

CCData Blockdaemon Staking Yield Benchmark Statement

29 March 2023

Benchmark Statement

Introduction

This benchmark statement is provided by CC Data Limited (CCData), which is the benchmark administrator for the CCData Blockdaemon Staking Yield Index Family, a proprietary family of benchmarks designed to provide an indicative staking yield of the underlying digital asset (the Index) intended to meet the requirements in Article 27 of Regulation EU/2016/1011 (as well as the regulatory technical standards including Commission Delegated Regulation EU 2018/1643 (RTS)) as implemented in the domestic law of the United Kingdom pursuant to the European Union (Withdrawal) Act 2018 (as amended) as supplemented and amended by various UK statutory instruments including the Benchmark (Amendments and Transitional Provision) (EU Exit) Regulations 2019 (SI 2019/657) (the BMR) and should be read in conjunction with the policies and methodology documents available from CCData or upon request.

This benchmark statement intends to define the economic reality measured by the Index and the circumstances in which such measurement may become unreliable. This statement highlights, where applicable, any elements of the calculation of the Index where CCData may apply discretion or expert judgement. This statement also provides an overview of those internal and external factors which may require changes to the methodology of the Index and the potential impact on the value of the financial instruments, products or funds that reference the Index. CCData is authorised and regulated by the United Kingdom Financial Conduct Authority as a benchmark administrator with firm reference number 938826 for the purposes of Article 34 of the BMR.

This Benchmark Statement was first published on 18 October 2022.

General Information

The Index is a non-significant and non-critical benchmark for the purposes of the BMR. CCData does not treat the Index as a regulated data benchmark, an interest rate benchmark or a commodity benchmark as those terms are defined in the BMR. CCData does not currently assign an ISIN to the Index. The Index does not utilise contributions of input data for determining the Index as contemplated in the BMR. The source of input data for the Index is publicly available staking data retrieved directly from the relevant blockchain. All key terms



are set out in the CCData Blockdaemon Staking Yield Index methodology document (see Documents section below).

Description of the Market or Economic Reality Measured by the Index

The benchmark family measures the yield generated through staking individual digital assets with the purpose of showing the best yield estimation for market participants to value their portfolios, conduct research or issue yield-based financial products where they reference the Index. A detailed list of indices in the family can be found in Appendix A of the methodology document.

The benchmark family uses publicly available staking data retrieved, processed and made available by Blockdaemon Inc., the official data provider approved for use in the CCData Blockdaemon Staking Yield Index methodology. Should geographical boundaries exist within the market measured by the Index, they will be described in the CCData Blockdaemon Staking Yield Index methodology document.

Methodology

The CCData Blockdaemon Staking Yield Index for a given digital asset is designed to provide an indicative daily yield in annualised terms that can be achieved through staking such digital asset. Staking, which is the process of delegating or committing digital asset holdings to a validator in order to bolster the security of a blockchain, generates rewards for both the token holder and validator. It is an integral part of any blockchain network based on the proof-of-stake model. Further details on how the Index is calculated can be found in Section 5 of the CCData Blockdaemon Staking Yield Index methodology document.

The rationale for adopting the methodology is to create a transparent, rules-based measure for staking yield for certain proof-of-stake digital assets. The methodology used for determining the Index is reviewed at least every quarter by the Technical Committee, and at least on an annual basis by the Oversight Function, to ensure that it remains representative of the relevant market or economic reality that it is intended to measure.

The process for approving the Index follows the governance processes established by CCData's internal policies and procedures, which are designed to comply with the BMR.

The Index methodology has been reviewed and approved in accordance with CCData's internal controls and procedures, which are designed to ensure compliance with the BMR. The internal controls and procedures are designed to ensure that the methodology remains robust and reliable, and mitigate factors that might result in a distortion or error.

Procedure for changing the Methodology

CCData has implemented a Benchmark Methodology Change and Cessation Policy, which governs the implementation of changes to the methodology of the Index.

A change may be triggered in the following circumstances:

- As the result of an annual or additional internal review of the Index methodology;
- On the recommendation of the CCData Board of Directors or the Oversight Function;
- On the recommendation of the Technical Committee or the Compliance department;
- Due to issues raised by stakeholders including subscribers and other users



CCData will conduct an analysis of the impact of the proposed change on the Index and will determine whether the proposed change: (a) is beneficial to the quality and representativeness of the Index with respect to the underlying market or reality that it represents; and (b) constitutes a material change to the methodology with advice from the Oversight Function.

If CCData determines that the change is beneficial to the quality and representativeness of the Index but does not constitute a material change, it will amend and publish the new methodology. If CCData determines that the change is material then it will enter into a public consultation of no less than thirty days. Users will be notified, at a minimum, of the key elements of the methodology that would be affected by the proposed material change via API newsletter and other direct client communication channels, and the proposed methodology amendments will be available for review at ccdata.io, where users will be able to submit feedback on any proposed change.

Following receipt of feedback, if any, at the conclusion of a consultation period for a proposed change that constitutes a material change, the Oversight Function will determine whether to proceed with the change. If the determination is not to proceed, CCData will announce that determination.

If the determination is to proceed with the proposed change, CCData will announce that determination and state an effective date for the confirmed change.

The notification period shall depend on the nature of the Benchmark and the confirmed change but shall typically be not less than one calendar month.

An amended methodology document will be issued following the announcement of a confirmed change with an updated version history.

Input Data Interruptions and Errors

Input data interruptions may occur from time to time due to an outage or disruption of the underlying blockchain or the data provider's API that adversely impacts the delivery and/or quality of the input data. CCData has specifically designed its systems to account for such interruptions.

The major processes that CCData has in place to address these issues include:

- Data validation: Input data for each Index is validated for the following: each field has the correct data format; each field is available at the expected time; period start and end times are not in the future; and each field has a reasonable magnitude.
- Automated alerts: CCData has implemented automated alerts to flag missing input data. In the event of a failure to retrieve the required input data at the expected time, CCData notifies the data provider through the usual communication channels, who then endeavours to backfill the missing data as soon as reasonably practicable. Additionally, the data provider has implemented automated alerts on their end to monitor timely data updates.
- Historical calculation: Once the service is restored and input data backfilled, the Index is recalculated for the affected period and restated, if applicable.



The Index is recalculated and restated whenever errors or distortions occur that are deemed to be significant by the Technical Committee. All such decisions are taken in accordance with CCData's control environment and procedures.

Users will be notified of such changes through appropriate media channels.

Discretion and Expert Judgement

The Index is rules-based and its construction is designed to consistently produce values without the need to apply and/or exercise expert judgement or discretion.

However, CCData may exercise expert judgement and discretion in limited circumstances, including where input data is or appears to be qualitatively inferior, different sources provide different data or a situation is not covered by the Index rules. The exercise of expert judgement and/or discretion will be subject to approval by the Technical Committee and will be conducted in a manner that complies with CCData's control framework.

In case of material changes to input data, the relevant situation will be analysed in detail, described, presented, discussed and reviewed by the Oversight Function and discussed and reviewed with the Oversight Function.

Any decisions taken will be made in good faith and in a commercially reasonable manner, which weighs the different interests and needs of the users of the Index, the requirement to ensure integrity of the market and the interests of other parties.

As a matter of policy and in order to minimise the need to apply and/or exercise expert judgement, CCData may consider updating the Index rules. Other possible mitigation measures may include the use of alternative or additional input data, data provider and/or conducting own research, where possible and reasonable.

The policy sets out the circumstances in which expert judgement may be used and the circumstances in which users will be consulted or notified. The policy requires records to be retained and sets out the conditions that trigger a review.

Limitations of the Index

The Index works best when there are no interruptions in underlying data provision. It relies on regular and timely staking yield updates retrieved, processed and made available by the data provider. The potential limitations of the Indices include circumstances where:

- the input data is unavailable, either due to an outage or disruption of the underlying blockchain or the data provider's API; or
- the input data does not capture all of the staking information or is inaccurate for any reason; or
- if applicable, the input data is aggregated incorrectly for any reason.

If the input data for an Index is not available at the expected time, then the Index is at risk of becoming stale for the affected period. If the input data is incorrect, incomplete or



aggregated incorrectly for an Index, then the Index is at risk of giving an indicative yield value that does not sufficiently or accurately reflect the market reality.

Cessation or Changes to the Index

Factors, including external factors beyond the control of CCData, may necessitate changes to, or the cessation of, the Index.

Circumstances that may trigger a change or cessation of the Index, may include, but are not limited to

- The Index is no longer representative of the annualised staking yield of the underlying digital asset in a satisfactory way;
- There is insufficient, incomplete or inaccurate raw staking data to reliably calculate the Index; and
- Substantiated concerns regarding data quality from benchmark input data

Any proposed change or cessation will be submitted to the Oversight Function and will be subject to CCData's internal governance and oversight procedures.

CCData will use best efforts to notify users of any proposed changes or the cessation of the Index. If a cessation is confirmed, CCData will issue a notification of cessation and the expected cessation date to users via the API newsletter or direct user communication channels and on the CCData's website.

ESG Disclosures

The benchmarks within the Index design do not take account of ESG factors and do not pursue any ESG objectives.

The benchmarks within the Index do not use any temperature scenario, do not align with the target on carbon emission reductions and do not attain the objectives of the Paris Agreement.

Please see Annex 1 of this benchmark statement for further details on our ESG disclosures.

Updates

CCData shall update this benchmark statement in the event of any material changes to the information provided hereunder, including but not limited to any updates to the CCData Blockdaemon Staking Yield Index methodology. This benchmark statement shall in any case be subject to review at least every two years.

Documents

The CCData Blockdaemon Staking Yield Index methodology document can be accessed via the following links:

https://ccdata.io/indices/ccdata-blockdaemon-staking-yield-indices

https://ccdata.io/indices/index-documentation

Other documents relating to the calculation and oversight of the integrity of the Index may be provided to users upon request.



Contact Details:

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Annex

ESG Disclosures

EXPLANATION OF HOW ESG FACTORS ARE REFLECTED IN THE BENCHMARK STATEMENT

SECTION 1: CONSIDERATION OF ESG FACTORS

Item 1. Name of the benchmark administrator.	CC Data Limited	
Item 2. Type of benchmark or family of benchmarks Choose the relevant underlying assets from the list provided in Annex II of the applicable legislation under the UK BMR.	The Index as specified above and is "other" for the purposes of Annex II. For the purposes of Annex II, there are no environmental, social and governance (ESG) factors to be considered or pursued in respect of relevant underlying assets of the Index	
Item 3. Name of the benchmark or family of benchmarks.	The index as specified above	
Item 4. Are there in the portfolio of the benchmark administrator any (as defined in the UK BMR) UK Climate Transition Benchmarks, UK Paris-aligned Benchmarks or benchmarks that pursue ESG objectives or benchmarks that take into account ESG factors?	No	
Item 5. Does the benchmark or family of benchmarks pursue ESG objectives?	No	
Item 6. Where the response to Item 5 is positive, provide below the details (score) in relation to the ESG factors listed in Annex II for each family of benchmarks at an aggregated level. The ESG factors shall be disclosed at an aggregated weighted average value at the level of the family of benchmarks		
 a) List of combined ESG factors: b) List of environmental factors: c) List of social factors d) List of governance factors: 	The Index does not pursue ESG objectives. The Index does not pursue ESG objectives. The Index does not pursue ESG objectives. The Index does not pursue ESG objectives.	



Item 7. Where the response to Item 5 is positive, provide below the details (score) for each benchmark, in relation to the ESG factors listed in Annex II, depending on the relevant underlying asset concerned.

Alternatively, all of this information may be provided in the form of a hyperlink to a website of the benchmark administrator included in the benchmark statement. The information on the website shall be easily available and accessible. Benchmark administrators shall ensure that information published on their website remains available for five years.

The score of the ESG factors shall not be disclosed for each constituent of the benchmark, but shall be disclosed at an aggregated weighted average value of the benchmark.

The Index does not pursue ESG objectives.
The Index does not pursue ESG objectives.
The Index does not pursue ESG objectives.
The Index does not pursue ESG objectives. Not Applicable.
The Index does not use ESG factors
The UK BMR

SECTION 2 – ADDITIONAL DISCLOSURE REQUIREMENTS FOR UK CLIMATE TRANSITION BENCHMARKS AND UK PARIS-ALIGNED BENCHMARKS

Item 9. Where a benchmark is labelled as a 'UK Climate Transition Benchmark' or 'UK Paris-aligned Benchmark', benchmark administrators shall also disclose the following information: For all (a),(b),(c) a) forward-looking year-on-year In the Index there are no UK Climate decarbonisation trajectory; Transition Benchmarks or UK Paris-aligned Benchmarks. b) degree to which the IPCC decarbonisation trajectory (1,5°C with no or limited overshoot) has been achieved on average per year since creation; c) overlap between those benchmarks and their investable universe, as defined in the relevant delegated



legislation under UK BMR, using the active share at asset level

SECTION 3 – DISCLOSURE OF THE ALIGNMENT WITH THE OBJECTIVES OF THE PARIS AGREEMENT

Item 10. By the date of application of the relevant delegated legislation under UK BMR, for significant equity and bond benchmarks, UK Climate Transition Benchmarks and UK Paris-aligned Benchmarks, benchmark administrators shall also disclose the following

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a)	Does the benchmark align with the	No and not applicable for all.
	target of reducing carbon emissions	
	or the attainment of the objectives	
	of the Paris Agreement;	
b)	the temperature scenario, in	
	accordance with international	
	standards, used for the alignment	
	with the target of reducing GHG	
	emissions or attaining of the	
	objectives of the Paris Agreement;	
	No and not applicable.	
c)	the name of the provider of the	
	temperature scenario used for the	
	alignment with the target of	
	reducing GHG emissions or the	
	attainment of the objectives of the	
	Paris Agreement; No and not	
	applicable.	
d)	the methodology used for the	
	measurement of the alignment with	
	the temperature scenario; No and	
	not applicable.	
e)	the hyperlink to the website of the	
	temperature scenario used.	

Date on which information in this Annex has last been updated and reason for the update:

September 2022