

WisdomTree Rules-Based Commodity Index Family Methodology

Effective 15 January 2025

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WisdomTree Energy Transition Metals Commodity Index

1. Index Overview and Description

The WisdomTree Energy Transition Metals Commodity Index [referred to as “the Index”] is designed to track the performance of a diversified basket of commodities that are associated with energy transition themes. The Index was developed by WisdomTree, Inc. (“WTI”), in collaboration with third party specialists in the energy transition space.

The Index is reconstituted on a semi-annual basis in January and July. Excess and Total Return versions of the Index are calculated and published.

2. Key Features

2.1 Membership Criteria

The universe of eligible commodities will be determined based upon the criteria listed below:

- To be eligible for inclusion in the Index, component commodities must be under coverage by the third-party specialists in energy transition and are associated with the energy transition themes, which include, but are not limited to Electric Vehicles, Transmission, Charging, Energy Storage, Solar, Wind, and Hydrogen.
- Commodities that are listed on one or more eligible futures exchanges and can be priced by the third-party independent index calculation agent.
- Commodities that have an active and liquid trading market, i.e., the commodity needs to have minimum \$15 million in terms of the average daily trading volume and / or open interests on the commodity futures contracts.

The Index assesses the exposure and growth metrics for each commodity within the usage in energy transition solutions:

- Exposure: this measures the amount of consumption in energy transition solutions versus the total production for each commodity.
- Growth: this measures the 3-year estimated forward consumption versus the current consumption within the energy transition solutions for each commodity.

Each component commodity receives an Energy Transition Demand rating, which is calculated as the 3-year estimated consumption within energy transition divided by the current total consumption and being rescaled to the range 0-1.

Each component commodity also receives a Market Balance rating, which is calculated as the average of the estimated surplus or deficit supply of each metal divided by the annual total consumption over the 2 years, and being rescaled to the range 0-1.

For each component commodity, the Intensity Rating is calculated as 2/3 of Energy Transition Demand rating plus 1/3 of Market Balance rating.

Eligible commodities are selected based on the representativeness of the energy transition themes and liquidity criteria as described above. The current selected commodities are defined in Section 2.2 Index Components.

2.2 Index Components

Exposure to each selected commodity is achieved through investment in the relevant BNP Paribas Rolling Futures B0 (or N0) Commodity Indices. The Index will review the eligible indices from time to time and might add sub-indices on additional commodities from other index providers to the Index Components list.

Standard future based commodity Indices are comprised of commodity futures contracts. A commodity future contract is an agreement either to buy or sell a set amount of a physical commodity at a predetermined price for delivery within a predetermined delivery period (which is generally referred to as a “delivery month”). In order to avoid the delivery process and maintain a long futures position, contracts nearing delivery must be sold and replaced by the purchase of contracts that have not yet reached the delivery period. This process is known as the “roll” and consists in “rolling” the current futures position into the future contracts with the nearest delivery (the front month contract).

The BNP Paribas Rolling Futures B0 (or N0) Commodity Indices implement a standard roll methodology to get the exposure to front-months futures contracts for the relevant commodities. The details of the methodology can be found at <https://indx.bnpparibas.com/>

Index Components	Bloomberg Ticker	RIC Ticker	Commodity Exposure	Weight Cap	Rebalancing Cost
BNP Paribas Rolling Futures B0 LA Index	BNPIBOLA	.BNPIBOLA	Aluminum	100%	0%
BNP Paribas Rolling Futures B0 LX Index	BNPIBOLX	.BNPIBOLX	Zinc	100%	0%

BNP Paribas Rolling Futures B0 LN Index	BNPIB0LN	.BNPIB0LN	Nickel	100%	0%
BNP Paribas Rolling Futures B0 HG Index	BNPIB0HG	.BNPIB0HG	Copper	100%	0%
BNP Paribas Rolling Futures B0 SI Index	BNPIB0SI	.BNPIB0SI	Silver	100%	0%
BNP Paribas Rolling Futures B0 LT Index	BNPIB0LT	.BNPIB0LT	Tin	100%	0%
BNP Paribas Rolling Futures B0 LL Index	BNPIB0LL	.BNPIB0LL	Lead	100%	0%
BNP Paribas Rolling Futures B0 PL Index	BNPIB0PL	.BNPIB0PL	Platinum	100%	0%
BNP Paribas Rolling Futures N0 CV Index	BNPXN0CV	.BNPXN0CV	Cobalt	5%	5%
BNP Paribas Rolling Futures N0 LF Index	BNPXN0LF	.BNPXN0LF	Lithium	2%	5.5%

2.3 Base Date and Base Value

The Index was established with a base value of 200 on 14 January 2021.

2.4 Calculation and Dissemination

The Excess Return Index (ER Index)

The value of the Excess Return Index on any index calculation date t (IER_t) is calculated in accordance with the following formula:

$$IER_t = IER_{t-1} \times \left(1 + \sum_{i=1}^N W_{t-1}^i \times \left(\frac{IC_t^i}{IC_{t-1}^i} - 1 \right) - |W_{t-1}^i - DW_{t-1}^i| \times RC^i \right)$$

If t is an index rebalancing date:

$$W_t^i = TW_r^i$$

Otherwise,

$$W_t^i = \min(DW_t^i, cap^i)$$

And

$$DW_t^i = W_{t-1}^i \times \frac{IC_t^i}{IC_{t-1}^i} \times \frac{IER_{t-1}}{IER_t}$$

Where

W_t^i is the daily weight for Index Component i on the index calculation date t ;

DW_t^i is the drifted weight for Index Component i on the index calculation date t ;

cap^i is the weight cap for Index Component i ;

RC^i is the rebalancing cost for Index Component i ;

IC_t^i is the settlement value for Index Component i on the index calculation date t ;

N is the number of Index Components comprised in the Index;

r is the index rebalancing date immediately preceding t

TW_r^i is the target weight for Index Component i on the index calculation date t ;

The Total Return Index (TR Index)

The value of the Total Return Index on any index calculation date t (ITR_t) is calculated in accordance with the following formula:

$$ITR_t = ITR_{t-1} \times \left(\frac{IER_t}{IER_{t-1}} + DCY_t - 1 \right)$$
$$DCY_t = \left(1 + FFER_{t-1} \times \frac{NCD(t-1, t)}{360} \right)$$

Where

IER_t is the excess return index value on the index calculation date t ;

DCY_t is the daily cash collateral return on the index calculation date t ;

$NCD(t-1, t)$ is the number of calendar days between index calculation date $t-1$ and t ;

$FFER_t$ is the most recent Fed Funds Effective Rate (expressed as an annual rate) as published in Federal Reserve Statistical Release H.15 (519), or any successor page (or on the Bloomberg ticker: FEDL01 Index).

The Index is calculated on an end-of-day basis based on the settlement values of the Index components determined by the designated third-party calculation agent. Currently, the Index is calculated by Solactive AG.

2.5 Weighting

The Index is weighted by the Intensity Rating, i.e., the target weight of each metal reflects its proportional share based on the Intensity Rating. The maximum weight of each commodity is capped at 40% at the rebalance.

The Index weighting also takes into account each commodity's liquidity profile (i.e., in terms of the average daily trading volume and / or open interests), such that commodities with lower liquidity will be capped to ensure the overall implied liquidity of the Index.

Between index rebalances, commodities with lower liquidity will also be capped at the Weight Cap defined in Section 2.2, and subject to adjustments as described in Section 2.6

2.6 Index Maintenance

Index Maintenance includes monitoring and implementing the adjustments due to market disruption or other events. Those events might require adjustment for the Weight Cap and / or Rebalancing Cost for the calculation of Index levels to ensure the underlying Index Components are tradable for users of the Index. The treatment of such events is evaluated by the Index provider from qualitative and quantitative characteristics of each component commodity.

2.7 Index Reconstitution

The Index periodically adjusts Index constituents and weightings (i.e., Index Reconstitution) to reflect changes to the commodities within the energy transition themes. The Index reconstitutes / rebalances on a semi-annual basis in January and July, following the announcement and implementation process below.

Reconstitution Month: January and July.

Reconstitution Announcement Date: The Index provider announces the change of Index components and the target weights following the selection and weighting methodology described above, at least 10 business days before the Reconstitution Implementation Date.

Reconstitution Implementation Date: The addition / removal / re-weighting of the component commodity is implemented at the Index close on the 9th business day of the Reconstitution Month.

WisdomTree Battery Metals Commodity Index

1. Index Overview and Description

The WisdomTree Battery Metals Commodity Index [referred to as “the Index”] is designed to track the performance of a diversified basket of commodities that are associated with battery energy storage themes. The Index was developed by WisdomTree, Inc. (“WTI”), in collaboration with third party specialists in the battery energy storage space.

The Index is reconstituted on a semi-annual basis in January and July. Excess and Total Return versions of the Index are calculated and published

2. Key Features

2.1 Membership Criteria

The universe of eligible commodities will be determined based upon the criteria listed below:

- To be eligible for inclusion in the Index, component commodities must be under coverage by the third-party specialists in battery and are associated with the battery themes, which include, but are not limited to Electric Vehicles, Charging, and Energy Storage.
- Commodities that are listed on one or more eligible futures exchanges and can be priced by the third-party independent index calculation agent.
- Commodities that have an active and liquid trading market, i.e., the commodity needs to have minimum \$15 million in terms of the average daily trading volume and / or open interests on the commodity futures contracts.

The Index assesses the exposure and growth metrics for each commodity within the usage in battery solutions:

- Exposure: this measures the amount of consumption in battery energy storage solutions versus the total production for each commodity.
- Growth: this measures the 3-year estimated forward consumption versus the current consumption within the battery energy storage solutions for each commodity.

Each component commodity receives an Energy Transition Demand

rating, which is calculated as the 3-year estimated consumption within battery divided by the current total consumption and being rescaled to the range 0-1.

Each component commodity also receives a Market Balance rating, which is calculated as the average of the estimated surplus or deficit supply of each metal divided by the annual total consumption over the 2 years, and being rescaled to the range 0-1.

For each component commodity, the Intensity Rating is calculated as 2/3 of Energy Transition Demand rating plus 1/3 of Market Balance rating.

Eligible commodities are selected based on the representativeness of the battery themes and liquidity criteria as described above. The current selected commodities are defined in Section 2.2 Index Components.

2.2 Index Components

Exposure to each commodity is achieved through investment in the relevant BNP Paribas Rolling Futures B0 (or N0) Commodity Indices. The Index will review the eligible indices from time to time and might add sub-indices on additional commodities from other index providers to the Index Components list.

Standard future based commodity Indices are comprised of commodity futures contracts. A commodity future contract is an agreement either to buy or sell a set amount of a physical commodity at a predetermined price for delivery within a predetermined delivery period (which is generally referred to as a “delivery month”). In order to avoid the delivery process and maintain a long futures position, contracts nearing delivery must be sold and replaced by the purchase of contracts that have not yet reached the delivery period. This process is known as the “roll” and consists in “rolling” the current futures position into the future contracts with the nearest delivery (the front month contract).

The BNP Paribas Rolling Futures B0 (or N0) Commodity Indices implement a standard roll methodology to get the exposure to front-months futures contracts for the relevant commodities. The details of the methodology can be found at <https://indx.bnpparibas.com/>

Index Components	Bloomberg Ticker	RIC Ticker	Commodity Exposure	Weight Cap	Rebalancing Cost
BNP Paribas Rolling Futures B0 LA Index	BNPIBOLA	.BNPIBOLA	Aluminum	100%	0%
BNP Paribas Rolling Futures B0 LX Index	BNPIBOLX	.BNPIBOLX	Zinc	100%	0%
BNP Paribas Rolling Futures B0 LN Index	BNPIBOLN	.BNPIBOLN	Nickel	100%	0%

BNP Paribas Rolling Futures B0 HG Index	BNPIB0HG	.BNPIB0HG	Copper	100%	0%
BNP Paribas Rolling Futures B0 LL Index	BNPIB0LL	.BNPIB0LL	Lead	100%	0%
BNP Paribas Rolling Futures N0 CV Index	BNPXN0CV	.BNPXN0CV	Cobalt	5%	5%
BNP Paribas Rolling Futures N0 LF Index	BNPXN0LF	.BNPXN0LF	Lithium	2%	5.5%

2.3 Base Date and Base Value

The Index was established with a base value of 200 on 14 January 2021.

2.4 Calculation and Dissemination

The Excess Return Index (ER Index)

The value of the Excess Return Index on any index calculation date t (IER_t) is calculated in accordance with the following formula:

$$IER_t = IER_{t-1} \times \left(1 + \sum_{i=1}^N W_{t-1}^i \times \left(\frac{IC_t^i}{IC_{t-1}^i} - 1 \right) - |W_{t-1}^i - DW_{t-1}^i| \times RC^i \right)$$

If t is an index rebalancing date:

$$W_t^i = TW_r^i$$

Otherwise,

$$W_t^i = \min(DW_t^i, cap^i)$$

And

$$DW_t^i = W_{t-1}^i \times \frac{IC_t^i}{IC_{t-1}^i} \times \frac{IER_{t-1}}{IER_t}$$

Where

W_t^i is the daily weight for Index Component i on the index calculation date t ;

DW_t^i is the drifted weight for Index Component i on the index calculation date t ;

cap^i is the weight cap for Index Component i ;

RC^i is the rebalancing cost for Index Component i ;

IC_t^i is the settlement value for Index Component i on the index calculation date t ;

N is the number of Index Components comprised in the Index;

r is the index rebalancing date immediately preceding t

TW_r^i is the target weight for Index Component i on the index calculation date t ;

The Total Return Index (TR Index)

The value of the Total Return Index on any index calculation date t (ITR_t) is calculated in accordance with the following formula:

$$ITR_t = ITR_{t-1} \times \left(\frac{IER_t}{IER_{t-1}} + DCY_t - 1 \right)$$
$$DCY_t = \left(1 + FFER_{t-1} \times \frac{NCD(t-1, t)}{360} \right)$$

Where

IER_t is the excess return index value on the index calculation date t ;

DCY_t is the daily cash collateral return on the index calculation date t ;

$NCD(t-1, t)$ is the number of calendar days between index calculation date $t-1$ and t ;

$FFER_t$ is the most recent Fed Funds Effective Rate (expressed as an annual rate) as published in Federal Reserve Statistical Release H.15 (519), or any successor page (or on the Bloomberg ticker: FEDL01 Index).

The Index is calculated on an end-of-day basis based on the settlement values of the Index components determined by the designated third-party calculation agent. Currently, the Index is calculated by Solactive AG.

2.5 Weighting

The Index is weighted by the Intensity Rating, i.e., the target weight of each metal reflects its proportional share based on the Intensity Rating.

The maximum weight of each commodity is capped at 40% at the rebalance.

The Index weighting also takes into account each commodity's liquidity profile (i.e., in terms of the average daily trading volume and / or open interests), such that commodities with lower liquidity will be capped to ensure the overall implied liquidity of the Index.

Between index rebalances, commodities with lower liquidity will also be capped at the Weight Cap defined in Section 2.2, and subject to adjustments as described in Section 2.6

2.6 Index Maintenance

Index Maintenance includes monitoring and implementing the adjustments due to market disruption or other events. Those events might require adjustment for the Weight Cap and / or Rebalancing Cost for the calculation of Index levels to ensure the underlying Index Components are tradable for users of the Index. The treatment of such events is evaluated by the Index provider from qualitative and quantitative characteristics of each component commodity.

2.7 Index Reconstitution

The Index periodically adjusts Index constituents and weightings (i.e., Index Reconstitution) to reflect changes to the commodities within the energy transition themes. The Index reconstitutes / rebalances on a semi-annual basis in January and July, following the announcement and implementation process below.

Reconstitution Month: January and July,.

Reconstitution Announcement Date: The Index provider announces the change of Index components and the target weights following the selection and weighting methodology described above, at least 10 business days before the Reconstitution Implementation Date.

Reconstitution Implementation Date: The addition / removal / re-weighting of the component commodity is implemented at the Index close on the 9th business day of the Reconstitution Month.

WisdomTree Energy Transition Metals Commodity UCITS Index

1. Index Overview and Description

The WisdomTree Energy Transition Metals Commodity UCITS Index [referred to as “the Index”] is designed to track the performance of a diversified basket of metals commodities that are associated with energy transition themes, which include, but are not limited to, electric vehicles, transmission, charging, energy storage, solar, wind and hydrogen production. The Index was developed by WisdomTree, Inc. (“WTI”), in collaboration with third party specialists in the energy transition industry.

The Index is reconstituted on a semi-annual basis in January and July. Excess and Total Return versions of the Index are calculated and published.

2. Key Features

2.1 Membership Criteria

The universe of eligible commodities will be determined based upon the criteria listed below:

- To be eligible for inclusion in the Index, component commodities must be under coverage by the third-party specialists in energy transition and are associated with the energy transition themes, which include, but are not limited to Electric Vehicles, Transmission, Charging, Energy Storage, Solar, Wind, and Hydrogen.
- Commodities that are listed on one or more eligible futures exchanges and can be priced by the third-party independent index calculation agent.
- Commodities that have an active and liquid trading market, i.e., the commodity needs to have minimum \$15 million in terms of the average daily trading volume and / or open interests on the commodity futures contracts.

Eligible commodities are selected based on the representativeness of the energy transition themes and liquidity criteria as described above. The current selected commodities are defined in Section 2.2 Index Components

The Index assesses the exposure and growth metrics for each commodity within the usage in energy transition solutions:

- Exposure: this measures the amount of consumption in energy transition solutions versus the total production for each commodity.
- Growth: this measures the 3-year estimated forward consumption versus the current consumption within the energy transition solutions for each commodity.

Each component commodity receives an Energy Transition Demand rating, which is calculated as the 3-year estimated consumption within energy transition divided by the current total consumption and being rescaled to the range 0-1.

Each component commodity also receives a Market Balance rating, which is calculated as the average of the estimated surplus or deficit supply of each metal divided by the annual total consumption over the 2 years, and being rescaled to the range 0-1.

For each component commodity, the Intensity Rating is calculated as 2/3 of Energy Transition Demand rating plus 1/3 of Market Balance rating.

2.2 Index Components

Exposure to each selected commodity is achieved through investment in the relevant Rolling Futures Commodity Indices, as defined in the table below. The Index will review the eligible indices from time to time and might add sub-indices on additional commodities from other index providers to the Index Components list.

Standard future based commodity Indices are comprised of commodity futures contracts. A commodity future contract is an agreement either to buy or sell a set amount of a physical commodity at a predetermined price for delivery within a predetermined delivery period (which is generally referred to as a “delivery month”). In order to avoid the delivery process and maintain a long futures position, contracts nearing delivery must be sold and replaced by the purchase of contracts that have not yet reached the delivery period. This process is known as the “roll” and consists in “rolling” the current futures position into the future contracts with the nearest delivery (the front month contract).

The relevant Rolling Futures Commodity Indices implement a standard roll methodology to get the exposure to front-months futures contracts for the relevant commodities. The details of the methodology can be found at <https://merqube.com/indices> and <https://www.solactive.com/indices/>

Index Components	Bloomberg Ticker	Commodity Exposure	Weight	Rebalancing Cost
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			Cap ¹	
MerQube Aluminium Rolling Futures Index	MQCMLA	Aluminum	100%	0%
MerQube Zinc Rolling Futures Index	MQCMLX	Zinc	100%	0%
MerQube Nickel Rolling Futures Index	MQCMLN	Nickel	100%	0%
Solactive HG Copper Commodity Futures SL Index	SOLWSHG1	Copper	100%	0%
Solactive Silver Commodity Futures SL Index	SOLWSSI1	Silver	100%	0%
MerQube Tin Rolling Futures Index	MQCMLT	Tin	100%	0%
MerQube Lead Rolling Futures Index	MQCMLL	Lead	100%	0%
MerQube Platinum Rolling Futures Index	MQCMPL	Platinum	100%	0%
MerQube Cobalt Rolling Futures CT1 Index	MQCMFCV1	Cobalt	5%	5%
MerQube Lithium Rolling Futures CT1 Index	MQCMFLF1	Lithium	2%	5.5%

2.3 Base Date and Base Value

The Index was established with a base value of 200 on 12 January 2024.

2.4 Calculation and Dissemination

The Excess Return Index (ER Index)

The value of the Excess Return Index on any index calculation date t (IER_t) is calculated in accordance with the following formula:

$$IER_t = IER_{t-1} \times \left(1 + \sum_{i=1}^N W_{t-1}^i \times \left(\frac{IC_t^i}{IC_{t-1}^i} - 1 \right) - |W_{t-1}^i - DW_{t-1}^i| \times RC^i \right)$$

If t is an index rebalancing date:

$$W_t^i = TW_r^i$$

Otherwise,

¹ Weight caps are determined from time to time by the index provider based on market research gathered from financial institutions willing and able to provide swaps on the index

$$W_t^i = \min(DW_t^i, cap^i)$$

And

$$DW_t^i = W_{t-1}^i \times \frac{IC_t^i}{IC_{t-1}^i} \times \frac{IER_{t-1}}{IER_t}$$

Where

W_t^i is the daily weight for Index Component i on the index calculation date t ;

DW_t^i is the drifted weight for Index Component i on the index calculation date t ;

cap^i is the weight cap for Index Component i ;

RC^i is the rebalancing cost for Index Component i ;

IC_t^i is the settlement value for Index Component i on the index calculation date t ;

N is the number of Index Components comprised in the Index;

r is the index rebalancing date immediately preceding t

TW_r^i is the target weight for Index Component i on the index calculation date t ;

The Total Return Index (TR Index)

The value of the Total Return Index on any index calculation date t (ITR_t) is calculated in accordance with the following formula:

$$ITR_t = ITR_{t-1} \times \left(\frac{IER_t}{IER_{t-1}} + DCY_t - 1 \right)$$

$$DCY_t = \left(\frac{1}{1 - \frac{91}{360} \times TBR_{t-1}} \right)^{\frac{NCD(t-1,t)}{91}}$$

Where

IER_t is the excess return index value on the index calculation date t ;

DCY_t is the daily cash collateral return on the index calculation date t ;

$NCD(t - 1, t)$ is the number of calendar days between index calculation date $t-1$ and t ;

TBR_t is the most recent weekly auction High Rate for 13 week (3 Month) U.S. Treasury Bills, as reported on the website <http://www.treasurydirect.gov/instit/annceresult/annceresult.htm> published by the Bureau of the Public Debt of the U.S. Treasury, or any successor page (or on the Bloomberg ticker: USB3MTA Index).

The Index is calculated on an end-of-day basis based on the settlement values of the Index components determined by the designated third-party calculation agent. Currently, the Index is calculated by Solactive AG.

2.5 Weighting

The Index is weighted by the Intensity Rating, i.e., the target weight of each metal reflects its proportional share based on the Intensity Rating. The maximum weight of each commodity is capped at 20% at the rebalance.

The Index weighting also takes into account each commodity's liquidity profile (i.e., in terms of the average daily trading volume and / or open interests), such that commodities with lower liquidity will be capped to ensure the overall implied liquidity of the Index.

Between index rebalances, commodities with lower liquidity will also be capped at the Weight Cap defined in Section 2.2, and subject to adjustments as described in Section 2.6

In the case of any index component's weight individually exceed 35% or two or more components' weights get over 20%, an ad hoc index rebalance will be undertaken to re-cap the weights.

2.6 Index Maintenance

Index Maintenance includes monitoring and implementing the adjustments due to market disruption or other events. Those events might require adjustment for the Weight Cap and / or Rebalancing Cost for the calculation of Index levels to ensure the underlying Index Components are tradable for users of the Index. The treatment of such events is evaluated by the Index provider from qualitative and quantitative characteristics of each component commodity.

2.7 Index Reconstitution

The Index periodically adjusts Index constituents and weightings (i.e., Index Reconstitution) to reflect changes to the commodities within the energy transition themes. The Index reconstitutes / rebalances on a semi-annual basis in January and July, following the announcement and implementation process below.

Reconstitution Month: January and July.

Reconstitution Announcement Date: The Index provider announces the change of Index components and the target weights following the selection and weighting methodology described above, at least 10 business days before the Reconstitution Implementation Date.

Reconstitution Implementation Date: The addition / removal / re-weighting of the component commodity is implemented at the Index close on the 9th business day of the Reconstitution Month.