

Specifications Guide

Platts-Viridios CARBEX Carbon Credit Indices

Latest update: September 2021

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DEFINITIONS OF THE TRADING LOCATIONS FOR WHICH PLATTS PUBLISHES DAILY INDEXES OR ASSESSMENTS

The following specifications guide contains the primary specifications for Platts-Viridios CARBEX Carbon Credit Indices. All of the assessments here utilize Viridios' artificial intelligence technology.

These guides are designed to give Platts subscribers as much information as possible about a wide range of methodology and specification questions.

This guide is current at the time of publication. Platts may issue further updates and enhancements to this guide and will announce these to subscribers through its usual publications of record. Such updates will be included in the next version of this guide. Platts editorial staff and managers are available to provide guidance when assessment issues require clarification.

Viridios Artificial Intelligence Model

The Viridios AI model is a neural network that works by learning the pattern of pricing behavior based on available combinations of attributes that define a carbon offset project: certification standard, project activity, geography, contributions to the 17 UN Sustainable Development goals (SDGs) and vintage. This pricing pattern is learned through the iterative training of the neural network, after which the model is capable of deriving the value on any combination of those attributes.

During the learning process, the neural network is fed datasets with past transaction prices of a diverse set of combinations of a carbon project's attributes. This learning process is run simultaneously against the values of reference instruments which we call "benchmarks", i.e., assessments of certain commodities made by Platts and indices from S&P Global. Once the model is trained, present fair value of carbon credits can be computed by feeding the model with the current values of the benchmarks. The model acts as a "factor model", which is a well-known modeling technique in finance. But in this case the relationship among data and factors (benchmarks) is highly non-linear and captured by the parameters in the neural network.

Viridios' AI has been trained using the following inputs:

- Dated Brent (\$/b) – PCAAS00
- Platts TTF M1 (\$/mmbtu) – GTFWM10
- CFR Thermal Coal WCI (\$/mt) – CIWCI00
- Platts CEC (\$/mtCO₂e) – PCECA00
- Dow Jones Sustainability World Index (Total Return)
- S&P Green Bond Index

All of the Indexes will be generated using the most complete dataset of inputs available at time of publication.

Platts-Viridios CARBEX Carbon Credit Indices

Platts will publish the following CARBEX assessments on a daily basis, following the Platts Global Carbon holiday calendar. Platts and Viridios will review the inputs and outputs periodically to ensure that the indices remain relevant. Benchmark inputs have been chosen based on an AI-driven analysis of the strongest

correlations with value changes across the carbon complex.

All of the new CARBEX indices are standard-neutral and reflect a global price for current year vintage and current year delivery.

Household Devices CARBEX: Projects that are focused on sustainable development within individual communities by upgrading basic needs with cleaner alternatives. This index includes Cookstoves and Water Purification projects, including the following SDGs:

- Good Health & Well-Being (3)
- Equality (5)
- Affordable & Clean Energy (7)
- Decent Work & Economic Growth (8)
- Responsible Consumption & Production (12)
- Climate Action (13)
- Life on Land (15)

Soil CARBEX: Projects that focus on improvements to agriculture and commit to best practice land-use management, resulting in the increased sequestration of CO2 from the atmosphere and the development of soil organic carbon. This index includes regenerative farming involving a range of activities from residue and nutrient management (mulching, composting, cover crops, etc) to agronomic practices (no-till/low-till, crop rotation, agroforestry, etc), including the following SDGs:

- Good Health & Well-Being (3)
- Clean Water & Sanitation (6)
- Decent Work & Economic Growth (8)
- Responsible Consumption & Production (12)
- Climate Action (13)
- Life on Land (15)

Eco Create CARBEX: Projects that are focused on carbon sequestration through activities such as reforestation, afforestation and wetlands restoration. This index includes afforestation, reforestation and other ecosystem restoration

projects which include the following SDG: Climate Action (13).

Eco Create CARBEX Biodiverse: Projects that are focused on carbon sequestration as outlined in Eco Create CARBEX above, but which also include the following additional SDGs:

- Life Below Water (14)
- Life on Land (15)

Eco Protect CARBEX: Projects that focus on avoiding deforestation and forest degradation. This index includes REDD/ REDD+ projects which include the following SDGs:

- Climate Action (13)
- Life Below Water (14)
- Life on Land (15)

Eco Protect CARBEX Social: Projects that focus on avoiding deforestation and forest degradation as outlined in Eco Protect CARBEX above, but which also include the following additional SDGs:

- No Poverty (1)
- Zero Hunger (2)
- Good Health & Well-Being (3)
- Quality Education (4)
- Gender Equality (5)
- Clean Water & Sanitation (6)

ASSESSMENTS

Assessment Name	Code	Mavg Code
Household Devices CARBEX	CBXAA00	CBXAA03
Soil CARBEX	CBXAB00	CBXAB03
Eco Create CARBEX	CBXAC00	CBXAC03
Eco Create CARBEX Biodiverse	CBXAD00	CBXAD03
Eco Protect CARBEX	CBXAE00	CBXAE03
Eco Protect CARBEX Social	CBXAF00	CBXAF03

REVISION HISTORY

September 2021: Corrected Typo in Soil CARBEX SDG List.

August 2021: Guide was created
