



CRYPTO MINING AS A SERVICE

www.Bit3-mining.com

Bit3 develops and operates fully integrated Bitcoin mining facilities in strategic locations, using its in-house developed MeasureX OSS/BSS platform

Bit3 acts as a “facilitator” for the creation of digital assets and doesn’t speculate on the value of the digital assets.

PLUGS

We focus on plug capacity to ensure flexible growth through dynamic markets. Our vertically integrated, infrastructure-first strategy ensures the ability to create and take advantage of plug-ready digital asset infrastructure.

POWER

We build **sustainable**, scalable facilities utilizing 100% zero-carbon energy while delivering peer-leading power supply economics.

What is crypto mining?

Crypto mining is the process by which crypto miners use computers, data, codes, and calculations to validate cryptocurrency transactions and earn cryptocurrency as compensation for their work.

As people become more interested in cryptocurrency, it's important for everyone to be able to easily understand how crypto mining works in simple terms.

Sometimes it is easier to understand how things work when we can visualize where the work is taking place, what is required to drive the work, and who or what is involved. We will take a look at some of those questions here in order to help you better understand how crypto mining works.

1.1. Where Does Crypto Mining Take Place?

While traditional mining took place in a physical mine or specific geographic place, crypto mining takes place in a decentralized system where anyone with a computer and power source – anywhere in the world – can be a part of the digital data recordkeeping required for cryptocurrency transactions. The shared, publicly available cryptocurrency record is called a ledger.

With traditional currency, the ledger is centralized, meaning only official authorities and banks can verify and validate transactions and values. In the decentralized cryptocurrency system, the responsibility for verifying and validating transactions and recording the digital data on the ledger is distributed among all of the participants on the cryptocurrency network. For this reason, it is called a distributed network.

The decentralized network functions like a web, with many people and computers taking part and participating, so no one institution or person can control the network.

1.2. How Does Crypto Mining Work?

As previously discussed, cryptocurrency uses distributed ledger technology to decentralize currency transactions. That ledger is called a blockchain. Crypto mining involves verifying blocks of data and adding them to the blockchain. This process allows for a trustless, peer-to-peer form of currency.

To verify blocks, crypto miners must verify the data in the block, record the transaction on the block, and add the new block to the blockchain. The verification process used in crypto mining is not easy. Miners must correctly guess the code associated with the data on the newest block using code-cracking functions. Code-cracking is called **cryptography**. Therefore, these functions are called cryptographic hash functions.

In crypto mining, the first miner to correctly guess the complex code for the latest block then transmits their work to other miners on the network. If other miners are able to verify the original miner's code, the original miner receives cryptocurrency and transactions fees as a reward.

1.3. Who Are Crypto Miners?

As you learn about cryptocurrency and crypto mining, you may have wondered “who exactly are crypto miners?” Crypto miners range from companies with multiple facilities and miner machines to individuals using everything from mobile phones to personal computers to verify cryptocurrency.

What is sustainable crypto mining?

Crypto mining requires energy to power the computers that verify and record cryptocurrency transactions. In some cases this energy may come from the burning of coal or fossil fuels, a source of carbon emissions, which are driving climate change. In contrast, green crypto mining draws power from renewable energy sources such as solar power, hydroelectric power, and nuclear energy that emit little or no carbon.

2.1. What is the primary source of energy for crypto mining?

Entrepreneurs and leaders from Elon Musk to Janet Yellen have voiced concerns over the sustainability of crypto mining because it is a carbon-intensive process requiring a lot of power. However, it is a misconception that fossil fuels are the only source of energy for crypto mining. In fact, a 2020 study [PDF] by the Cambridge Centre for Alternative Finance (CCAF) at the University of Cambridge Judge Business School found that the crypto miners around the world they surveyed sourced their energy from renewable energy sources. The bitcoin miners they surveyed reported that 29% of their mining is powered by renewables. Many crypto miners are turning to renewable energy and using it to increase their profits.

2.2. How can the sustainability of crypto mining be calculated?

You might think the sustainability of crypto mining could be calculated by looking at emissions, but this can be difficult to calculate. It is difficult to ascertain the carbon emissions created by crypto mining without knowing the precise energy mix used to power it in the first place. Think of this like knowing the supply chain of crypto mining. For example, one unit of hydro energy will have much less of an environmental impact than the same unit of coal-powered energy.

In an [article](#) [PDF] published in 2021 the journal Nature Communications, researchers found inducing the industry to source its energy from clean or renewable energy sources could be a more effective way for government policy makers to limit carbon emissions than taxing emissions after they are already created.

2.3. When can crypto mining be considered green or sustainable?

To understand whether crypto mining is green or sustainable, it is first important to understand how a crypto mining company describes its energy sourcing practices. Some ways to communicate sustainability involve claiming crypto mining is “zero carbon” or “carbon neutral” but these are not the same thing.

Zero-carbon means that no carbon emissions were produced during the creation of a product or a service. **Carbon neutral** involves removing as much carbon from the atmosphere as was created, after it is created. This may be through carbon credits or offsets, i.e., payments to support activities that support the removal of carbon from the atmosphere, such as preserving or planting forests. However, the idea that carbon neutral is sustainable has been criticized because carbon credit/offset activities may not permanently reduce carbon. If carbon credits are used to protect one forested area, deforestation may increase in another area.

BIT3 mines sustainable bitcoin at an industrial scale using over 90% zero-carbon energy. These sources include nuclear energy, hydro-electric power, and solar. We plan to reach 100% zero-carbon emissions by 2030.

What is the future of crypto mining?

The future of crypto mining is one of growth, and the need for crypto mining is increasing as the use of cryptocurrency increases worldwide. Bitcoin mining can speed up the transition to a zero-carbon future while creating green energy jobs and helping fight climate change by enabling the grid to manage higher proportions of renewable loads.

3.1. Crypto mining is a growing industry.

The opportunities for crypto mining are expanding as crypto currency use and acceptance increases worldwide. In September 2021, the country of El Salvador became the first country to adopt bitcoin as its national currency; in April 2022 the Central African Republic followed. Improvements to the Bitcoin protocol and the lightning network are making bitcoin transactions faster, safer, and easier for users. As the size of the Network increases, the opportunity and need for miners who keep the bitcoin network running increases as well.

3.2. Crypto mining can complement the transition to renewable and zero carbon energy

Crypto mining may present an opportunity to accelerate the global energy transition to renewables by sourcing energy from renewable sources and utilizing surplus renewable energy supplies.

The Bitcoin Clean Energy Initiative has published a research paper on how **Bitcoin mining could complement renewable energy** and storage systems. The paper highlights how crypto miners can offtake excess energy that is currently not able to be stored by batteries cost-effectively. Crypto mining also enables less flexible nuclear generators to adapt to a changing grid, for example, BIT3 is currently constructing a bitcoin mining facility that will draw power directly from a nuclear power plant. This co-location provides BIT3 with stable, zero carbon power and provides the nuclear power plant with a stable, baseload customer.

3.3. Crypto mining can create green energy jobs and support local economies

Crypto mining facilities operate like large data centers and are major employers and economic drivers for communities.

BIT3's sustainable bitcoin mining facilities harness abundant hydro and renewable energy from the local area. The new facility will employ local workers. Our facilities create green energy jobs.

The foundations of **BIT3**

BIT3 focusses on a multi-tier approach for digital asset creation: Cloud-Mining and Hosted-Mining

4.1. Cloud-Mining

Cloud mining is the easiest and most effective way to make money from cryptocurrency mining without buying and maintaining equipment. It is realized through the lease of **BIT3's** equipment facilities. One of the main advantages of this investment type is the ability to start mining with literally two clicks. Customer's just need to select a contract and buy it.

4.2. Hosted-Mining

Hosted mining, also known as custodial mining, is a process where a third-party hosts mining equipment on behalf of a client. In most cases, the client purchases the mining equipment directly through the hosting company. Generally included within this hosting fee, in addition to electricity and rack space, are all the ancillary services to ensure operations run smoothly such as security, customer service, and monitoring.

5. BIT3 & MeasureX platform

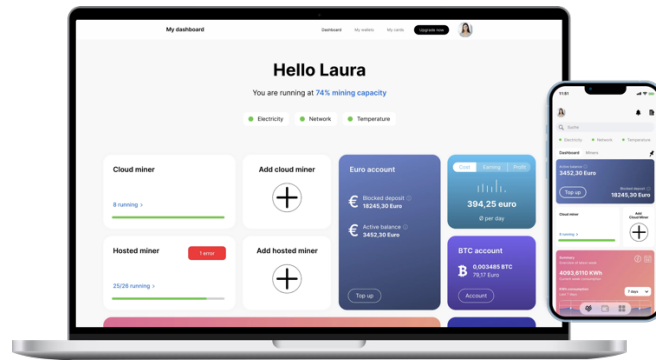
In house developed by **BIT3**, the MeasureX platform eliminates all operational and financial risks related to cloud-mining and hosted-mining.

5.1. Hosted Mining + MeasureX

From recurring billing of service fees and one-off fees to spot-on multi-tier billing of actual consumed electricity. Everything has been covered.

5.2. Cloud Mining + MeasureX

The BIT3 Cloud Mining platform + Mobile APPs facilitate the one click process of ordering, provisioning and operating of Cloud Mining Contracts.



MeasureX Interface & App

6. One off opportunity in the market

The main pillars for creating a highly profitable Bitcoin mining operation consist of 3 combinable factors:

$$\begin{array}{c} \text{Mining location and electricity price} \\ + \\ \text{powerful state of the art mining equipment} \\ + \\ \text{management software / **MeasureX**} \end{array}$$

6.1. Mining location opportunity

Bit3 has the opportunity to buy a 4,5 Mwatt facility (expandable to 20 Mwatt) in Sweden, fully equipped for crypto mining with a running, renewable green power contract at a purchase rate of **3,5 cents per Kwh**. This is the lowest rate possible in the Western Hemisphere.

6.2. Bitmain partnership special one-time quote

Bitmain, the largest manufacturer of Bitcoin Mining Equipment, has proposed a special deal to **Bit3** which consist of their newest (Not yet on the market) Liquid Cooled Miners at a 17\$ per TH price. On top of the best in market price Bit3 will receive from Bitmain to support this deal liquid cooled mining containers **for free** as part of a one-time deal.

The combination of these opportunities will make **Bit3** without ANY doubt the best suitable player on the **GLOBAL** market.

Existing players like Riot Blockchain, with a market cap of over **830 Mio USD**, who invested hundreds of millions of dollars don't even come close.

It is clear that current market conditions are shaping opportunities, never seen before in this industry.