

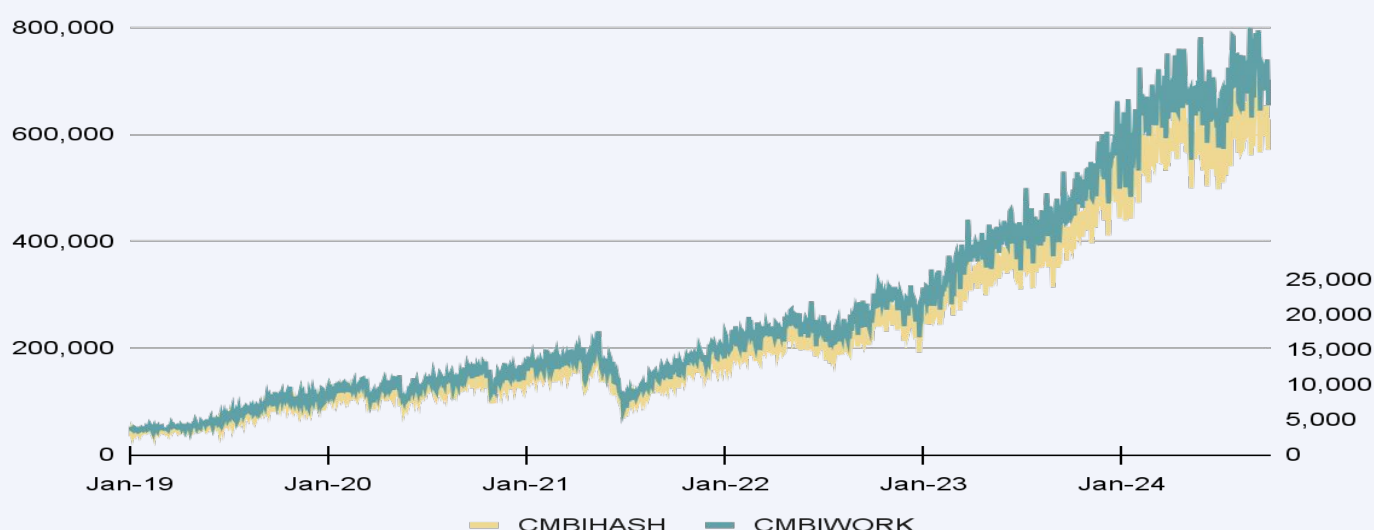
CMBI Mining Series

The CMBI Mining Series provide the cryptoasset community, investors and asset managers with publicly available and investable benchmarks that reliably and accurately track the activity of one of crypto's critical functions, mining.

The CMBI Bitcoin Hash Rate (CMBIHASH) represents the implied hash rate that miners are contributing to Bitcoin at any single point in time. The CMBI Bitcoin Hash Rate utilize a 48hr lookback window to accurately reflect the current performance of miners whilst maintaining resistance to outlier results and potentially manipulative activities.

The CMBI Bitcoin Observed Work (CMBIWORK) utilizes the real-time levels from the CMBI Bitcoin Hash Rate to represent an approximation for the number of hashes that have been conducted over the previous 24hr period.

Historical Performance*



*Performance of indexes prior to their respective launch date is back-tested performance utilizing historical data

Features

Coverage

The CMBI Mining Series currently provides coverage for Bitcoin only.

Objective

Mining indexes are designed to accurately represent mining activity and act as the basis for financial products including derivatives such as futures and swaps.

Transparent

Index design and calculation follow a rules-based process that is publicly available on the Coin Metrics website.

Investability

Assets launched in the CMBI Mining Series have been selected based on the size and activity of mining conducted on their network.

Price

CMBI Hash Rate is measured in Petahashes/second. CMBI Observed Work is measured in Zettahashes/day.

Availability

Mining indexes are calculated every 5 seconds. The close price for the CMBI Mining Series is the 5 second level from 12:00ET.

Performance

INDEX	Level	Level Change			Annualized Level Change		
		1M	3M	YTD	1Y	3Y	5Y
CMBI Bitcoin Hash Rate	\$628,428.75	-3%	12%	16%	62%	63%	49%
CMBI Bitcoin Observed Work	\$53,483.33	-2%	9%	17%	57%	63%	49%

*Performance of indexes prior to their respective launch date is back-tested performance utilizing historical data

Calendar Year Performance

INDEX	2023	2022	2021	2020	2019
CMBI Bitcoin Hash Rate	101%	69%	3%	58%	141%
CMBI Bitcoin Observed Work	100%	67%	4%	51%	150%

Mining Related Network Data*

INDEX	1M	3M	YTD	2023	2022	2021	2020
Blocks Produced per Day	143	146	145	148	146	144	145
Mean Block Size (Bytes)	1669318	1637872	1671791	1702038	1190335	1223749	1188946
Mean Difficulty (millions)	90815713	87027538	83073986	51942610	30354804	20325259	16590055

*Performance of indexes prior to their respective launch date is back-tested performance utilizing historical data

Mining Revenues*

INDEX	1M	3M	YTD	2023	2022	2021	2020
Mean Fee (BTC)	0.05	0.07	0.34	0.44	0.10	0.42	0.52
Mean Fee (USD)	\$3,306	\$4,305	\$20,214	\$14,826	\$2,706	\$20,037	\$6,345
Mean Subsidy(BTC)	3.13	3.09	4.36	6.25	6.25	6.25	8.50
Mean Subsidy(USD)	\$188,922	\$188,623	\$256,975	\$180,369	\$176,199	\$296,492	\$87,736
Mean Reward (BTC)	3.18	3.16	4.71	6.69	6.35	6.67	9.02
Mean Reward (USD)	\$192,228	\$192,929	\$277,189	\$195,195	\$178,905	\$316,529	\$94,081

*Mining related network data is calculated using Coin Metrics Network Data Pro end of day values(00:00UTC)

Specifications

	CMBI Bitcoin Hash Rate	CMBI Bitcoin Observed Work
Launch Date	Sep 23, 2020	Sep 23, 2020
Base Date	Aug 08, 2015	Jan 3, 2017
Base Value	100	100
Calculation Currencies	USD	USD

Contact Us

To learn more, visit:

<https://coinmetrics.io/cm-indexes/>

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