

# S&P Dow Jones Indices

A Division of **S&P Global**

## **S&P GSCI Single Commodity Capped Component Indices *Methodology***

May 2021

# Table of Contents

Introduction	2
<b>Index Objectives and Highlights</b>	<b>2</b>
<b>Index Family</b>	<b>2</b>
<b>Supporting Documents</b>	<b>3</b>
Index Construction & Maintenance	4
<b>Currency of Calculation and Additional Index Return Series</b>	<b>4</b>
<b>S&amp;P GSCI Single &amp; Ex-Single Commodity Capped Component</b>	<b>4</b>
<b>S&amp;P GSCI Single Commodity ex Agriculture and Livestock Capped Component</b>	<b>6</b>
<b>S&amp;P GSCI Energy &amp; Extended Metals, Platinum &amp; Palladium Capped Component</b>	<b>7</b>
Index Dissemination	8
<b>Tickers</b>	<b>8</b>
Index Governance	9
<b>Index Committee</b>	<b>9</b>
<b>Commodity Index Advisory Panel</b>	<b>9</b>
Index Policy	10
<b>Announcements</b>	<b>10</b>
<b>Contact Information</b>	<b>10</b>
Appendix I	11
<b>Index Weights</b>	<b>11</b>
Appendix II	13
<b>EU Required ESG Disclosures</b>	<b>13</b>
Disclaimer	14

# Introduction

## Index Objectives and Highlights

The S&P GSCI Single Commodity Capped Component Indices measure the performance of a single capped commodity component of the S&P GSCI while maintaining the diversification of the S&P GSCI component weights.

*For information on the S&P GSCI, please refer to the S&P Dow Jones Indices' S&P GSCI Index Methodology available on our Web site at [www.spdji.com](http://www.spdji.com).*

The methodology for the S&P GSCI Single Commodity Capped Component Indices uses various terms and definitions from the S&P GSCI Methodology. Where not specifically noted otherwise in this document, the rules of the S&P GSCI Methodology prevail.

The namesake commodity is the commodity bearing the name of the S&P GSCI Single Commodity Capped Component. For example, Gold is the namesake commodity for the S&P GSCI Gold Capped Component. In general, any S&P GSCI Single Commodity Capped Component consists of the namesake commodity as well as most of the rest of the S&P GSCI Commodities, subject to the Rule of Exclusion regarding commodities that belong to a given component.

The Rule of Exclusion states that when any commodity that belongs to a component is the namesake commodity of the index, all other commodities of that same component are excluded in that particular single commodity index. For instance, for the S&P GSCI Heating Oil Capped Component, the four remaining commodities (WTI Crude Oil, Brent Crude Oil, Unleaded Gasoline and Gasoil) of the Petroleum Component are not included in the index.

## Index Family

**S&P GSCI Single Commodity Capped Component.** The weighting scheme of the S&P GSCI Single Commodity Capped Component is as follows: in every S&P GSCI Single Commodity Capped Component, each namesake commodity is allocated 32%, with the remaining 68% equally distributed among the eligible S&P GSCI Commodities, subject to the Rule of Exclusion.

The weights are rebalanced on a monthly basis. In essence, each single commodity index consists of a basket of individual S&P GSCI Single Commodities, not just one single individual commodity. However, if a market disruption event takes place on the day of the rebalance, the rebalance is held off one business day, or until there is no further market disruption event.

**S&P GSCI Ex-Single Commodity Capped Component.** The weighting scheme of the S&P GSCI® Ex-Single Commodity Capped Component is as follows: in every S&P GSCI Ex-Single Commodity Capped Component, each namesake commodity is allocated 0%, with the remaining 100% equally distributed among the eligible S&P GSCI Commodities. These indices are not subject to the Rule of Exclusion.

The weights are rebalanced on a monthly basis. In essence, each ex-single commodity index consists of a basket of the S&P GSCI Single Commodities, excluding one single individual commodity.

**S&P GSCI Single Commodity ex Agriculture and Livestock Capped Component.** Every S&P GSCI Single Commodity ex Agriculture and Livestock Capped Component index follows a weighting scheme whereby each namesake commodity is allocated 32%, with the remaining 68% equally distributed among the eligible S&P GSCI ex Agriculture and Livestock commodities, subject to the Rule of Exclusion.

Additionally, all components are capped at 17%. This means that for any given S&P GSCI Single Commodity ex Agriculture and Livestock Capped Component index, if the sum of the weights of all the commodities belonging in the same component exceeds 17%, then the individual weights of all the commodities in said component are curtailed to the extent that the sum of the weights of all the commodities in said component equal 17%, and the excess weight is redistributed on a pro-rata basis to all the remaining commodities, except for the namesake commodity, which remains at 32%.

**S&P GSCI Energy & Extended Metals, Platinum & Palladium Capped Component.** Every GSCI Energy & Extended Metals, Platinum & Palladium Capped Component index follows a weighting scheme whereby each namesake commodity is allocated 32%, with the remaining 68% equally distributed among the eligible S&P GSCI Energy & Extended Metals, Platinum & Palladium commodities, subject to the Rule of Exclusion.

The membership of the S&P GSCI Energy & Extended Metals, Platinum & Palladium Capped Component indices takes into account the energy and metals sectors of the S&P GSCI, along with Platinum & Palladium, which are not currently members of the S&P GSCI. Four commodities, Gold, Silver, Platinum, and Palladium, use the standard GSCI calendar, while the remaining commodities uses the GSCI Two - Month Forward calendar.

### 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' Commodities Indices Policies & Practices Methodology	<a href="#">Commodities Indices Policies &amp; Practices</a>
S&P Dow Jones Indices' Index Mathematics Methodology	<a href="#">Index Mathematics Methodology</a>

This methodology supplement 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. 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.

# Index Construction & Maintenance

## Currency of Calculation and Additional Index Return Series

In addition to the indices detailed in this methodology, additional return series versions of the indices may be available, including, but not limited to: 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.spdji.com](http://www.spdji.com).

## S&P GSCI Single & Ex-Single Commodity Capped Component

**Rebalancing Frequency:** Monthly.

**Determination date:** One S&P GSCI business day before each monthly roll date.

**Sector, component, and commodity name information:**

GSCI Sector	GSCI Component	Commodity Name
Agriculture	Wheat	Chicago Wheat
		Kansas Wheat
		Corn
		Soybeans
		Coffee
		Sugar
		Coca
		Cotton
Livestock	Cattle	Live Cattle
		Feeder Cattle
		Lean Hogs
Energy	Petroleum	WTI Crude Oil
		Brent Crude Oil
		Gas Oil
		Heating Oil
		Unleaded Gasoline
	Natural Gas	
Metals	Industrial Metals	Aluminum
		Copper
		Lead
		Nickel
		Zinc
	Precious Metals	Gold
		Silver

### Spot Index Calculation

$$Spot_t = Spot_{t_R} * \sum_{i=1}^N \left( Weight_{i t_R} * \frac{SingleSpot_{i t}}{SingleSpot_{i t_R}} \right)$$

Where:

- Spot<sub>t</sub> = S&P GSCI Single Capped Component spot level
- t<sub>R</sub> = Rebalancing date (i.e. 5<sup>th</sup> business day of the month)
- Weight<sub>i</sub> = Monthly reset weight
- SingleSpot<sub>i</sub> = S&P GSCI Single Commodity spot level for the i<sup>th</sup> component
- N = Total number of components in the index

### Excess Return Index Calculation

$$ER_t = ER_{t_R} * \sum_{i=1}^N \left( Weight_{i t_R} * \frac{SingleER_{i t}}{SingleER_{i t_R}} \right)$$

Where:

- ER<sub>t</sub> = S&P GSCI Single Capped Component ER level
- SingleER<sub>i</sub> = S&P GSCI Single Commodity ER level for the i<sup>th</sup> component

### Total Return Index Calculation

$$TR_t = TR_{t-1} * \left( 1 + \frac{ER_t}{ER_{t-1}} + TBR_t \right) * (1 + TBR_t)^{days}$$

Where:

- TR<sub>t</sub> = S&P GSCI Single Capped Component TR level
- days = number of non S&P GSCI Business Days since the preceding S&P GSCI business day

$$TBR_t = \left[ \frac{1}{1 - \frac{91}{360} * TBAR_{t-1}} \right]^{\frac{1}{91}} - 1$$

Where:

- TBAR = 91-day discount rate for U.S. Treasury Bills, as reported by the U.S. Department of the Treasury's Treasury Direct service at <https://www.treasurydirect.gov/instit/annceresult/annceresult.htm>.

**S&P GSCI Single Commodity ex Agriculture and Livestock Capped Component**

**Rebalancing Frequency:** Monthly.

**Determination Date:** One S&P GSCI business day before each monthly roll date.

**Sector, component, and commodity name information:**

<b>GSCI Sector</b>	<b>GSCI Component</b>	<b>Commodity Name</b>
Energy	Petroleum	WTI Crude Oil
		Brent Crude Oil
		Gas Oil
		Heating Oil
		Unleaded Gasoline
		Natural Gas
Metals	Industrial Metals	Aluminum
		Copper
		Lead
		Nickel
		Zinc
	Precious Metals	Gold
		Silver

**S&P GSCI Energy & Extended Metals, Platinum & Palladium Capped Component**

**Rebalancing Frequency:** Monthly.

**Determination Date:** One S&P GSCI business day before each monthly roll date.

**Sector, component, commodity name and contract calendar information:**

<b>GSCI Sector</b>	<b>GSCI Component</b>	<b>Commodity Name</b>	<b>Contract Calendar</b>
Energy	Petroleum	WTI Crude Oil	2-Month Forward
		Brent Crude Oil	
		Gas Oil	
		Heating Oil	
		Unleaded Gasoline	
		Natural Gas	
Metals	Industrial Metals	Aluminum	
		Copper	
		Lead	
		Nickel	
		Zinc	
	Precious Metals	Gold	Standard
Silver			
N/A	Non GSCI	Platinum	
		Palladium	



# Index Dissemination

Index levels are available through S&P Dow Jones Indices' Web site at [www.spdji.com](http://www.spdji.com), major quote vendors, numerous investment-oriented Web sites, and various print and electronic media.

## **Tickers**

*For a list of tickers within the S&P GSCI Single Commodity Capped Component family of indices, please refer to the S&P GSCI Ticker Table document located on our Web site, [www.spdji.com](http://www.spdji.com).*

# Index Governance

## Index Committee

S&P Dow Jones Indices has established an Index Committee to oversee the daily management and operations of the S&P GSCI, and is responsible for all analytical methods and calculation in the indices. The Committee is comprised of full-time professional members of S&P Dow Jones Indices staff. At each meeting, the Committee reviews any issues that may affect index constituents, statistics comparing the composition of the indices to the market, commodities that are being considered as candidates for addition to an index, and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting commodities, 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.

All references to methodology-related decisions made by S&P Dow Jones Indices in this document represent decisions made by the Index Committee.

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*
- *Internal Reviews of Methodology*
- *Calculations and Pricing Disruptions*
- *Error Correction*
- *Expert Judgment*
- *Data Hierarchy*
- *Unexpected Exchange Closures*

*Please refer to S&P Dow Jones Indices' Commodities Indices Policies & Practices Methodology.*

## Commodity Index Advisory Panel

S&P Dow Jones Indices has established a Commodity Index Advisory Panel to assist it in connection with the operation of the S&P GSCI. The Panel meets on an annual basis and at other times at the request of the Index Committee. The principal purpose of the Panel is to advise the Index Committee with respect to, among other things, the calculation of the S&P GSCI, the effectiveness of the S&P GSCI as a measure of commodity futures market performance and the need for changes in the composition or methodology of the S&P GSCI. The Panel acts solely in an advisory and consultative capacity; the Index Committee makes all decisions with respect to the composition, calculation and operation of the S&P GSCI. Certain members of the Panel may be affiliated with clients of S&P Dow Jones Indices. Also, certain members of the Panel may be affiliated with entities which, from time to time, may have investments linked to the S&P GSCI, either through transactions in the Contracts included in the S&P GSCI, futures contracts on the S&P GSCI or derivative products linked to the S&P GSCI.

# Index Policy

## **Announcements**

Announcements of the daily index values are made after the futures market close each day.

Announcements of the new futures contract months to be rolled into are made following the close of business on the third business day of each month.

*For information on Calculations and Pricing Disruptions, Expert Judgment, Data Hierarchy and Unexpected Exchange Closures, please refer to S&P Dow Jones Indices' Commodities Indices Policies & Practices Methodology.*

## **Contact Information**

For questions regarding an index, please contact: [index\\_services@spglobal.com](mailto:index_services@spglobal.com).



**Table 3: S&P GSCI Ex-Agriculture & Livestock Single Commodity Capped Component Index Weights**

Index	CL	GC	HO	LCO	LGO	MAL	MCU	MNI	MPB	MZN	NG	RB	SI
S&P GSCI Ex-Agriculture & Livestock Crude Oil Capped Component	32%	8.50%				8.50%	8.50%	8.50%	8.50%	8.50%	8.50%		8.50%
S&P GSCI Ex-Agriculture & Livestock Brent Crude Capped Component		8.50%		32%		8.50%	8.50%	8.50%	8.50%	8.50%	8.50%		8.50%
S&P GSCI Ex-Agriculture & Livestock Gasoil Capped Component		8.50%			32%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%		8.50%
S&P GSCI Ex-Agriculture & Livestock Heating Oil Capped Component		8.50%	32%			8.50%	8.50%	8.50%	8.50%	8.50%	8.50%		8.50%
S&P GSCI Ex-Agriculture & Livestock Unleaded Gasoline Capped Component		8.50%				8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	32%	8.50%
S&P GSCI Ex-Agriculture & Livestock Natural Gas Capped Component	3.40%	7.29%	3.40%	3.40%	3.40%	7.29%	7.29%	7.29%	7.29%	7.29%	32%	3.40%	7.29%
S&P GSCI Ex-Agriculture & Livestock Aluminum Capped Component	3.40%	7.29%	3.40%	3.40%	3.40%	32%	7.29%	7.29%	7.29%	7.29%	7.29%	3.40%	7.29%
S&P GSCI Ex-Agriculture & Livestock Copper Capped Component	3.40%	7.29%	3.40%	3.40%	3.40%	7.29%	32%	7.29%	7.29%	7.29%	7.29%	3.40%	7.29%
S&P GSCI Ex-Agriculture & Livestock Nickel Capped Component	3.40%	7.29%	3.40%	3.40%	3.40%	7.29%	7.29%	32%	7.29%	7.29%	7.29%	3.40%	7.29%
S&P GSCI Ex-Agriculture & Livestock Lead Capped Component	3.40%	7.29%	3.40%	3.40%	3.40%	7.29%	7.29%	7.29%	32%	7.29%	7.29%	3.40%	7.29%
S&P GSCI Ex-Agriculture & Livestock Zinc Capped Component	3.40%	7.29%	3.40%	3.40%	3.40%	7.29%	7.29%	7.29%	7.29%	32%	7.29%	3.40%	7.29%
S&P GSCI Ex-Agriculture & Livestock Gold Capped Component	3.40%	32%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%
S&P GSCI Ex-Agriculture & Livestock Silver Capped Component	3.40%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	7.29%	32%

**Table 4: S&P GSCI Energy & Extended Metals, Platinum & Palladium Capped Component Index Weights**

Index	Component Maturity Index Calendar	Commodity															
		CL	LCO	HO	LGO	RB	NG	MAL	MCU	MPB	MNI	MZN	GC	SI	PL	PA	
S&P GSCI Energy & Extended Metals Crude Oil Capped Component	S&P GSCI Crude Oil 2 Month Forward	32%					6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	
S&P GSCI Energy & Extended Metals Brent Crude Capped Component	S&P GSCI Brent Crude 2 Month Forward		32%				6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	
S&P GSCI Energy & Extended Metals Heating Oil Capped Component	S&P GSCI Heating Oil 2 Month Forward			32%			6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	
S&P GSCI Energy & Extended Metals Gasoil Capped Component	S&P GSCI Gasoil 2 Month Forward				32%		6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	
S&P GSCI Energy & Extended Metals Unleaded Gasoline Capped Component	S&P GSCI Unleaded Gasoline 2 Month Forward					32%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	
S&P GSCI Energy & Extended Metals Natural Gas Capped Component	S&P GSCI Natural Gas 2 Month Forward	3.40%	3.40%	3.40%	3.40%	3.40%	32%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%		
S&P GSCI Energy & Extended Metals Aluminum Capped Component	S&P GSCI Aluminum 2 Month Forward	3.40%	3.40%	3.40%	3.40%	3.40%	5.67%	32%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%		
S&P GSCI Energy & Extended Metals Copper Capped Component	S&P GSCI Copper 2 Month Forward	3.40%	3.40%	3.40%	3.40%	3.40%	5.67%	5.67%	32%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%		
S&P GSCI Energy & Extended Metals Lead Capped Component	S&P GSCI Lead 2 Month Forward	3.40%	3.40%	3.40%	3.40%	3.40%	5.67%	5.67%	5.67%	32%	5.67%	5.67%	5.67%	5.67%	5.67%		
S&P GSCI Energy & Extended Metals Nickel Capped Component	S&P GSCI Nickel 2 Month Forward	3.40%	3.40%	3.40%	3.40%	3.40%	5.67%	5.67%	5.67%	5.67%	32%	5.67%	5.67%	5.67%	5.67%		
S&P GSCI Energy & Extended Metals Zinc Capped Component	S&P GSCI Zinc 2 Month Forward	3.40%	3.40%	3.40%	3.40%	3.40%	5.67%	5.67%	5.67%	5.67%	5.67%	32%	5.67%	5.67%	5.67%		
S&P GSCI Energy & Extended Metals Gold Capped Component	S&P GSCI Gold	3.40%	3.40%	3.40%	3.40%	3.40%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	32%	5.67%	5.67%		
S&P GSCI Energy & Extended Metals Silver Capped Component	S&P GSCI Silver	3.40%	3.40%	3.40%	3.40%	3.40%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	32%	5.67%		
S&P GSCI Energy & Extended Metals Platinum Capped Component	S&P GSCI Platinum	3.40%	3.40%	3.40%	3.40%	3.40%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	32%		
S&P GSCI Energy & Extended Metals Palladium Capped Component	S&P GSCI Palladium	3.40%	3.40%	3.40%	3.40%	3.40%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	5.67%	32%		

# Appendix II

## EU Required ESG Disclosures

<b>EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL &amp; GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY<sup>1</sup></b>	
<b>1.</b>	<b>Name of the benchmark administrator.</b> S&P Dow Jones Indices LLC.
<b>2.</b>	<b>Underlying asset class of the ESG benchmark.<sup>2</sup></b> N/A
<b>3.</b>	<b>Name of the S&amp;P Dow Jones Indices benchmark or family of benchmarks.</b> <a href="#">S&amp;P DJI Futures Indices Benchmark Statement</a>
<b>4.</b>	<b>Do any of the indices maintained by this methodology take into account ESG factors?</b> No
<b>Appendix latest update:</b> January 2021	
<b>Appendix first publication:</b> January 2021	

<sup>1</sup> The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology.

<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.

# Disclaimer

© 2021 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, S&P 500 LOW VOLATILITY INDEX, 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, S&P TARGET DATE INDICES, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR and INDEXOLOGY are registered trademarks of S&P Global, Inc. (“S&P Global”) or its affiliates. DOW JONES, DJ, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are registered 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 Dow Jones Indices LLC, S&P Global, Dow Jones or their respective affiliates (collectively “S&P Dow Jones Indices”) do not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices 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 Dow Jones Indices 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 Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices 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. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment product or vehicle. S&P Dow Jones Indices LLC is not a tax advisor. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment 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 Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices 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” BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM 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.

S&P Global keeps certain activities of its various divisions and business units separate from each other in order 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 non-public 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.