

# Minto Whitepaper 1.2

## Introduction

Mining is a huge part of blockchain and crypto, but today's mining industry is closed to all but the most determined individuals. As mining complexity has increased, home solo mining as a hobby has become a thing of the past. Very few people have the resources or willingness to become professional cryptocurrency miners when the cost of equipment, the complexity of its maintenance and power consumption are constantly growing.

Various services for pooled and cloud mining have tried to solve this problem. The essence of cloud mining is that the process takes place using a remote data center with shared computing power. Cloud mining can be compared to the purchase of shares in a large factory, where everyone receives the product produced in proportion to their investment. But cloud mining has little transparency and is home to many scams, since all the business processes are centralized by one entity. The other big disadvantage of cloud mining comes from the power lease, which has a limited validity period, during which the terms are fixed. In addition, many services charge for power consumption and revenue output.

There is another part of the crypto industry that is increasingly popular since 2020: DeFi, which sparked the current period of crypto growth. DeFi uses smart contracts to enable trust and transparency in the market and makes crypto extremely attractive as an investment - DeFi projects work like a crypto version of trust banks.

Minto is the world's first decentralized mining DeFi platform, which combines the advantages of DeFi and cloud mining. By enabling trust, we lead the mining industry on a new level.

The advantages of Minto's Decentralized Mining Platform are:

- Low entry threshold
- No expensive equipment or maintenance required
- No additional costs for electricity, etc.
- High mining efficiency
- Transparency
- DeFi mechanics

Minto is ready to share with you the responsibility for the development of the entire project and a piece of the "big pie" that the future promises our company. BTCMT tokens issued on a new and

prospective HECO chain enable anyone to become our business partner. The use of smart contracts and DeFi mechanics makes our payment system transparent and secure.

#### **General Information**

Minto is a decentralized mining platform that creates a token secured by actively operating Bitcoin mining equipment. This equipment is tokenized by the BTCMT token, each of which equals a unit of actively operating Bitcoin mining power. Holding the token is effectively equivalent to owning Bitcoin mining power. Therefore, its fair market value can be determined using the DCF method. The BTCMT token is based on the HECO blockchain and the Minto project is part of the Huobi chain ecosystem.

Minto's token is backed by a state-of-the-art data center located in Karelia, which houses the Project's mining operation. The 86,000-square-meter data center is just 2 years old and has been fitted with the most powerful mining equipment available. Power for the mining equipment is supplied via a private hydroelectric plant with a current cap of 64.5 MW, which ensures that the facility always has more than enough available power.

Currently, Minto is housed in one data center but others are being built to accommodate the future growth of the Project. Total mining power allocated to Minto for now is 50,000 THs and we have the ability to increase it in the future, since it's only part of the whole data center's mining power. The Project will be launched on the Huobi pool. Other partners for the mining operation include F2pool, Binance, and Slush. The availability of current mining power is verified by our partners.

#### Stake to mine

Staking the token in a dApp entitles the owner to receive rewards for mining Bitcoin. Listing on exchanges will provide substantial liquidity for the tokenized mining power.

Name	BTCMT or BTCUT
Platform	Huobi Chain
Number of tokens	5,000,000.00
HR Convertation	1 BTCMT = 0.01 THs
Annual losses	8% (expected downtime of miners per year)

A token will create an efficient marketplace for professional miners and beginners alike. By trading BTCMT, market participants will be free to buy and sell mining capacity of any size, at any time, at low cost. Miners who have not tokenized mining capacity will be able to use this token to avoid the risks of equipment price fluctuations or to lock in profits.

BTCMT also links miners to traders. The price of the token must track with the price of Bitcoin and the token must be able to function as a leveraged Bitcoin token in the market. Moreover, since the token does not depend on financial derivatives, it is not itself at risk of liquidation. At the same time, the Project will act as the main market maker and, unlike tokens whose value is hard to determine, BTCMT has an intuitive valuation model and an OTC market for the underlying assets. Minto gets all mining rewards in hBTC - a HECO chain token backed by

Bitcoin. Consequently, the project has clear methodologies and incentives to bring the token's market price into equilibrium.

Thus, BTCMT will be able to meet the different needs of traders, including those previously unattainable.

### BTCMT token issuance and distribution

Mining	4,500,000.00	90%
Launch Pad	250,000.00	5%
Team	250,000.00	5%

A token can only be issued if equivalent Bitcoin mining power has been purchased by the Project or transferred to the Project. Miners transfer mining power to the Project in exchange for new BTCMT tokens issued. Any miner can transfer their mining power to the Project if certain conditions are met: 1) proof of legality and ownership of the given mining capacity; 2) the equipment producing the mining capacity is in data centers that pass the Project's inspection; 3) the size of the transferred mining capacity is not less than 10 PH.

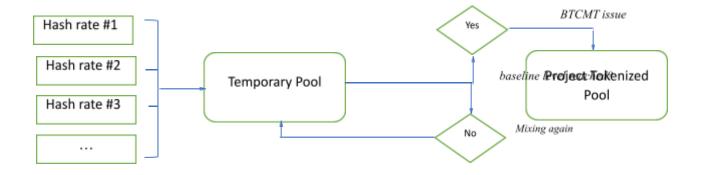
The Project can acquire mining capacity by raising capital or using retained earnings. Tokens issued as part of the Project's acquisition of mining capacity will be owned by the Project itself. As part of the transfer or acquisition of mining capacity, the number of TH units will be at least equal to the number of new tokens issued.

The project aims to maintain energy efficiency at a baseline level of 60 W / TH at launch. Thereafter, new mining capacity will be placed in a Temporary Pool for subsequent energy efficiency equalization. If the energy efficiency is not 60 W / TH, the Project will seek additional mining capacity with suitable efficiency that can be purchased or transferred to the Project so that the final energy efficiency reaches the baseline level.

For example, if the Temporary Pool contains 15 PH mining capacity with an energy efficiency of 80~W / TH, then the Project may decide to produce an additional 15 PH mining capacity with an energy efficiency of 40~W / TH in order to bring the total estimated energy efficiency to the baseline level.

Once the total energy efficiency in the Temporary Pool is successfully brought to the baseline level, the Project, with the consent of the owners of the mining capacity, will move all of the capacity to the Project Tokenized Pool and issue 1 BTCMT for every 0.01 TH added. If the base level is not reached, no tokens will be issued, and the mining capacity will wait to be brought to the base level again.

The total number of tokens in circulation must generate at least that amount of mining power, the equivalent of which all tokens in circulation represent. As described later, our partner mining pool will act as an independent auditor and periodically publish reports confirming that BTCMT is fully supplied with mining capacity. For example, if the blockchain shows that there are 1,500,000.00 tokens in circulation, then the project must have a Bitcoin mining capacity of at least 15,000.00 TH.



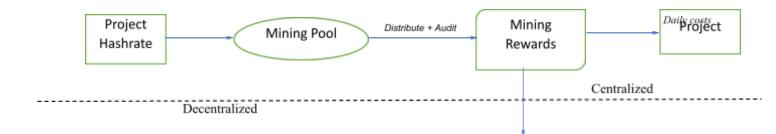
#### **Rewards distribution**

BTCMT receives rewards from Bitcoin mining centrally and distributes rewards to holders in a decentralized manner. The Project has a partnership with a reputable mining pool (Huobi pool) one of the 5 largest pools in the world, where it receives rewards from Bitcoin mining. The project will allocate all of its mining power to that pool in exchange for the rewards from mining, which will be calculated and distributed by the pool. Based on worldwide mining statistics, the project calculates that the downtime of mining facilities may be up to 8% per year. The centralization of this step is necessary to ensure accountability and efficiency: the mining pool will act as an independent service provider and auditor, monitoring the sufficiency of the project's mining capacity.

Name	Pcs	Unit of measure
HR (Hashrate) energy efficiency	0.06	kW/THs
Electricity price	0.055	USD/kW
Uptime	24	Hour
Hashrate	0.01	THs

A portion of the pool's accrued rewards will be sold in the marketplace to cover the project's daily operating and energy costs. The standard loss of energy efficiency in the industry is 3%. The formula for determining the *daily costs* of the project is:

**Daily costs** = HR e. efficiency x Electricity price x Hashrate x 24 x 1.03





The execution price and daily sale amount will be verified and published by the Project and certified by the mining pool. The remaining Bitcoin mining bounty attributable to the mining capacity deposited in the Project's dApp will be sent by the Project and the mining pool jointly to the dApp for distribution to owners.

The project provides a motivation program for early investors who have staked tokens. If the total mining capacity of tokens staked is less than or equal to 80% of the total active mining capacity, then the owners of staked mining capacity will receive a proportional distribution of the total Bitcoin mining reward.

The dApp will accumulate an amount in Bitcoin, which the owner is entitled to withdraw, for each continuous day of token staking (UTC 00:00). The calculation and distribution of rewards in Bitcoin will be done transparently and decentralized by the dApp. The owner can withdraw their Bitcoin at any time, either in full or in part.

For example, if the owner stakes 1,000 BTCMT in the dApp for a full day, then on the second day the owner will receive distributed mined Bitcoin according to the amount of mining power equivalent to the number of tokens mined (10 TH).

Like traditional mining, the exact amount of Bitcoin mined per unit of mining power will change daily because of the total hash rate of the Bitcoin network, the difficulty of the Bitcoin network, and the Bitcoin exchange rate relative to energy costs.

The token return is determined by the "Last - Forward" principle when the staking is completed.

## Protection of liquidity and price

We expect BTCMT to be valued higher than conventional mining because of its liquidity. To protect the valuation of BTCMT from pressure from sellers, significant issuances of BTCMT must occur and be unanimously approved by the Project's management board. The minimum amount of mining capacity for a significant BTCMT release is 2.5 PH. The Project is free to issue BTCMT representing the equivalent of less than 2.5 PH of mining capacity without unanimous approval from the management board.

## Minto company and the data center

The Minto company owns a large mining data center, whose creation is the result of extensive work. The company is a national leader in mining and hosting and owns the largest cluster of data centers in the country, in terms of square footage and total hash rate. All real estate, land,

and equipment is fully owned by the Project. The team has established themselves as high-level professionals in front of F2Pool, Canaan, Slush Pool and Braiins.

The key partners of the Company are the top Huobi pool and Huobi Global. These partners act as independent auditors and a controlling entity who will have a vote alongside the Project in matters such as new token issuance, cost level adjustments, profit sharing, and any future product updates or new functionality creation. Once the project is launched, there will be 5 votes: 1 vote belongs to the key partners, 2 votes belong to the Team, and 2 votes belong to the data center owners.

Minto performed in-depth research to find the best location to build a data center that complies with all international technological standards. This gem was found in the Republic of Karelia. The buildings are the now-inactive RUSAL factory in Nadvoitsy city. After making arrangements with partners and with the support of local authorities, reconstruction began in 2019. Unique factory buildings with a total area of 38,000 square meters were upgraded to allow us to host mining equipment with more than 120 MW of power by the end of 2021. The data center is built in complete compliance with local and international regulations and is monitored and maintained by a team of 150 experienced technicians. We have already installed mining equipment from leading manufacturers such as Bitmain, Avalon, INNOSILICON, and WhatsMiner. The overall computing capabilities of the facility can also be used for scientific calculations, big data processing, rendering, and artificial intelligence.

Mining with Minto neither harms the environment nor produces any CO2 emissions, as the electricity we use to power the facility is provided by a private hydroelectric plant, approved by WWF and complying with the CEO Water Mandate introduced by the UN.

The benefits the location and capabilities of Minto's Karelian data center offer include:

- hashrate of 50,000 THs
- ideal climate for a data center
- high quality, ultra-fast 2 Gbit internet
- access to a cheap, private source of energy

These factors allow Minto to cut maintenance and other operational costs to a minimum never achieved before. At full load, Minto is capable of providing over \$11,750 in mining rewards per day.

Right now, the number of tokens is only limited by the mining equipment allocated to the project, which is still below the full capacity of the data center. More of the facility's available miners will be used to maintain operations as necessary. As the project grows, so too will the number of tokens, and the amount of mining equipment devoted to Minto in the data centers. Additional, top-of-the-line facilities have already been constructed and more are on the way.

## Risks and risk management

Since Bitcoin's creation, mining has been profitable when viewed as a whole. The profitability of individual miner models or the Minto token is less obvious. The risks associated with Bitcoin mining are applicable to this project, since mining power is the basic unit of token collateral, though tokenization itself entails additional risks.

Risks in mining are typically associated with the blockchain protocol and network, including instability, congestion, high transaction fees, network latency, and increasing network difficulty. Such risks can result in delayed or failed transaction processing, and affect the final reward per unit of mining capacity, reducing it to a level where profits cannot be made.

In addition, among other risks, there are risks associated with the token, which may arise due to the presence of vulnerabilities or bugs in the dApp application, as well as attacks aimed at harming the Project, which may result in loss of rewards or make the receipt of rewards unavailable.

There are a number of external risks that we can minimize, but have no control over:

- Risks of damage to the mining equipment or its complete failure, which will affect final mining capacity (including as a result of floods, fires, earthquakes, war, coups, and other events, collectively referred to as Force Majeure);
- Risks of damage to the mining site and infrastructure that would slow down the development of the project or affect the project's final mining capacity (again including as a result of Force Majeure);
- Risks associated with unilateral increases in electricity rates from government suppliers or material changes in the contract by suppliers.

Although the Project team cannot control these risks, we can predict, minimize, and effectively manage them. The main tasks to minimize and effectively manage risks will be:

- Standardization of data centers for mining in accordance with international ISO standards, and standardization of requirements for the selection and verification of new sites, making checklists for verification;
- Allocation of mining capacities in different data centers managed by the Project, as well as the search for new sites for placement;
- Diversification of mining equipment models and manufacturers;
- Involvement of a large company and consultants for full due diligence of the Project in order to increase the probability of contracts, in which should be spelled out the scheme of property rights transfer, obligations for power supply, as well as the means of legal protection in the event of default, changes in legislation, and other events affecting the performance of the Project;
- Engagement of at least two security companies to analyze and audit the dApp and smart contracts, identify possible errors and/or vulnerabilities (if any), and correct them.

## Roadmap

[Link to current roadmap on Minto site]

#### Conclusion

The BTCMT token combines the best advantages of cloud mining and DeFi. Our economic activity is backed by the first and most liquid cryptocurrency, Bitcoin, but also by the equipment used for mining. The BTCMT team has united these two strong supports and connected them to our token by using smart contracts. We're pioneers and have no competitors for our solution. Our project represents cloud mining solutions taken to a new level for the whole blockchain industry.

BTCMT is a community project - join us and grab your slice of a pie that was, until now, out of your reach.	