

INDEX GUIDELINE

SOLACTIVE COMMODITIES SELECT INDEX

Version 1.0

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TABLE OF CONTENTS

Introduction	3
1. Index Specifications	4
1.1. Scope of the Index	4
1.2. Identifiers and Publication	4
1.3. Initial Level of the Index	4
1.4. Prices and calculation frequency	4
1.5. Licensing.....	5
2. Index Selection	6
2.1. INDEX UNIVERSE REQUIREMENTS.....	6
2.2. Selection of the Index Components	6
2.3. Weighting of the Index Components.....	7
3. Rebalance	8
3.1. ORDINARY REBALANCE.....	8
3.2. EXTRAORDINARY REBALANCE	8
4. Calculation of the Index	8
4.1. Index formula	8
4.2. Accuracy	10
4.3. Recalculation.....	10
4.4. Market Disruption	10
5. Miscellaneous	11
5.1. Discretion	11
5.2. Methodology Review.....	11
5.3. Changes in calculation method.....	11
5.4. Termination	11
5.5. Oversight	12
6. Definitions.....	13
Contact.....	15



INTRODUCTION

This document (the "GUIDELINE") is to be used as a guideline with regard to the composition, calculation and maintenance of the Solactive Commodities Select Index (the "INDEX"). Any amendments to the rules made to the GUIDELINE are approved by the OVERSIGHT COMMITTEE specified in Section 5.5. The INDEX is owned, calculated, administered and published by Solactive AG ("SOLACTIVE") assuming the role as administrator (the "INDEX ADMINISTRATOR") under the Regulation (EU) 2016/1011 (the "BENCHMARK REGULATION" or "BMR"). The name "Solactive" is trademarked.

The text uses defined terms which are formatted with "SMALL CAPS". Such Terms shall have the meaning assigned to them as specified in Section 6 (Definitions).

The GUIDELINE and the policies and methodology documents referenced herein contain the underlying principles and rules regarding the structure and operation of the INDEX. SOLACTIVE does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the INDEX nor the level of the INDEX at any certain point in time nor in any other respect. SOLACTIVE strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for SOLACTIVE – irrespective of possible obligations to issuers – to advise third parties, including investors and/or financial intermediaries, of any errors in the INDEX. The publication of the INDEX by SOLACTIVE does not constitute a recommendation for capital investment and does not contain any assurance or opinion of SOLACTIVE regarding a possible investment in a financial instrument based on this INDEX.



1. INDEX SPECIFICATIONS

1.1. SCOPE OF THE INDEX

Category	Description
Asset Class	Commodity
Strategy	Representation of a basket of commodities
Regional Allocation	Global
Rebalancing Frequency	Every four months (January, April, July, October)

1.2. IDENTIFIERS AND PUBLICATION

The INDEX is published under the following identifiers:

Name	ISIN	Currency	Type	RIC	BBG ticker
SOLACTIVE COMMODITIES SELECT INDEX	DE000SLOGEY3	USD	ER*	.SOLCOSUS	SOLCOSUS Index

*ER means that the Index is calculated as excess return

The INDEX is published on the website of the INDEX ADMINISTRATOR (www.solactive.com) and is, in addition, available via the price marketing services of Boerse Stuttgart GmbH and may be distributed to all of its affiliated vendors. The index will be especially published on Bloomberg under the given ticker. Each vendor decides on an individual basis as to whether it will distribute or display the INDEX via its information systems.

Any publication in relation to the INDEX (e.g. notices, amendments to the GUIDELINE) will be available at the website of the INDEX ADMINISTRATOR: <https://www.solactive.com/news/announcements/>.

1.3. INITIAL LEVEL OF THE INDEX

The initial level of the INDEX on the 07/09/2007, the START DATE, is 100. Historical values from the 31/10/2022, the LIVE DATE, will be recorded in accordance with Article 8 of the BMR. Levels of the INDEX published for a period prior to the LIVE DATE have been back-tested.

1.4. PRICES AND CALCULATION FREQUENCY

A closing level of the INDEX for each CALCULATION DAY is calculated. This closing level is based on the CLOSING PRICES for the INDEX COMPONENTS on the respective EXCHANGES on which the INDEX COMPONENTS are listed. The CLOSING PRICES of INDEX COMPONENTS not listed in the INDEX CURRENCY are converted using the 4pm London



time WM Fixing quoted by ICE. If there is no 4pm London time WM Fixing for the relevant CALCULATION DAY, the last available 4pm London time WM Fixing will be used for the closing level calculation.

1.5. LICENSING

Licenses to use the INDEX as the underlying value for financial instruments, investment funds and financial contracts may be issued to stock exchanges, banks, financial services providers and investment houses by Solactive.



2. INDEX SELECTION

As this index is a static basket, no selection takes place.

Each INDEX COMPONENT will be assigned a weight as described in Section 2.3 and is included the current composition of the INDEX on the REBALANCE DAY according to the procedure outlined in Section 3.

2.1. INDEX UNIVERSE REQUIREMENTS

Not applicable as no ordinary rebalance takes place.

2.2. SELECTION OF THE INDEX COMPONENTS

The Index is composed of the following 12 underlyings (each of them an UNDERLYING COMPONENT, together the Index Components):

Component	Name	Currency	Reference Exchange	BBG ticker
1	Goldman Sachs Copper Index	USD	LME	AGGSIC11 Index
2	Goldman Sachs Nickel Index	USD	LME	AGGSIN11 Index
3	Goldman Sachs Aluminum Index	USD	LME	AGGSIA11 Index
4	Goldman Sachs Steel Scrap Index	USD	LME	AGGSSRPE Index
5	Goldman Sachs Zinc Index	USD	LME	AGGSIZ11 Index
6	Goldman Sachs Silver Index	USD	CME	AGGSSI11 Index
7	Goldman Sachs Platinum Index	USD	Nymex	AGGSPL11 Index
8	Goldman Sachs Palladium Index	USD	Nymex	AGGSPA11 Index
9	Goldman Sachs Chicago Ethanol Index	USD	CME	AGGSETHE Index
10	Goldman Sachs EUA Index	USD	ICE	AGGSEUAU Index
11	Goldman Sachs California Carbon Allowance (CCA) Index	USD	ICE	AGGSCAZE Index
12	Goldman Sachs Shanghai Pulp Index	USD	Norexeco	AGGSSSPE Index



2.3. WEIGHTING OF THE INDEX COMPONENTS

On each REBALANCE DAY each INDEX COMPONENT is assigned a weight according to the following table:

Component	Name	Target Weights	Transaction Costs
1	Goldman Sachs Copper Index	15%	0.01%
2	Goldman Sachs Nickel Index	10%	0.03%
3	Goldman Sachs Aluminum Index	5%	0.01%
4	Goldman Sachs Steel Scrap Index	1%	0.5%
5	Goldman Sachs Zinc Index	2.5%	0.01%
6	Goldman Sachs Silver Index	12%	0.02%
7	Goldman Sachs Platinum Index	7%	0.03%
8	Goldman Sachs Palladium Index	7%	0.05%
9	Goldman Sachs Chicago Ethanol Index	10%	0.15%
10	Goldman Sachs EUA Index	15%	0.05%
11	Goldman Sachs California Carbon Allowance (CCA) Index	7.5%	0.5%
12	Goldman Sachs Shanghai Pulp Index	8%	0.3%



3. REBALANCE

3.1. ORDINARY REBALANCE

The weights of the INDEX COMPONENTS will be adjusted one day prior the REBALANCE DAY after CLOSE OF BUSINESS.

This is carried out by implementing the weights as outlined in Section 2.3.

3.2. EXTRAORDINARY REBALANCE

The INDEX is not rebalanced extraordinarily.

4. CALCULATION OF THE INDEX

4.1. INDEX FORMULA

The Net Index Level for any CALCULATION DAY t , denoted $Index_t^{net}$, is determined in accordance with the following formula, where $Index_0^{net} = 100$:

$$Index_t^{net} = \sum_{i=1}^{12} Price_{i,t} \times NOSH_{i,R} + cash_pocket_t$$

With:

$Price_{i,t}$: The price as of CALCULATION DAY t for INDEX COMPONENT i

$NOSH_{i,R}$: The number of shares for INDEX COMPONENT i as of REBALANCE DAY R

$cash_pocket_t$: The cash pocket for the index, that includes the Management Fee, Transaction Costs and Rebalancing Costs.

The number of shares are determined on the START DATE and after close of business on the REBALANCE DAY. On the START DATE, the number of shares are determined according to the following formula:

$$NOSH_{i,StartDate} = \frac{w_{i,StartDate} \times 100}{Price_{i,StartDate}}$$

Where:

$w_{i,StartDate}$: The weight of INDEX COMPONENT i as of the CALCULATION DAY immediately preceding the START DATE.



$Price_{i,StartDate}$: The price as of the START DATE for INDEX COMPONENT i.

Following the START DATE, the number of shares are determined after close of business on the REBALANCE DAY according to the following formula:

$$NOSH_{i,R} = \frac{w_{i,R} \times Index_{R-1}^{net}}{Price_{i,R-1}}$$

Where:

$w_{i,R}$: The target weight of INDEX COMPONENT i as of the CALCULATION DAY immediately preceding the REBALANCE DAY R.

$Price_{i,R-1}$: The price as of one index calculation day prior the REBALANCE DAY R for INDEX COMPONENT i.

$Index_{R-1}^{net}$: The Net Index Level as of one index calculation day prior the REBALANCE DAY R.

The cash pocket for any CALCULATION DAY t, denoted $cash_pocket_t$, is determined in accordance to the following formula, where $cash_pocket_0 = 0$:

$$cash_pocket_t = cash_pocket_{t-1} - mgm_{fee} \times \frac{DCF(t, t-1)}{360} - rebal_cost_t + flow_rebal_t$$

With:

$$rebal_cost_t = \begin{cases} \sum_{i=1}^{12} Price_{i,t} \times abs(NOSH_{i,t} - NOSH_{i,t-1}) \times TC_i, & \text{if } t \text{ is a Rebalance Day} \\ 0, & \text{otherwise} \end{cases}$$

And

$$flow_rebal_t = \begin{cases} \sum_{i=1}^{12} -(NOSH_{i,t} - NOSH_{i,t-1}) \times Price_{i,t}, & \text{if } t \text{ is a Rebalance Day} \\ 0, & \text{otherwise} \end{cases}$$

Where:

mgm_fee : Active Management fee depends on the current market situation given by following table:

Date	Mgm_fee
2007-09-07	0.5%
Live Date	0.68%

The Active Management Fee will be used from the given date onwards until the Active Management Fee changes for a future date given in the table.



$DCF(t, t - 1)$: Is a day-count fraction defined as the number of calendar days between Index t and $t - 1$.

$rebal_cost_t$: Rebalancing cost as of CALCULATION DAY t .

TC_i : Transaction Costs for INDEX COMPONENT i given by section 2.3.

$flow_rebal_t$: Flow as of rebalancing date index on CALCULATION DAY t .

4.2. ACCURACY

The level of the INDEX will be rounded to 4 decimal places.

4.3. RECALCULATION

SOLACTIVE makes the greatest possible efforts to accurately calculate and maintain its indices. However, errors in the determination process may occur from time to time for variety reasons (internal or external) and therefore, cannot be completely ruled out. SOLACTIVE endeavors to correct all errors that have been identified within a reasonable period of time. The understanding of "a reasonable period of time" as well as the general measures to be taken are generally depending on the underlying and is specified in the Solactive Correction Policy, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/correction-policy/>.

4.4. MARKET DISRUPTION

In periods of market stress SOLACTIVE calculates its indices following predefined and exhaustive arrangements as described in the Solactive Disruption Policy, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/disruption-policy/>. Such market stress can arise due to a variety of reasons, but generally results in inaccurate or delayed prices for one or more INDEX COMPONENTS. The determination of the INDEX may be limited or impaired at times of illiquid or fragmented markets and market stress.



5. MISCELLANEOUS

5.1. DISCRETION

Any discretion which may need to be exercised in relation to the determination of the INDEX (for example the determination of the INDEX UNIVERSE (if applicable), the selection of the INDEX COMPONENTS (if applicable) or any other relevant decisions in relation to the INDEX) shall be made in accordance with strict rules regarding the exercise of discretion or expert judgement.

5.2. METHODOLOGY REVIEW

The methodology of the INDEX is subject to regular review, at least annually. In case a need of a change of the methodology has been identified within such review (e.g. if the underlying market or economic reality has changed since the launch of the INDEX, i.e. if the present methodology is based on obsolete assumptions and factors and no longer reflects the reality as accurately, reliably and appropriately as before), such change will be made in accordance with the Solactive Methodology Policy, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/methodology-policy/>.

Such change in the methodology will be announced on the SOLACTIVE website under the Section "[Announcement](https://www.solactive.com/news/announcements/)", which is available at <https://www.solactive.com/news/announcements/>. The date of the last amendment of this INDEX is contained in this GUIDELINE.

5.3. CHANGES IN CALCULATION METHOD

The application by the INDEX ADMINISTRATOR of the method described in this document is final and binding. The INDEX ADMINISTRATOR shall apply the method described above for the composition and calculation of the INDEX. However, it cannot be excluded that the market environment, supervisory, legal and financial or tax reasons may require changes to be made to this method. The INDEX ADMINISTRATOR may also make changes to the terms and conditions of the INDEX and the method applied to calculate the INDEX that it deems to be necessary and desirable in order to prevent obvious or demonstrable error or to remedy, correct or supplement incorrect terms and conditions. The INDEX ADMINISTRATOR is not obliged to provide information on any such modifications or changes. Despite the modifications and changes, the INDEX ADMINISTRATOR will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.

5.4. TERMINATION

SOLACTIVE makes the greatest possible efforts to ensure the resilience and continued integrity of its indices over time. Where necessary, SOLACTIVE follows a clearly defined and transparent procedure to adapt Index



methodologies to changing underlying markets (see Section 5.2 “Methodology Review”) in order to maintain continued reliability and comparability of the indices. Nevertheless, if no other options are available the orderly cessation of the INDEX may be indicated. This is usually the case when the underlying market or economic reality, which an index is set to measure or to reflect, changes substantially and in a way not foreseeable at the time of inception of the index, the index rules, and particularly the selection criteria, can no longer be applied coherently or the index is no longer used as the underlying value for financial instruments, investment funds and financial contracts.

SOLACTIVE has established and maintains clear guidelines on how to identify situations in which the cessation of an index is unavoidable, how stakeholders are to be informed and consulted and the procedures to be followed for a termination or the transition to an alternative index. Details are specified in the Solactive Termination Policy, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/termination-policy/>.

5.5. OVERSIGHT

An oversight committee composed of staff from SOLACTIVE and its subsidiaries (the “OVERSIGHT COMMITTEE”) is responsible for decisions regarding any amendments to the rules of the INDEX. Any such amendment, which may result in an amendment of the GUIDELINE, must be submitted to the OVERSIGHT COMMITTEE for prior approval and will be made in compliance with the Methodology Policy, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/methodology-policy/>.



6. DEFINITIONS

"BENCHMARK REGULATION" shall have the meaning as defined in Section "Introduction".

"BMR" shall have the meaning as defined in Section "Introduction".

"BUSINESS DAY" is a day on which the Reference Exchange given in Section 1.2 is scheduled to open for a trading session in respect of the Futures Expiries of the relevant Futures Series, including days for which the Reference Exchange has scheduled shortened trading hours.

"CALCULATION DAY" is every weekday from Monday to Friday. A day on which the New York Mercantile Exchange is not open for general business is not a CALCULATION DAY.

"CLOSE OF BUSINESS" is the calculation time of the closing level of the INDEX as outlined in Section 1.4.

The "CLOSING PRICE" in respect of an INDEX COMPONENT and a TRADING DAY is a security's final regular-hours TRADING PRICE published by the EXCHANGE and determined in accordance with the EXCHANGE regulations. If the EXCHANGE has no or has not published a CLOSING PRICE in accordance with the EXCHANGE rules for an INDEX COMPONENT, the last TRADING PRICE will be used.

"REFERENCE EXCHANGE" is with respect to the INDEX and every INDEX COMPONENT, the respective exchange where the INDEX COMPONENT has its listing as determined in accordance with the rules in Section 2.

"GUIDELINE" shall have the meaning as defined in Section "Introduction".

"INDEX" shall have the meaning as defined in Section "Introduction".

"INDEX ADMINISTRATOR" shall have the meaning as defined in Section "Introduction".

"INDEX COMPONENT" is each security reflected in the INDEX.

"UNDERLYING COMPONENT" shall have the meaning as defined in Section 2.2.

"INDEX COMPONENT REQUIREMENTS" shall have the meaning as defined in Section 2.2.

"INDEX CURRENCY" is the currency specified in the column "Currency" in the table in Section 1.2.

"LIVE DATE" shall have the meaning as defined in Section 1.3.

"OVERSIGHT COMMITTEE" shall have the meaning as defined in Section 5.5.

"REBALANCE DAY" is the last business day in January, April, July and October where every Reference Exchanges and New York Mercantile Exchange are open for business.

"SOLACTIVE" shall have the meaning as defined in Section "Introduction".

"START DATE" shall have the meaning as defined in Section 1.3.

"TRADING DAY" is with respect to an INDEX COMPONENT included in the INDEX at the REBALANCE DAY and every INDEX COMPONENT included in the INDEX at the CALCULATION DAY immediately following the REBALANCE DAY (for clarification: this provision is intended to capture the TRADING DAYS for the securities to be included in the INDEX as new INDEX COMPONENTS with close of trading on the relevant EXCHANGE on the REBALANCE DAY) a day



on which the relevant EXCHANGE is open for trading (or a day that would have been such a day if a market disruption had not occurred), excluding days on which trading may be ceased prior to the scheduled EXCHANGE closing time and days on which the EXCHANGE is open for a scheduled shortened period. The INDEX ADMINISTRATOR is ultimately responsible as to whether a certain day is a TRADING DAY.

The "TRADING PRICE" in respect of an INDEX COMPONENT and a TRADING DAY is the most recent published price at which the INDEX COMPONENT was traded on the respective EXCHANGE.

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