INDEX METHODOLOGY



# MSCI SELECT COMMODITY PRODUCERS INDEXES

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## 1 INTRODUCTION

The MSCI Select Commodity Producers Indexes are custom market capitalization weighted indexes based on the MSCI ACWI Investable Market Index (IMI). The indexes aim to capture the performance of securities of companies primarily involved in the production of commodities. MSCI currently calculates the following MSCI Select Commodity Producers Indexes:

- MSCI ACWI Select Energy Producers Investable Market Index
- MSCI ACWI Select Agriculture Producers Investable Market Index
- MSCI ACWI Select Metals & Mining Producers Ex Gold and Silver Investable Market
  Index
- MSCI ACWI Select Gold Miners Investable Market Index
- MSCI ACWI Select Silver Miners Investable Market Index

MSCI ACWI IMI is a global equity index consisting of developed and emerging market countries across the large, mid and small cap size-segments. For more information, please visit our web site at

<u>http://www.msci.com/products/indexes/country\_and\_regional/all\_country/methodology.html</u>.



# 2 CONSTRUCTING THE MSCI SELECT COMMODITY PRODUCERS INDEXES

#### 2.1 UNDERLYING UNIVERSE

The underlying universe for the MSCI Select Commodity Producers Indexes is the MSCI ACWI IMI.

#### 2.2 MSCI ACWI SELECT ENERGY PRODUCERS INVESTABLE MARKET INDEX

The MSCI ACWI Select Energy Producers Investable Market Index is free float-adjusted market capitalization weighted.

Constituents of the MSCI ACWI IMI classified under the eligible sub-industries based on the Global Industry Classification Standard (GICS<sup>®</sup>) and fulfilling the additional screening criteria, as described in the table below, are included in the MSCI ACWI Select Energy Producers Investable Market Index.

Eligible GICS <sup>®</sup> Code	Eligible GICS <sup>°</sup> Sub- Industry	Description	Additional Screening Criteria
10102010	Integrated Oil & Gas	Integrated oil companies engaged in the exploration & production of oil and gas, as well as at least one other significant activity in either refining, marketing and transportation, or chemicals.	Companies that derive a majority of their revenues from marketing, storage and/or transportation of oil and gas are not included. Companies that do not separately disclose refining revenues from downstream components are included. Companies primarily involved in alternative fuels are not included.
10102020	Oil & Gas Exploration & Production	Companies engaged in the exploration and production of oil and gas not classified elsewhere.	No additional screening



10102030	Oil & Gas Refining & Marketing	Companies engaged in the refining and marketing of oil, gas and/or refined products not classified in the Integrated Oil & Gas or Independent Power Producers & Energy Traders Sub-Industries.	Companies that derive a majority of their revenues from marketing, storage and/or transportation of oil and gas are not included. Companies that do not separately disclose refining revenues from downstream components are included. Companies primarily involved in alternative fuels are not included.
10102050	Coal & Consumable Fuels	Companies primarily involved in the production and mining of coal, related products and other consumable fuels related to the generation of energy. Excludes companies primarily producing gases classified in the Industrial Gases sub-industry and companies primarily mining for metallurgical (coking) coal used for steel production.	No additional screening



#### 2.3 MSCI ACWI SELECT AGRICULTURE PRODUCERS INVESTABLE MARKET INDEX

The MSCI ACWI Select Agriculture Producers Investable Market Index is free float-adjusted market capitalization weighted.

Constituents of the MSCI ACWI IMI classified under the eligible sub-industries based on GICS<sup>®</sup> and fulfilling the additional screening criteria, as described in the table below, are included in the MSCI ACWI Select Agriculture Producers Investable Market Index.

Eligible GICS® Code	Eligible GICS® Sub- Industry	Description	Additional Screening Criteria
15101030	Fertilizers & Agricultural Chemicals	Producers of fertilizers, pesticides, potash or other agriculture-related chemicals not classified elsewhere.	No additional screening
20106015	Agricultural & Farm Machinery	Companies manufacturing agricultural machinery, farm machinery, and their related parts. Includes machinery used for the production of crops and agricultural livestock, agricultural tractors, planting and fertilizing machinery, fertilizer and chemical application equipment, and grain dryers and blowers	No additional screening
30202010	Agricultural Products	Producers of agricultural products. Includes crop growers, owners of plantations and companies that produce and process foods but do not package and market them. Excludes companies classified in the Forest Products Sub-Industry and those that package and market the food products classified in the Packaged Foods Sub-Industry.	No additional screening



30202030	Packaged Foods & Meats	Producers of packaged foods including dairy products, fruit juices, meats, poultry, fish and pet foods.	Only companies that derive the majority of their revenues from the packaging and marketing of agricultural products they produce are included, based on the following guidelines:
			<ul> <li>Poultry and Livestock: companies are included only if they are significantly involved in the breeding of animals by themselves or through contract farming.</li> </ul>
			<ul> <li>Dairy: manufacturers of milk and milk products like cheese, yogurt etc. are not included.</li> </ul>
			• Sugar: manufacturers of sugar are included even if they did not farm sugarcane. Companies selling sweeteners, sugar free, syrups, etc. are not included.
			<ul> <li>Edible Oil: companies processing the edible oil without cultivating the plantation are not included.</li> </ul>
			<ul> <li>Confectionaries and Snacks: manufacturers of finished products are not included.</li> </ul>
			<ul> <li>Coffee: coffee companies are not included.</li> </ul>
			<ul> <li>Fishing: fishing companies are included.</li> </ul>

#### 2.4 MSCI ACWI SELECT METALS & MINING PRODUCERS EX GOLD AND SILVER INVESTABLE MARKET INDEX

The MSCI ACWI Select Metals & Mining Producers Ex Gold and Silver Investable Market Index is free float-adjusted market capitalization weighted.

Constituents of the MSCI ACWI IMI classified under the eligible sub-industries based on GICS<sup>®</sup> and fulfilling the additional screening criteria, as described in the table below, are included in the MSCI ACWI Select Metals & Mining Producers Ex Gold and Silver Investable



Market Index. In addition, all constituents of the MSCI ACWI Select Gold Miners Investable Market Index and the MSCI ACWI Select Silver Miners Investable Market Index are not included.

Eligible GICS <sup>®</sup> Code	Eligible GICS <sup>®</sup> Sub- Industry	Description	Additional Screening Criteria
15104010	Aluminum	Producers of aluminum and related products, including companies that mine or process bauxite and companies that recycle aluminum to produce finished or semi-finished products. Excludes companies that primarily produce aluminum building materials classified in the Building Products Sub-Industry.	No additional screening
15104020	Diversified Metals & Mining	Companies engaged in the diversified production or extraction of metals and minerals not classified elsewhere. Including, but not limited to, nonferrous metal mining (except bauxite), salt and borate mining, phosphate rock mining and diversified mining operations. Excludes iron ore mining, classified in the Steel Sub- Industry and bauxite mining, classified in the Aluminum Sub-Industry, and coal mining, classified in either the Steel or Coal & Consumable Fuels Sub-Industries.	No additional screening
15104040	Precious Metals & Minerals	Companies mining precious metals and minerals not classified in the Gold Sub-Industry. Includes companies primarily mining platinum.	Only companies that derive less than 50% of their revenues from gold mining or silver mining are included.
15104050	Steel	Producers of iron and steel and related products, including metallurgical (coking) coal mining used for steel production.	No additional screening



#### 2.5 MSCI ACWI SELECT GOLD MINERS INVESTABLE MARKET INDEX

The MSCI ACWI Select Gold Miners Investable Market Index is weighted based on the MSCI 25/50 Indexes methodology. For a description of the MSCI 25/50 Index methodology, please refer to http://www.msci.com/products/indexes/strategy/capped/twentyfive fifty/

Constituents of the MSCI ACWI IMI classified under the eligible sub-industries based on GICS<sup>®</sup> and fulfilling the additional screening criteria, as described in the table below, are included in the selection universe.

Eligible GICS <sup>°</sup> Code	Eligible GICS <sup>°</sup> Sub- Industry	Description	Additional Criteria for Inclusion in the Selection Universe
15104030	Gold	Producers of gold and related products, including companies that mine or process gold and the South African finance houses which primarily invest in, but do not operate, gold mines.	Companies which primarily invest in but do not operate gold mines are not included. Companies that do not generate any revenues from gold production are not included. See below for additional criteria for inclusion in the Index.
15104040	Precious Metals & Minerals	Companies mining precious metals and minerals not classified in the Gold Sub-Industry. Includes companies primarily mining platinum.	Only companies that generate revenues of which at least 50% are from gold mining are included. See below for additional criteria for inclusion in the Index.

From the selection universe, all companies which state as a general policy that they do not hedge their exposure to gold prices are included, as long as no indication of hedging activities is found in their annual reports or such hedging activities are nevertheless identified but represent less than 10% of the business (step 1).

If after including the securities based on the above criteria the number of constituents is less than 30, further securities from the selection universe are included until the index has reached 30 constituents in the following order of priority:

• Step 2: Securities of companies that state as a general policy that they do not hedge their exposure to gold prices but for which indications of hedging activities can nevertheless be identified in their annual reports, as long as the proportion of hedging



cannot be quantified (securities are added in descending order of free float-adjusted market capitalization).

- Step 3: Securities of companies that state as a general policy that they do not hedge their exposure to gold prices but for which indications of hedging activities greater than 10% can nevertheless be identified in their annual reports (securities are added in ascending order of percentage hedged).
- Step 4: Securities of companies that state as a general policy that they hedge their exposure to gold prices and for which the proportion of such hedging can be quantified (securities are added in ascending order of percentage hedged).
- Step 5: Securities of companies that state as a general policy that they hedge their exposure to gold prices and for which the proportion of such hedging cannot be quantified (securities are added in descending order of free float-adjusted market capitalization)

If after applying these steps the number of constituents is less than 30, further securities outside the selection universe are included until the index has reached 30 constituents in the following order of priority:

- Step 6: Securities of companies classified under GICS 15104030 Gold that do not generate revenues from gold but are involved in gold exploration (securities are added in descending order of free float-adjusted market capitalization).
- Step 7: Securities of companies classified under GICS 15104040 Precious Metals & Minerals that do not generate revenues from gold but are involved in gold exploration (securities are added in descending order of free float-adjusted market capitalization).
- Step 8: Constituents of the MSCI World Micro Cap Index classified under GICS 15104030

   Gold (securities are added in descending order of free float-adjusted market capitalization).

If the number of constituents after applying the above remains below 30, the Index will only include the resulting constituents.

At subsequent Semi-Annual Index Reviews, all eligible securities are assigned to a step, as defined above, and securities are selected for inclusion as follows:

- All securities assigned to step 1 are included in the index.
- If the resulting number of constituents is less than 30, securities assigned to steps 2 to 5 are selected in the order of priority defined above until the index has reached 30 constituents. Current constituents of the index that are assigned to the same step as the



30<sup>th</sup> security selected are maintained in the index while securities assigned to subsequent steps are deleted.

- If the number of constituents is still less than 30, securities assigned to steps 6 to 8 are selected in the order of priority defined above until the index has reached 30 constituents. All remaining current constituents of the index that have not been selected are deleted from the index.
- If the number of constituents after applying step 8 remains below 30, the Index will only include the resulting constituents.

#### 2.6 MSCI ACWI SELECT SILVER MINERS INVESTABLE MARKET INDEX

The MSCI ACWI Select Silver Miners Investable Market Index is weighted based on the MSCI 25/50 Indexes methodology. For a description of the MSCI 25/50 Index methodology, please refer to <a href="http://www.msci.com/products/indexes/strategy/capped/twentyfive">http://www.msci.com/products/indexes/strategy/capped/twentyfive</a> fifty/.

Constituents of the MSCI ACWI IMI classified under the eligible sub-industry based on GICS<sup>®</sup>, as described in the table below, are included in the MSCI ACWI Select Silver Miners Investable Market Index

Eligible GICS <sup>®</sup> Code	Eligible GICS <sup>®</sup> Sub- Industry	Description
15104045	Silver	Companies primarily mining silver. Excludes companies classified in the Gold or Precious Metals and Minerals Sub-Industries.

If after including the securities based on the above criteria (step 1) the number of constituents is less than 30, further securities from an additional selection universe are included until the index has reached 30 constituents. Constituents of the MSCI ACWI IMI classified under the eligible sub-industries based on GICS<sup>®</sup>, as described in the table below, are included in the additional selection universe.



Eligible GICS <sup>®</sup> Code	Eligible GICS <sup>®</sup> Sub- Industry	Description
15104030	Gold	Producers of gold and related products, including companies that mine or process gold and the South African finance houses which primarily invest in, but do not operate, gold mines.
15104040	Precious Metals & Minerals	Companies mining precious metals and minerals not classified in the Gold Sub-Industry. Includes companies primarily mining platinum.

Securities from the additional selection universe are included until the index has reached 30 constituents in the following order of priority:

- Step 2: Securities of companies classified under GICS 15104040 Precious Metals & Minerals and generating at least 25% of their revenues from silver (securities are added in descending order of percentage of revenues generated from silver).
- Step 3: Securities of companies classified under GICS 15104030 Gold and generating at least 25% of their revenues from silver (securities are added in descending order of percentage of revenues generated from silver).
- Step 4: Securities of companies classified under GICS 15104040 Precious Metals & Minerals not generating revenues but involved in silver mining exploration (securities are added in descending order of free float-adjusted market capitalization).
- Step 5: Securities of companies classified under GICS 15104030 Gold not generating revenues but involved in silver mining exploration (securities are added in descending order of free float-adjusted market capitalization).

If after applying these steps the number of constituents is less than 30, further securities outside the selection universe are included until the index has reached 30 constituents in the following order of priority:

- Step 6: Constituents of the MSCI World Micro Cap Index classified under GICS 15104045 – Silver.
- Step 7: Constituents of the MSCI World Micro Cap Index classified under GICS 15104040

   Precious Metals & Minerals provided the company generates at least 50% of its revenues from silver mining (securities are added in descending order of free float-adjusted market capitalization).



- Step 8: Constituents of the MSCI World Micro Cap Index classified under GICS 15104040

   Precious Metals & Minerals provided the company generates at least 25% of its revenues from silver mining (securities are added in descending order of free float-adjusted market capitalization).
- Step 9: Constituents of the MSCI World Micro Cap Index classified under GICS 15104040

   Precious Metals & Minerals not generating revenues but involved in silver mining exploration (securities are added in descending order of free float-adjusted market capitalization).

If after applying these steps the number of constituents is less than 30, further securities from the selection universe are included until the index has reached 30 constituents in the following order of priority:

- Step 10: Securities of companies classified under GICS 15104040 Precious Metals & Minerals and generating at least 10% of their revenues from silver (securities are added in descending order of percentage of revenues generated from silver).
- Step 11: Securities of companies classified under GICS 15104030 Gold and generating at least 10% of their revenues from silver (securities are added in descending order of percentage of revenues generated from silver).

If the number of constituents after applying the above remains below 30, the Index will only include the resulting constituents.

At subsequent Semi-Annual Index Reviews, all eligible securities are assigned to a step, as defined above, and securities are selected for inclusion as follows:

- All securities assigned to step 1 are included in the index.
- If the resulting number of constituents is less than 30, securities assigned to steps 2 to 5 are selected in the order of priority defined above until the index has reached 30 constituents. Current constituents of the index that are assigned to the same step as the 30<sup>th</sup> security selected are maintained in the index while securities assigned to subsequent steps are deleted.
- If the number of constituents is still less than 30, securities assigned to steps 6 to 11 are selected in the order of priority defined above until the index has reached 30 constituents. All remaining current constituents of the index that have not been selected are deleted from the index.
- If the number of constituents after applying step 11 remains below 30, the Index will only include the resulting constituents.



## 3 MAINTAINING THE MSCI SELECT COMMODITY PRODUCERS INDEXES

#### 3.1 SEMI-ANNUAL INDEX REVIEWS

The MSCI Select Commodity Producers Indexes are fully reviewed on a semi-annual basis, coinciding with the May and November Semi-Annual Index Reviews of the MSCI Global Investable Market Indexes. The changes are implemented as of the close of the last business day of May and November.

At the Semi-Annual Index Reviews, all companies in the underlying universe are reviewed for inclusion in the MSCI Select Commodity Producers Indexes based on the criteria described under section 3. The cutoff date to define the universe of securities to review is the price cutoff date used for MSCI Global Investable Market Indexes, which is generally any one of the last 10 business days of April and October for the May and November Semi-Annual Index Reviews, respectively.

#### 3.2 QUARTERLY INDEX REVIEWS

On a quarterly basis, coinciding with the February and August Quarterly Index Reviews of the MSCI Global Investable Market Indexes, all additions to the MSCI ACWI IMI since the previous Semi-Annual Index Review are reviewed for inclusion based on the criteria described under section 3.

All deletions from the MSCI ACWI IMI as well as companies re-classified from an eligible subindustry to an ineligible sub-industry are deleted from the MSCI Select Commodity Producers Indexes.

The cutoff date to define the universe of securities to review is the price cutoff date used for MSCI Global Investable Market Indexes, which is generally any one of the last 10 business days of January and July for the February and August Quarterly Index Reviews, respectively.

#### 3.3 ONGOING EVENT-RELATED MAINTENANCE

The MSCI Corporate Events methodology is applied for the maintenance of the MSCI Select Commodity Producers Indexes. The details relating to the handling of specific corporate event types can be found in the MSCI Corporate Events methodology book available at: <u>http://www.msci.com/products/indexes/size/standard/methodology.html</u>

Companies deleted from the MSCI ACWI IMI in between the Index Reviews will be simultaneously deleted from the MSCI Select Commodity Producers Indexes.

Companies added to the MSCI ACWI IMI in between the Index Reviews (e.g., IPOs, spun off securities) and classified in an eligible non screened sub-industry will be added to the



relevant MSCI Select Commodity Producers Index. Additions to the MSCI ACWI IMI classified in an eligible screened sub-industry will not be added to the MSCI Select Commodity Producers Indexes and will be reviewed at the following Index Review.

In addition, the treatment for changes in GICS classification in between the Index Reviews is detailed below:

Index	Treatment
Existing constituent re-classified to an ineligible sub- industry	Security is deleted from the Index
Existing constituent re-classified to an eligible non screened sub-industry	Security is maintained in the Index
Existing constituent re-classified from an eligible non- screened sub-industry to an eligible screened sub- industry	Security is deleted from the Index
Existing constituent re-classified from an eligible screened sub-industry to another eligible screened sub-industry	Security is maintained in the Index
Non constituent re-classified to an eligible non- screened sub-industry	Security is added to the Index
Non constituent re-classified to an eligible screened sub-industry	Security is not added to the Index

The list of eligible sub-industries and whether they require additional screening is summarized below:

Index	Additional Screening Not Required	Additional Screening Required
MSCI ACWI Select Energy Producers Investable Market Index	10102020 – Oil & Gas Exploration & Production 10102050 - Coal & Consumable Fuels	10102010 - Integrated Oil & Gas 10102030 - Oil & Gas Refining & Marketing
MSCI ACWI Select Agriculture Producers Investable Market Index	15101030 - Fertilizers & Agricultural Chemicals 20106015 – Agricultural & Farm Machinery 30202010 – Agricultural Products	30202030 - Packaged Foods & Meats



MSCI ACWI Select Metals & Mining Producers Ex Gold and Silver Investable Market Index	15104010 – Aluminum 15104020 - Diversified Metals & Mining 15104050 – Steel	15104040 - Precious Metals & Minerals
MSCI ACWI Select Gold Miners Investable Market Index		15104030 – Gold 15104040 – Precious Metals & Minerals
MSCI ACWI Select Silver Miners Investable Market Index	15104045 - Silver	15104030 – Gold 15104040 - Precious Metals & Minerals

#### 3.4 MAINTENANCE OF THE 25/50 CAPPING

The maintenance of the 25/50 capping for the MSCI ACWI Select Gold Miners Investable Market Index and the MSCI ACWI Select Silver Miners Investable Market Index is based on the MSCI 25/50 Index methodology. For a description of the MSCI 25/50 Index methodology, please refer to

http://www.msci.com/eqb/methodology/meth\_docs/MSCI\_Feb14\_25\_50\_Indices\_Method\_ology.pdf.



#### The following sections have been modified since January 2014:

Section 3.4: MSCI ACWI Select Gold Miners Investable Market Index

Clarification of MSCI ACWI Select Gold Miners Investable Market Index construction rules

Section 3.5: MSCI ACWI Select Silver Miners Investable Market Index

Clarification of MSCI ACWI Select Silver Miners Investable Market Index construction rules

Section 4.3: Ongoing Event-Related Maintenance

• Addition of treatment for changes in GICS classification in between the Index Reviews

Section 4.4: Maintenance of the 25/50 Capping

• Updated link for MSCI 25/50 Index methodology



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