Decentralized Hash Mining (DHM)

Tokenized Perpetual Standard Hashrate

Berlin Ye
December 12, 2020

Abstract

Bitcoin is produced through mining based on a proof-of-work consensus algorithm that is a form of computational decryption. Accelerated by technological advancement, Bitcoin mining has seen an increasing institution dominance, where independent miners have found it hard to survive this consolidation phase. In solving this problem, we work on deconstructing the hashrate, or computational power, generated by the institutions into tokens for everyone to participate in mining. Perpetual Decentralized Hash Mining (DHM) breaks down hashrate into fungible tokens and makes it easy for all to get exposure in Bitcoin mining and get a chance to overperform Bitcoin.

1. Introduction

Each DHM is initially pegging to 0.1 TH/S. Users stake one DHM to obtain the BTC reward per the hashrate pegged to the token. In other words, each DHM amounts to a miner with 0.1TH/S that is mining Bitcoin for the DHM token staker. The pricing of the original, newly issued DHM will be determined by the hashrate management providers collateral. In the secondary market, each DHM can be traded as a tokenized mining machine, as a strategy to double leverage the gains generated. . Mining machines are now a liquid asset.

The cloud mining industry suffers from the same problems as the real-economy mining industry: insufficient liquidity, unregulated and chaotic market, obscure operations in a black box, high barrier to entry -- all have prevented investors from getting exposure to the mining industry.

2. Our advantages

- **Hashrate Audit**

We brought in the acclaimed MINERSFUND as the initial hashrate management provider. MINERSFUND is a large investment management fund dedicated to the Bitcoin mining industry. The general partners consist of experienced managers of large mining sites domestically and overseas. The fund boasts a strong influence in the mining space. MINERSFUND specializes in blockchain sector investments. Currently, it has mining farms, mining machines, among other equity assets totaling 500 million RMB under management.

- **High Liquidity**

The initial tokens will be issued as ERC-20 on the Ethereum network. Ethereum oracle supports smart contracts that execute hashrate returns calculation and release accurately. Token stakers can send and receive the profits freely using the Ethereum protocol, which transfers the hashrate-generated rewards effectively and efficiently.
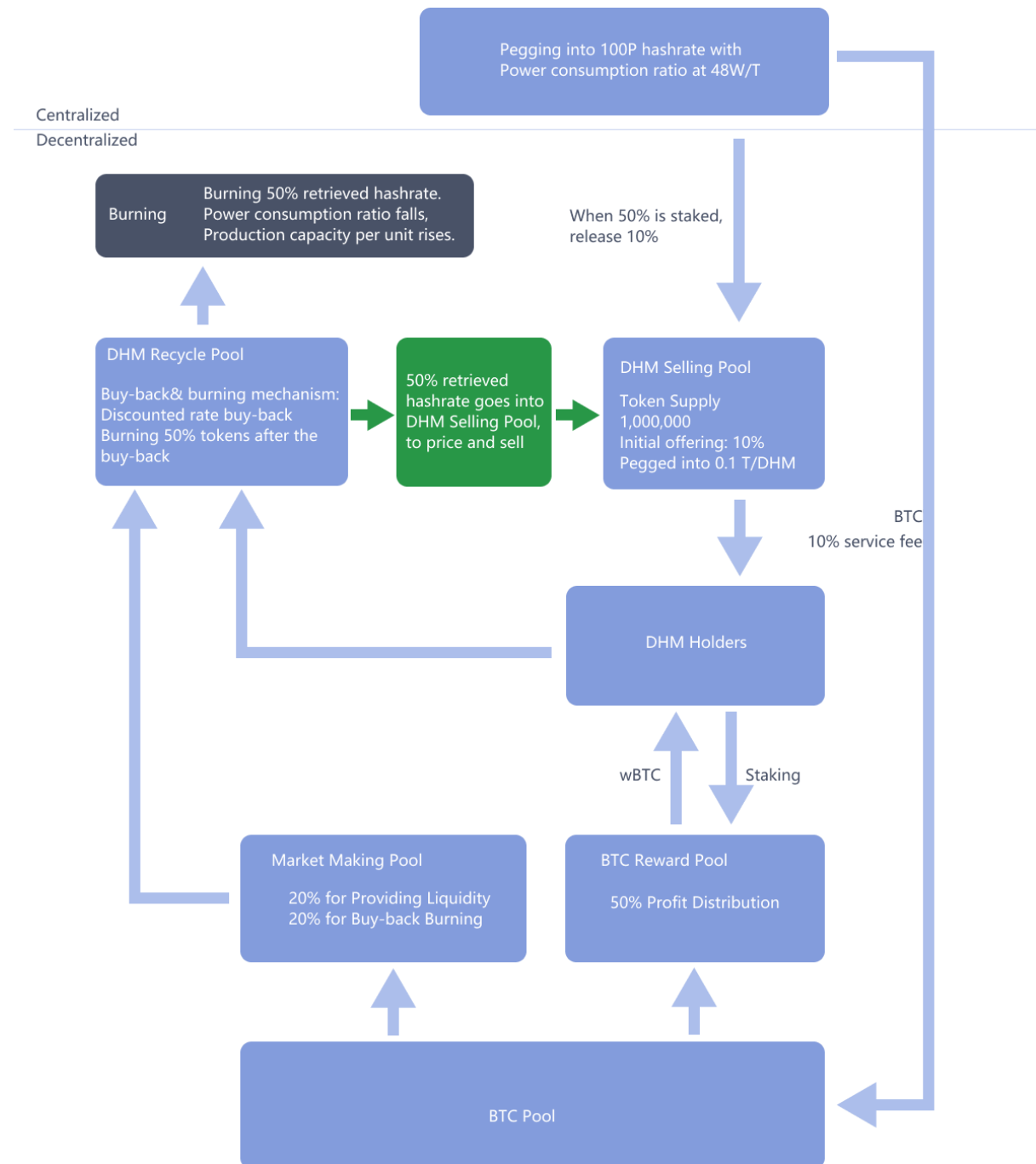
- **Hashrate Token Economy Model**

The issuance of DHM are backed byreplicates the hashrate capacity. Token issuance and burning occurs to maintain that correlation. 50 percent of the tokens retrieved will be destroyed, to maintain the total supply of hashrate a constant. Eachvery retrieval will optimize the miner production capacity and mining efficiency of each token.

- **Cross-chain Technology**

To fulfill the decentralized blueprint of the crypto ecosystem, we plan to construct cross-chain bridges, facilitating deployment of multiple top swap-chain technology on multiple blockchains, with the needs of Polkadot, Binance, etc. fully sufficed.

Hashrate Model

Pegging into 100P hashrate with Power consumption ratio at 48W/T

Centralized
Decentralized

Burning — Burning 50% retrieved hashrate. Power consumption ratio falls, Production capacity per unit rises.

When 50% is staked, release 10%

DHM Recycle Pool

Buy-back& burning mechanism: Discounted rate buy-back Burning 50% tokens after the buy-back

50% retrieved hashrate goes into DHM Selling Pool, to price and sell

DHM Selling Pool

Token Supply 1,000,000
Initial offering: 10%
Pegged into 0.1 T/DHM

BTC
10% service fee

DHM Holders

wBTC   Staking

Market Making Pool

20% for Providing Liquidity
20% for Buy-back Burning

BTC Reward Pool

50% Profit Distribution

BTC Pool

- **Basic Parameters**

  The initial total supply of DHM is 1,000,000, pegging to 100,000 TH/S.

  Unlock a total of 10 batches, with 100,000 DHM for each batch.

  Each DHM initially is pegged into 0.1 TH/S.

  The performance per watt is at 48 W/TH.

  Electricity bill benchmark: 0.057 USD/kwh

  Power loss benchmark: 3 %

  Service fee: 10% （it is used to cover onchain distrubition fee for Bitcoin and Ehereum network）

- **How does it work**

  Token owner activates the token via Dapp to mine Bitcoin. The hashrate and its profits gained from the current date will be calculated on the second day (T+1). When the token deactivates, profits will not be released on that day.

- **Issuance and Burning**

  As the issuer, DHM will price and issue the standard hashrate based on the dynamic calculation of the current day mining machine hashrate price. Once all the hashrate is sold out, the current batch of mining machine token reaches the maximum supply.

- **Conclusion**

  Mining machine hashrate possesses long life cycles and serves as a store-of-value, DHM provides a reclaiming window for the mining investors (token owners) to hedge the risk with flexibility. MINERSFUND will calculate the retrieval price of the day, based on the issuing price and hashrate life cycle. Every retrieval will result in burning 50 percent of the token retrieved to fuel the hashrate upgrade. This will enhance the production capacity for each individual token left.

- **Buyback and Market Making**

  To encourage DHM collatorization, we will allocate 50% of all released hashrate generated rewards to each staked DHM, and execute the unlock plan when the collatorization ratio reaches 50%. The plan unlocks the next batch of 10% hashrate tokens. At this time, the previously collateralized tokens will receive 50% of the rewards of all released tokens.

  For the rest 40% of the rewards, DHM will use it to initiate the Buy-back and Burn and the Provide Liquidity plan. DHM's original Buy-back and Upgrade mechanism will be used to optimize the power consumption ratio of the mining machines, allowing every token holder to benefit from this plan.

  We hope to optimize our economic model through deflation token creation and market stimulus plan, so that everyone who contributes to the blockchain mining ecosystem can share the profits.

Profit Example:

1,000,000 DHM token with performance at 48 W/TH produces 0.622315 Bitcoin daily

Electricity Cost:

0.048 KWH/TH * 0.057 USD/KWH * 1.03 * 24H * 100,000TH / 40000USD/BTC = 0.169084BTC

Daily Net Profit: 0.622315BTC - 0.169084BTC = 0.453231BTC

Profit Distribution: 0.453231BTC * 50% = 0.2266115BTC

Buy-back and BurningRetrieval Case Study:

The hashrate retrieval mechanism will have our platform to provide a fixed algorithm to determine the price. All sellers sold the tokens through the retrieval channel will contribute to the entire hashrate network and gain profits. The platform will destroy 50% of the retrieved amount to fuel the token upgrade. We are to retrieve 100,000 tokens and destroy 50,000 tokens this time. The total token supply will be reduced to 950,000, and the total hashrate will remain unchanged.

Before the Burning	DHM Token Performance per watt	48 W/TH
	Electricity cost	0.169084 BTC
	Daily distributed profit	0.226 BTC

After the Burning	DHM Token Performance per watt	45.6 W/TH
	Electricity cost	0.1606298 BTC
	Daily distributed profit	0.230 BTC

Each round of buy-back will bring holders token upgrades, which can greatly hedge the machine-shutdown risk caused by the Bitcoin price decline, and the upgrade cost will be provided by the hashrate management provider.

Governance Mechanism

Since the first round of hashrate issuance comes from the mining reward of the Bitcoin network, in order to meet the decentralized distribution rules, it is necessary to introduce Ethereum smart contract rules to recreate the rules, so wBTC, the BTC pegged token of Ethereum is used as the profit distribution Token.

While the cross-chain ecosystem is not yet perfect at the time, the DHM governance committee will be introduced to supervise the hashrate and provide a real and effective environment for the investors.

The tokenized hashrate token DHM carries a liquidity premium, in order to protect the premium from undue pressure, the DHM Governance Committee must ensure that the hash rate is effective for each issuance. Each time when issuing the corresponding hashrate, the hashrate management provider must switch the real hashrate to the wallet address that can be supervised by the DHM governance committee and publish the address.

All mining profits will be deposited into the Dapp under the audit and supervision of the DHM Governance Committee, and all will be distributed to the effective DHM miners of the day. 10% of the mining profits will also be used as a cross-chain service fee and market making fund under the audit and supervision of the DHM Governance Committee.

Users Guide

Purchase hashrate

Enter the DEPOSIT interface of the Dapp, input the purchase quantity and click the DEPOSIT button to purchase the share of the hashrate. Currently only USDT payment is accepted. After the payment is completed, you will receive the corresponding DHM token as a hashrate certificate.

Hashrate Initiates

Click the START button on the MINING page on the Dapp to activate your DHM hashrate. The hashrate will start to calculate the income the day after the staking date, that is, the income will be calculated on the T+1 day, and the income can be collected on the T+2 day. Click the CLAIM button to liquidate the profits of hashrate.

Hashrate Buy-back

At the REDEMPTION page on the Dapp, input the retrieving amount and click the REDEEM button to sell. DHM will be converted to USDT, returned to the seller's wallet. After 50% of this DHM is burned, the rest will be filled into the hashrate selling pool.

Smart Contract

Except for hashrate verification and revenue data transmitted on-chain, all hashrate sales and distribution are accomplished through the smart contract of the Ethereum protocol to fulfill the decentralized consensus.

Purchase the Contract

According to the user input quantity, the smart contract will denominate the input USDT according to the algorithmic price and issue the corresponding number of DHMs.

Mining Contract

The DHM activated by the user will enter the smart contract and update the amount of DHM mining rewards according to the number of DHM activated on the entire network and the FPPS algorithm of BITCOIN mining.

Retrieve Contract

The smart contract will automatically calculate and balance the buy-back price based on the current amount of DHM hashrates in the entire network, and the smart contract will automatically destroy 50% of the retrieved tokens to fuel the entire network DHM hashrate upgrade.

Development Plan

Based on the diversified distribution of the classic crypto mining hashrate in the market, we planned to introduce more hashrate management providers and mining machine specifications.

In order to resolve cross-chain data faults, we will be closely following up with the entire network's cross-chain technology ecosystem, maintain technological advancement, build a better ecology, and provide better solutions.

Based on community experience and suggestions, we will be improving project governance rules and ecosystem step by step and expanding the consensus.

Timeframe

Nov.2020 - Project Initiated

Dec.2020 - Recruitment accomplished for the first 100P hashrates

Jan.2021 - Issue the first batch of 100 P hashrate based on 48 w/th of Bitcoin mining performance

Feb.2021 - Introduce cross-chain technology and construct multi-chain contracts

Mar.2021 - Issue the first batch of Ethereum network hashrate, and issue 1000P Bitcoin hashrate

Apr.2021 - Recruit hashrate providers and improve community governance rules

Contributor

MINERSFUND