores, ratings or other data supplied directly or indirectly by third parties, S&P DJI does not accept responsibility for the accuracy of completeness of such ESG scores, ratings, or data.

No single clear, definitive test or framework (legal, regulatory, or otherwise) exists to determine 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. In the absence of well-defined market standards and due to the existence of multitude approaches, the exercise of judgment is necessary. Accordingly, different persons may classify the same investment, product and/or strategy differently regarding 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. Furthermore, the legal and/or market position on what constitutes an 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives may change over time, especially as further regulatory or industry rules and guidance are issued and the ESG sustainable finance framework becomes more sophisticated.

Prospective users of an S&P DJI ESG Index are encouraged to read the relevant index methodology and related disclosures carefully to determine whether the index is suitable for their potential use case or investment objective.