

# **Whitepaper**

## **Bitcoin Hash Power token (BHP)**

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## 1. In Summary

Bitcoin Hash Power (BHP) is a crypto asset other than asset referenced tokens or e-money tokens issued by IBX AG, a Lichtenstein-based mining company that allows everybody to mine Bitcoin and participate in the generation of Bitcoin blockchain blocks. Mining Bitcoin means generating blockchain blocks through *proof-of-work* technology by receiving rewards from the Bitcoin blockchain itself.

Each BHP token is tied to the production capacity of 1 Terahash of Bitcoin mining hardware. The user who buys a BHP token, thus buys a production capacity of 1 Terahash that can be used in the space available in IBX's mining farms. In addition, at your preference, you can redeem the BHP tokens (with a number of BHP tokens corresponding to a miner's Terahash) and request the miner to be shipped at a mining farm of your choice, outside of IBX AG's mining farm.

## 2. Bitcoin Hash Rate token (BHP)

### 2.1. The token

BHP is a crypto asset different from asset referenced tokens or e-money tokens, each BHP is tied to a Terahash of Bitcoin mining hardware:

**1 BHP = 1 Terahash of Bitcoin hashrate**

The user who buys a BHP token, thus purchases a production capacity of 1 Terahash of Bitcoin

The BHP token is represented by an ERC20 smart contract on the Ethereum blockchain.

The user who purchases Terrahash of Bitcoin hasrates via the BHP token must also activate them in the space available in IBX's mining farms and then begin production and mining Bitcoin or at his preference he can redeem BHP tokens (with a number of BHP tokens corresponding to a miner's Terahash) and request that the miner be shipped at his expense to his preferred mining farm, outside of IBX AG's mining farm. In order to redeem BHP tokens, it is necessary to have a number of BHP tokens matching a miner's production capacity (see section 5 "Redeem

BHP tokens and get miners").

## **2.2. Depreciation costs**

Hashrate-producing servers, hereafter referred to as miners, undergo an ageing process due to the increased difficulty for mining and future technological developments. For this reason, after a certain number of years, the miner is no longer found to be efficient and must be decommissioned.

In order not to lose value, a portion of the Bitcoins generated through the hashrate of the BHP token are allocated to purchase a replacement machine. Replacement costs vary over the years and are not a fixed amount, but can be quantified as approximately 30 percent of the revenue generated by the miner.

Each new machine purchased will be allocated to BHP token holders to compensate for the loss of hashrate from miners.

## **2.3. Operating costs**

The hashrate purchased through the BHP must be activated by allocating the token to a specific hosting center. Through the activation action, the token holder agrees to enter into a mining as a service contract with IBX to manage the mining activity. The contract governs IBX's responsibilities for the mining activity and the expenses associated with that activity, specifically:

- Hosting costs
- Electricity costs
- The costs of management by IBX

The BHP token holder is aware that without the token activation step, the token does not generate any Bitcoin and serves only to redeem miners corresponding to the purchased hashrate.

## **2.4. Transparency**

One of the goals of blockchain technology is to increase transparency, any information on the blockchain is available for anyone to verify.

You can easily verify that each BHP is linked to a Terahash of miner hardware by comparing the number of tokens minted to the smart contract address of the ERC20 BHP token

0x7C3ce9939Dc06baA163334029759C1e8Fd6A5F56 with the total

hashrate of miners supporting BHP tokens.

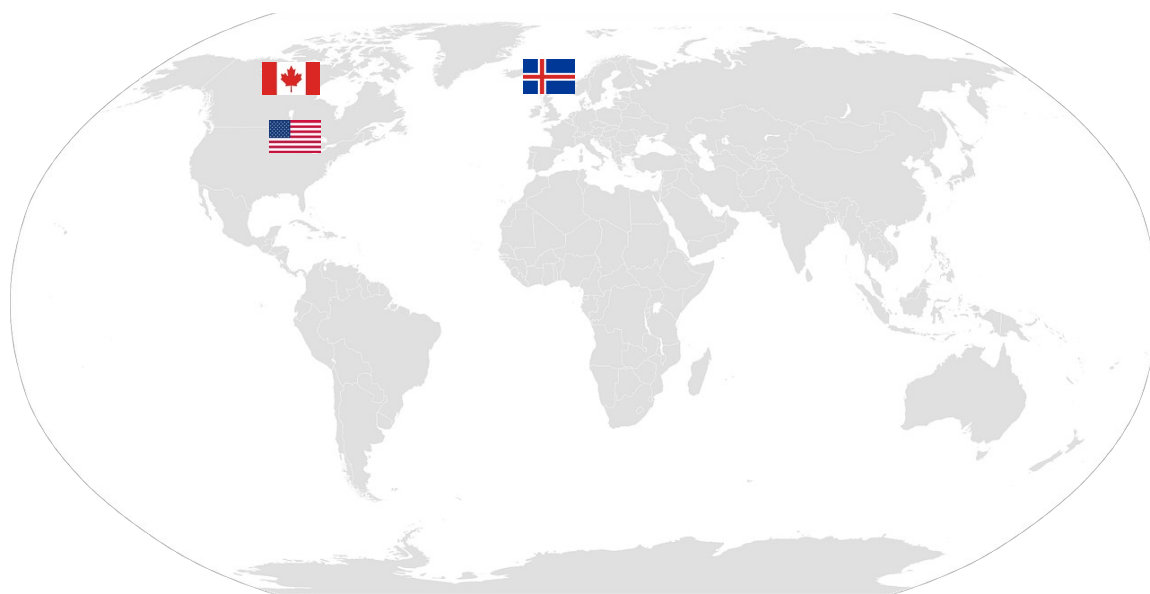
At <https://www.bitcoinhash.io/transparency/> it is possible to check in real time that the total hashrate of IBX miners has a 1:1 match with the BHP tokens released on the blockchain as well as the Bitcoins mined each day. The mined Bitcoins are then distributed to the owner of the BHP tokens he or she has allocated in IBX's mining farms net of costs (which include the cost of hosting at the datacenter, the cost of the electricity used to process the share of miners represented by each token).

### **3. Hosting of miners to mine Bitcoin**

The miners will be hosted at one of the mining farms in Iceland, the United States (Texas, New York) and Canada (Manitoba) where IBX AG has contracted space and which have favorable conditions determined by:

- Low energy costs
- Low temperatures
- Internet ultra-wideband

IBX will have the authority to set up new hosting in the following regions: Europe, North and South America. IBX will check the management of the machines and their repair, however IBX is not responsible in case of loss of the machine due to force majeure events (natural disasters, wars) as well as in case legislative changes in the country where the machine is located should make it impossible to continue mining.



#### **4. Where to buy the BHP token**

The BHP token is listed on the exchanges indicated on <https://www.bitcoinhash.io> where you can not only buy and sell the BHP token but also subscribe to the mining service at IBX mining farms. You will receive weekly in your wallet at these exchanges the Bitcoin reward of mining activity less the operating costs which include the cost of hosting at the mining farm, the cost of electricity, and the cost of IBX service for managing the miner's share represented by the BHP tokens.

The user does not directly provide for the mining cost as this is deducted from Bitcoin rewards before they are distributed.

At any time the user can check the total hashrate and mined Bitcoin on the transparency page <https://www.bitcoinhash.io/transparency/>

#### **5. How to redeem BHP tokens and receive the miner**

Users can redeem BHP tokens and have the miner sent to the mining farm of their choice. A number of BHP tokens corresponding to the total terahash of the miner is required. BHP uses different models of miner: Antminer XP 140T - S19 pro 110T - S19J 104T- S19J100T - Avalon 1246 90T. When redeeming BHP tokens, it is IBX that chooses which miner model to redeem the tokens with. IBX chooses a model based on what is available in stock and out of the mining pools, and it could be, by IBX's exclusive choice, any of the models mentioned above. An amount of BHP tokens corresponding to the miner's total terahash available in stock must be redeemed.

## 5.1. Miners: typology of models



Antminer S19 XP

Hash rate 140 t



Antminer S19 Pro

Hashrate 110 t



Antminer S19j Pro

Hash rate 100 e 104 t



Avalone 1246

Hashrate 90 T

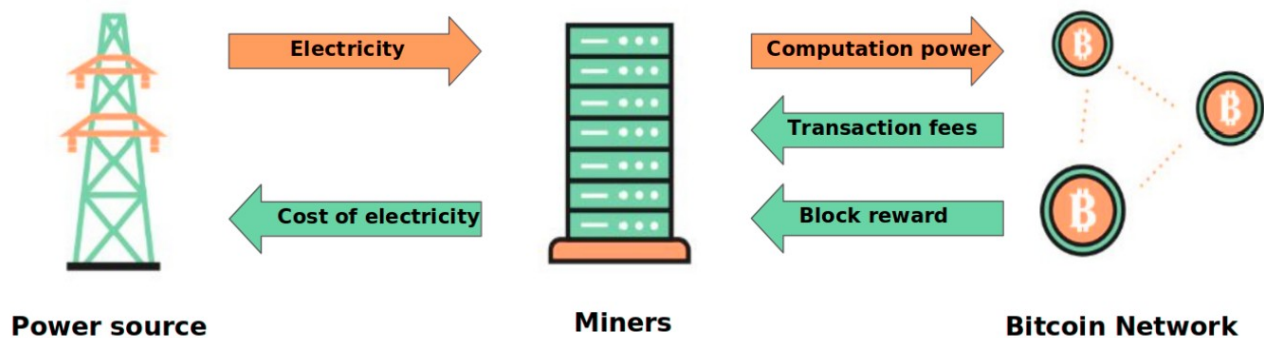
## 6. The issuing company and the founders

IBX AG is the Lichtenstein-based mining company issuer of the token Bitcoin Hash Power (BHP).

In 2019, the government of Liechtenstein passed a law called the Blockchain Act that aims to regulate blockchain technology and its various applications. This act is a significant step toward creating a regulatory framework for companies whose business is based on blockchain, making Liechtenstein one of the first countries to do so.

IBX AG is based in Triesen, Liechtenstein, and has been mining Bitcoin since 2021.

## 7. How Bitcoin mining works



- For each block produced, Miners receive transaction fees and block rewards from Bitcoin's blockchain
- Electricity and the purchase of mining super computer equipment are the main costs for Miners
- On average, new blocks are produced every ten minutes

### 7.1. Bitcoin mining: the process

Bitcoin mining is the process of validating transactions and adding them to the blockchain ledger by solving complex mathematical problems using powerful computers. Miners compete to be the first to solve the cryptographic puzzle and earn a reward in new bitcoins, in addition to transaction fees paid by users. The difficulty of the hash function is adjusted every 2016 blocks to ensure a constant block time of ten minutes. The bitcoin mining process is designed to ensure that the network remains secure and decentralized. By requiring miners to solve complex mathematical puzzles, the network ensures that no single entity can control the network or manipulate transactions.

Bitcoin mining requires specialized hardware, known as application-specific integrated circuits (ASICs), designed to perform the mathematical calculations required for mining as quickly and efficiently as possible. These ASICs consume a significant amount of electricity and generate heat, so miners often locate their operations in areas with cheap electricity and cool climates. In addition to the block reward, miners also receive transaction fees as an incentive to include a user's transaction in their block. Transaction fees are paid by users to prioritize their transactions and ensure that they are processed quickly.



As the number of transactions on the network increases, transaction fees also increase, making mining even more profitable for miners.

## **8. Risks**

### **8.1. Technical knowledge required**

The BHP buyer confirms that he understands and has significant experience in bitcoin, cryptocurrency, and blockchain systems and services, and that he fully understands the risks associated with purchasing a mining token.

IBX will not be responsible for any loss of BHP or mined bitcoins or situations that make access to the tokens or mined bitcoins impossible, which may result from the actions or omissions of the user or any person who engages in acquiring BHP tokens, as well as in the event of hacker attacks.

### **8.2. The risks to which Bitcoin mining is exposed**

Bitcoin mining is a highly competitive activity that requires a large amount of resources, both financial and energy. Despite the potential gains, there are also significant risks to which Bitcoin miners are exposed. Therefore, and before acquiring BHP tokens, any user should carefully consider the risks, costs, and benefits of acquiring BHP tokens and, if necessary, obtain independent advice on the matter. Any interested person who is unable to accept or understand the risks associated with mining or any other risks as outlined below should not acquire BHP tokens. In this section, we will review the main risks associated with Bitcoin mining and how miners can mitigate them.

#### **8.2.1. Bitcoin price volatility**

The price of Bitcoin is known for its extreme volatility, which is the result of various factors, such as market demand, industry news, and fiat currency fluctuations. Bitcoin miners make money in Bitcoin, so Bitcoin price volatility can have a significant impact on their earnings. If the price of Bitcoin suddenly collapses, miners can suffer significant financial losses.

To mitigate the risk of price volatility, miners may consider using hedging strategies, such as using Bitcoin futures or Bitcoin options. In this way, miners can protect their Bitcoin earnings from price fluctuations.

IBX does not perform any hedging or hedging of Bitcoin price

fluctuation risk.

### **8.2.2. High energy costs**

Bitcoin mining requires a huge amount of electricity to run ASICs. Energy costs can account for a significant portion of total mining costs. In addition, energy costs can vary depending on the geographic location of miners, as energy rates can differ from place to place.

Miners can mitigate the risk of high energy costs by choosing a geographical location with lower energy rates or by using renewable energy sources, such as solar or wind power. In addition, miners can consider using more energy-efficient hardware that uses less energy to solve mining problems.

IBX also chose the location of its mining farm in consideration of energy prices. The buyer of BHP accepts the location of the hosting farms chosen by IBX and will not hold IBX responsible if the energy prices of these locations should increase.

### **8.2.3. Increasing mining difficulty**

The difficulty of Bitcoin mining is designed to increase over time, which means it becomes increasingly difficult for miners to solve the math problems required to add new blocks to the blockchain. This means that miners must continually upgrade their electronic hardware to remain competitive.

The increasing difficulty of mining can pose a financial risk to miners, as the costs of upgrading hardware can be significant. In addition, if miners are unable to upgrade their hardware on time, they may lose potential earnings due to competition from more efficient miners.

The purchaser of the BHP token is aware that the value of the BHP token depends on the efficiency of the miners models purchased. The BHP token buyer is also aware that the BHP token has a limited lifespan and it will no longer produce any Bitcoin when its hardware is no longer competitive.

### **8.2.4. Safety hazards**

Bitcoin mining requires the use of mining software that can be vulnerable to cyber attacks. Miners can be subject to phishing attacks, malware, and DDoS attacks, which can compromise the security of their Bitcoin earnings.

IBX is not responsible for attacks suffered by BHP token holders once

Bitcoins have been transferred to the token holders' wallets.

### **8.2.5. Extreme risks from natural and other causes**

Miners are subject to hazards such as earthquakes, volcanic eruptions, floodings, fires and theft. Earthquakes and volcanic eruptions can damage miners' locations. Theft can be physically perpetrated, fire can be caused by short circuits or overheating of components, and flooding can be caused by water leaks or extreme weather events. In addition, natural (earthquakes, floods, volcanic eruptions) and nonnatural (wars, epidemics) extreme events can have a negative impact in mining. Finally, the legislature could intervene in mining activity by regulating it or even banning it.

In view of the high cost of insurance, IBX does not insure miners against these risks, but manages them by spreading its miners over multiple locations. The purchaser of the BHP token declares himself aware of these risks and excludes any liability of IBX in case of loss of miners due to any of the above events.

## **9. Representation and guarantees:**

By purchasing the BHP, the purchaser agrees to the above and specifically represents and warrants that:

- Having carefully read the terms and conditions of this document; agreeing to their full content and being legally bound by them;
- Are not U.S. citizens, residents or entities (a "U.S. Person");
- Not to be a resident of a jurisdiction that does not allow the sale of BHP;
- that they are familiar with all related regulations in the specific jurisdiction in which they are based and that the purchase of cryptographic tokens in that jurisdiction is not prohibited, restricted, or subject to additional conditions of any kind;
- to have sufficient knowledge of the nature of cryptographic tokens and have significant experience and functional understanding of the use and complexity of token management and bitcoin mining.

## **10. Applicable law - Arbitration:**

All disputes arising with the documents provided shall be settled by arbitration in accordance with the Swiss Rules of International Arbitration of the Swiss Chambers of Commerce in effect on the date the Notice of Arbitration is submitted in accordance with these Rules. The arbitration panel shall consist of one arbitrator. The seat of the arbitration will be Lugano, Switzerland. The arbitration proceedings will be conducted in English.