



## **Horizons Carbon Credits Rolling Futures Index ER**

**Ticker: CARBCNER**

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### **INDEX GUIDELINE**

**Updated and Effective: February 4, 2022**

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This document contains the underlying principles and regulations regarding the structure and the operating of the Horizons Carbon Credits Rolling Futures Index ER (the “Index”). Horizons ETFs does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the Index nor the Indexvalue at any certain point in time nor in any other respect. The Index is calculated and published by Solactive AG and strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for Horizons ETFs–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 Horizons ETFs and Solactive AG is not a recommendation for capital investment and does not contain any assurance or opinion of Horizons ETFs or Solactive AG regarding a possible investment in a financial instrument based on this Index.

# Introduction

This document is to be used as a guideline with regard to the composition, calculation and management of the Index. Any changes made to the guideline are initiated by the committee specified in section 1.6.

The Index is a proprietary index owned and operated by Horizons ETFs Management (Canada) Inc. (“Horizons ETFs”). The index calculation agent is Solactive AG.

## 1. Index Specifications

The Horizons Carbon Credits Rolling Futures Index ER (the “Index”) is designed to measure returns that mirror the holding of carbon credits futures contracts and, in doing so, represents a liquid benchmark for investors that seek exposure to carbon credit futures contracts. The Horizons Carbon Credits Rolling Futures Index ER is designed to measure the performance of liquid carbon credit futures contracts listed on globally recognized developed market exchanges.

The Index is initially calculated based on the daily returns of the Daily Contract Settlement Price of European Union Allowance emission (“EUA”) futures contracts as the Designated Relevant Contracts. The excess return version of the Index captures the performance of the applicable EUA futures contracts theoretically held by the Index.

The EUA contract’s normal trading hours are Monday - Friday (2:00 a.m. - 12:00 p.m. EST.) or (7:00 a.m. - 5:00 p.m CET.). The daily settlement prices for EUA futures are determined at 5:15 p.m Central European Time (CET).

The specifications of the EUA futures contracts may change at the discretion of the listing exchange.

Additional information regarding the defined contract terms, may be found in the Definition section. An Excess Return version of the Index is published in EUR.

### 1.1. Short Name and ISIN

The Index is distributed under ISIN [DE000SL0FGH5]; the WKN is [SL0FGH]. The Index is published on Bloomberg under the code CARBCNER Index and on Refinitiv under RIC .CARBCNER.

Index Code (Bloomberg)	Underlying Futures Contract
CARBCNER <Index>	EUA Futures

### 1.2. Initial Value

The index was launched on February 4, 2022, all data prior to this date is back-tested. The Index was initially based on 136.612022 times the value of the EUA future on the base date of December 30, 2011. The index base date value is 1000.

### **1.3. Distribution**

The index is published by Solactive AG and is distributed to all affiliated vendors. Each vendor decides on an individual basis as to whether they will distribute/display the index via their information systems.

### **1.4. Prices and Calculation Frequency**

The price of the Index is calculated on each Trading Day based on the trading prices on the Exchange on which the Index Components are listed. The most recent trading prices of all Index Components are used. Should there be no current trading price available, the most recent trading pricing on Reuters for the preceding Trading Day is used in the calculation. The closing price of the Index is calculated on each Trading Day based on the settlement prices on the Exchange on which the Index Components are listed. The most recent settlement prices of all Index Components are used. Should there be no current settlement price available, the most recent settlement price on Reuters for the preceding Trading Day is used in the calculation.

In the event that data cannot be provided to Reuters or to the pricing services of Boerse Stuttgart AG the Index cannot be distributed.

### **1.5. Weighting**

The Weighting of the futures in the index is done according to Section 2.

### **1.6 Decision-making Bodies**

A Committee composed of staff from Horizons ETFs is responsible for decision regarding the composition of Index as well as any amendments to the rules (in this document referred to as the “Committee”, or the “Index Committee”). The Committee shall also determine the future composition of the Index. If any Extraordinary Events should occur and the implementation of any necessary adjustments.

Members of the Committee can recommend changes to the guideline and submit them to the Committee for approval.

### **1.7 Publication**

All specifications and information relevant to calculating the Index are made on the <http://www.solactive.com> web page and sub-pages.

### **1.8 Historical Data**

Back-tested data is available beginning December 30, 2011. The index launched on February 4, 2022

## 2 Calculation of the Index

### 2.1 Index Component Selection Process

While the index is initially comprised of EUA futures, there is flexibility to add additional futures contracts that provide exposure to other developed-market carbon credit futures contracts assuming they meet sufficient requirements for inclusion, described below, as determined by the Index Committee. The composition of the carbon credit futures contracts in the Index as well as any selection for an ordinary rebalance is determined on the selection day. The Index Committee shall regularly review developed markets carbon credit futures contracts and on the selection day determine the eligibility of the futures contracts for inclusion in the Index. Eligibility will be assessed based on factors such as the average daily value traded and open interest value over the past three months up to the selection day. If a carbon-credit futures contracts from a developed market outside the EUA market is deemed eligible by the Index Committee, the Index Committee, will in its sole discretion, determine the selection day to include these futures contracts and their weighting in the Index.

### 2.2 Weighting of the Index Components

On each selection day each index component is assigned a weight determined according to the average daily value traded over the last three months, including the selection day. As part of Index Committee review process, the weight of each index component may subject to a cap re-distributing any weight which is larger than the weight cap to other index components proportionally in an iterative manner.

Initially, the weights of the index will be 100% EUA futures.

### 2.3 Index Formula

The Index Value on Trading Day  $t$  is calculated in accordance with the following formulas:

$$I_t = I_{t-1} \cdot \left( CRW_{A,t} \cdot \frac{SP_{A,t}}{SP_{A,t-1}} + CRW_{NA,t} \cdot \frac{SP_{NA,t}}{SP_{NA,t-1}} \right)$$

$I_{t-1}$  = Index Value on the Trading Day immediately preceding Trading Day  $t$

$CRW_{A,t}$  = Contract Roll Weight of the Active Contract on Trading Day  $t$

$CRW_{NA,t}$  = Contract Roll Weight of the Next Active Contract on Trading Day  $t$

$SP_{A,t}$  = Settlement Price of the Active Contract on Trading Day  $t$

$SP_{NA,t}$  = Settlement Price of the Next Active Contract on Trading Day  $t$

## 2.4 Accuracy

The value of the Index will be rounded to two decimal places. Trading Prices and foreign exchange rates will be rounded to four decimal places. Divisors will be rounded to four decimal places.

## 2.5 Market Disruption Events

From time to time, market disruption events may occur that will result in the postponement of the Index and/or the adjustment of the roll period. A Market Disruption Day will be deemed to have occurred if any of the following events occur:

- i. The Daily Contract Settlement Price is not published by 5:00 PM, Eastern Time;
- ii. The Daily Contract Settlement Price is erroneous, in the reasonable judgment of Horizons ETFs, and such error is not corrected by 5:00pm, Eastern Time;
- iii. The Daily Contract Settlement Price is a Limit Price; or
- iv. Trading in the relevant contract is disrupted during the trading day and does not trade for at least 30 minutes prior to the scheduled closing time (or rescheduled closing time if the contract closing time is rescheduled).

If any of these events occur on a non-roll date, the Index will not be posted for that Business Day. If any of these events occur on a roll date, the Index will not be posted for that Business Day AND the roll that was to take place on the Market Disruption Day will take place on the next non-Market Disruption Business Day. For instance, if the Market Disruption Day occurred during the roll period for the Active Contract, the roll that was to take place that day will take place on the next non-Market Disruption Business Day.

## 3 Index Roll Methodology

In order to reflect the new selection of the index components determined on the selection day (in accordance with Section 2.1 and 2.2) the Index is adjusted on the rebalance day at the close of business. This is carried out by implementing the weights as determined on the selection day.

### 3.1 Roll Period

During the Roll Period the Active Contract is rolled over a five-day period into the Next Active Contract. The Roll Period starts on the 1st Business Day of each November and the Contract Roll Weight of the Active Contract is decreased by 20% after the Close of Business of each Business Day of the Roll Period starting at 100% while the Contract Roll Weight of the Next Active Contract is increased by 20% after the Close of Business of each Trading Day of the Roll Period starting at 0%. After the end of the roll period the Next Active Contract becomes the Active Contract. The roll schedule is listed below in Section 3.2.

For the purposes of the Index, a trading day is defined as any day in which all of the following are true: (i) the futures contracts are trading and there is a published Contract Settlement Price for the Active Contract, and the Next Active Contract; (ii) the Toronto Stock Exchange (“TSX”) is open and publishes closing prices; and (iii) a day where CAD, USD, and EUR can settle.

Trading Day	End-of-Day Contract Weight
Day 1	100% Active Contract, 0% Next Active Contract
Day 2	80% Active Contract, 20% Next Active Contract
Day 3	60% Active Contract, 40% Next Active Contract
Day 4	40% Active Contract, 60% Next Active Contract
Day 5	20% Active Contract, 80% Next Active Contract
Day 6	0% Active Contract, 100% Next Active Contract

### 3.2 Roll Schedule

Active Contracts:

Month Begin Date	Active Contract	Next Active Contract
January	Z	Z+
February	Z	Z+
March	Z	Z+
April	Z	Z+
May	Z	Z+
June	Z	Z+
July	Z	Z+
August	Z	Z+
September	Z	Z+
October	Z	Z+
November	Z	Z+
December	Z+	Z++

A “+” defines a contract of the following year. The following naming convention of the contracts holds:

Contract Month Codes

Month	Month Code
December	Z
December + 1	Z+
December + 2	Z++

## 4. Definitions

“Active Contract” means the contract given in the roll schedule under Section 3.2.

“Trading Day” means any day in which the relevant futures contract exchange is open and publishes a Contract Settlement Price for the Designated Relevant Contracts and which the Toronto Stock Exchange (“TSX”) is open and publishes closing prices and Canadian Banks are open and have the ability to settle foreign exchange transactions. In addition, a day in which CAD, USD, and EUR can settle.

“Contract Roll Weight” means the target weight determined as per Section 3.1.

“Daily Contract Settlement Price” means the price, as determined by the exchange, at which a derivatives contract settles once a given trading day has ended, see Section 1.1 Contract Specifications.

“Daily value traded” means, in respect of an index component and a trading day, the product of (i) the Daily Contract Settlement Price of such index component, (ii) the volume traded (measured as a number of contracts) of such index component on the exchange during such trading day, and (iii) the contract size (measured as the number of underlying carbon credits each contract provides notional exposure to) of such index component, taking into account any currency conversion in case the price of the index component is quoted in a currency other than the index currency.

“Exchange” means the relevant developed market exchange where such carbon credit futures contracts are listed.

“Extraordinary Event” is referring to the case if one or more contracts mentioned in the roll schedule under Section 5.3 are not listed anymore.

“Index Components” are any contracts currently included in the Index.

The “Index Calculator” is Solactive AG or any other appropriately appointed successor in this function. The “Index Currency” is initially EUR.

“Limit Price” means the maximum price range permitted by the Exchange for a futures contract in any trading session.

A “Market Disruption Event” is defined in section 3.

“Next Active Contract” means the contract given in the roll schedule under Section 3.2.

“Open Interest Value” means, in respect of an index component and a trading day, the product of (i) the Daily Contract Settlement Price of such index component, (ii) the open interest (measured as a number of contracts) of such index component on the exchange during such trading day, and (iii) the contract size (measured as the number of underlying carbon credits each contract provides notional exposure to) of such index component, taking into account any currency conversion in case the price of the index component is quoted in a currency other than the index currency.

“Roll Period” means a number of Trading Days as defined in Section 3.1

“Selection day” is 10 days before the scheduled rebalance day, disregarding any potential change of the rebalance day. If that day is not a trading day, the selection day will be the immediately following trading day.



## **5. Appendix**

### **5.1 Contact Data for Index**

Horizons ETFs Management (Canada) Inc.  
800 – 55 University Avenue  
Toronto, ON M5J 2H7  
Local: (416) 933-5745  
Toll Free: 1 (866) 641-5739  
Email: info@horizonsetfs.com

### **5.2 Calculation of the Index – Change in Calculation Method**

The Index Calculator shall apply the method described above for the composition and calculation of the Index. The Index Provider may also make changes to the terms and conditions of the Index and the method applied to calculate the Index, which he 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 Provider is not obliged to provide information on any such modifications or changes.

### **5.3 Changes to the Index Methodology**

From time to time, and as market forces dictate, it may become necessary for the Index Provider to change this index methodology (the “Index Methodology”) as explained in this document.

Changes may include, but will not be limited to, roll period adjustments, market disruption events, and Designated Relevant Contracts. Additionally, an Exchange has rights to change the specifications of the underlying contracts and may change the manner in which settlement prices are determined and as such this could require Horizons ETFs to make changes to the index methodology. The Index Provider will attempt to give as much notice as possible of any changes that may occur.

Neither this Index Methodology nor any set of procedures are capable of anticipating all possible circumstances and events that may occur with respect to the Index and the methodology for its composition, weighting and calculation. Accordingly, a number of subjective judgments must be made in connection with the operation of the Index that cannot be adequately reflected in this Index Methodology. Further, modifications to the methodology to calculate the Index, and consequently the Index Methodology, may be necessary from time to time.

The Index Provider reserves the right to make such changes or refinements to the methodology set forth in this Index Methodology as it believes necessary in order to preserve and enhance the utility of the Index as a benchmark for global carbon credit futures performance. The Index Provider also reserves the right to take such action with respect to the Index as it deems necessary or appropriate, in order to address market emergencies or other extraordinary market events or conditions. Wherever practicable, any such changes or actions will be publicly announced prior to their effective date.

## Disclaimer

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