The Satoshi Mining Whitepaper

What is Mining?

On May 13, 2021, the BTC price collapsed when Elon Musk announced that Tesla would no longer accept bitcoin. Tesla said mining is not environmentally friendly. Why does Bitcoin mining consume so much energy: and how does it even work? We explain in simple terms.

Every 10 minutes: —a riddle

You may be surprised, but at the heart of the bitcoin mining process is solving a complex mystery. Tasks are set by the Bitcoin blockchain, and miners solve complex hashing puzzles using powerful computing devices.

We will not go into the details of how these riddles work, we will only say that the miners need to find a number that satisfies certain requirements. Moreover, it is impossible to simply solve the problem as an equation. You need to sort through millions of potential solutions and broadcast them to other miners so that they can check them for correctness.

The mysterious creator of Bitcoin, Satoshi Nakamoto, set up the system in such a way that solving a cryptographic problem requires huge computational efforts, but checking for correctness is very simple. When all the miners in the network agree that the number found is correct, a new block is added to the network and the system immediately issues a new riddle. On average, this happens every 10 minutes.

This algorithm is called Proof-of-Work (PoW), that is, “proof of work”. This can be understood as follows: by broadcasting potential solutions to the network, the miner proves that he has completed the computational work.

The one who first finds the coveted number; —or rather, the one whose decision is the first to be recognized as correct by the rest; receives bitcoins as a reward. In 2021, the block reward is 6.25 BTC.

Three mysterious words: Hashrate, Difficulty and Asics

The miner's earnings largely depend on the performance of the equipment. The more decisions per second the machine produces, the more likely it is that one of them will be correct. This number of potential solutions (hashes) per unit of time is called a hashrate and reflects the computing power of the device. And the network hashrate is the total power of all simultaneously working miners (by the way, a miner is both a machine and a person involved in mining).

Over the past 10 years, the hashrate of the Bitcoin network has been gradually growing. It would seem that if all miners are working on the same task, then as their number (i.e., the total hashrate) grows, it will take less and less time to find a solution. But no: the complexity of the tasks also increases, so on average, the same 10 minutes are needed to solve. And vice versa: if a lot of miners suddenly leave the network, the difficulty will automatically drop.

This is exactly what happened in May-June 2021, when mining was banned in a number of regions in China. The miners had to massively disable equipment and leave Yunnan, Sichuan, etc. The network hashrate decreased by 54%, followed by a decrease in difficulty by 28%. Again, thanks to Satoshi Nakamoto for this elegant balancing mechanism.

At the dawn of Bitcoin development, the complexity was so low that it was possible to mine BTC on a regular computer. Now, for this, special devices are used: ASIC, or Application Specific Integrated Circuit, which means "special-purpose integrated circuit." It's a microchip that can only do one kind of calculation, but it's extremely efficient.

Power Consumption Problem

The hashrate of modern ASICs is calculated in terahash per second, that is, in trillions of hashes (solutions). For such power, these devices are very efficient: one ASIC consumes several times less electricity than a set of video cards (GPUs) with the same total hashrate.

Although each individual ASIC has sufficient efficiency, all ASICs combined consume a huge amount of electricity. Much of this electricity comes from fossil sources such as coal. This is what Elon Musk meant when he said that bitcoin mining is not environmentally friendly. The problem can be described as follows: the Bitcoin network is well protected from attacks and manipulations because all miners must come to a consensus and do the work. However, the fact that they are all competing on the same task results in a huge waste of resources.

This is the paradox of the Proof-of-Work algorithm, and Bitcoin mining will remain costly until the last coin is mined, presumably in 2140.

Securing the Network: The network is secured by using electric energy to stamp hashes on each block of transactions. The efficiency of using this type of methodology to secure the network is far superior to the number of resources needed to secure the legacy monetary system and far cleaner from a renewable perspective. The sustainable power used in the Bitcoin Mining Network is over 50% and has been

stated to be up to 56%. For comparison purposes, the U.S. uses electricity that is 30.5% sustainable, and in China, it is less than 15% sustainable.

Bitcoin Business Model: Satoshi Mining Inc. is a state-of-the-art Bitcoin Mining organization that will invest the proceeds from its token sale into the latest ASIC equipment and/or purchase hashrate futures. By combining both methods of mining, Satoshi Mining will have a relative bitcoin mining cost of approximately $25K. Also, due to the token sale, Satoshi Mining will not have to liquidate bitcoin in-order-to cover operational expenses which will result in a more robust balance sheet that will accrue bitcoin over time. By investing in the latest and most advanced equipment, Satoshi Mining will reduce its energy consumption on a terahash basis due to Moore's law which states the cost of computing power will decrease by approximately 50% every 2-3 years. This will enable Satoshi Mining to stay competitive while new technology is adopted in the ecosystem.

Satoshi Mining will be proactive in the space and will cultivate relationships with best-in-class vendors in the space to stay competitive and mine bitcoin at the lowest marginal cost available in the space. Satoshi Mining believes in creating an ecosystem that allows for all stakeholders to benefit and win. Satoshi Mining will operate with this mindset and will help drive bitcoin adoption to the masses. Another benefit of Satoshi Mining's business model is diversification. Due to geographical risk (weather, energy curtailments, etc.) and political risk (China, and regulatory FUD), Satoshi Mining will allocate capital and resources to having a robust infrastructure to create anti-fragility in the operating model. By having equipment at different locations and by utilizing hashrate futures, Satoshi Mining will be able to maintain a profitable operation in the event a risk factor does become a reality. It is also critical that Satoshi Mining continues to invest in infrastructure.

Bitcoin mining is the critical link between digital assets and the legacy world. By utilizing state-of-the-art hardware that is physical in nature, there is a real tangible cost to mining bitcoin in terms of energy consumption and hardware investment. In the

current legacy system, there is no marginal cost incurred in manufacturing more currency which is why the Central Banks continue to print more currency and flood the system with additional money supply for Manufacturer growth. The mining community does not have this luxury. Miners are forced to continue to invest in critical hardware and find the cheapest sources of excess energy to run a profitable operation. This is the only industry that exists in a free market today and that makes it worth participating in perpetuity. Economics: bitcoin has historically increased in value on an annualized basis of over 100% annually. The price increases are due to increased user adoption and tighter supply economics that are driven by the halving events and the two-week difficulty adjustment. This constant supply tightening drives the price higher over time as long as user adoption remains constant and/or is growing. Satoshi Mining believes the difficulty adjustments incurred over the next 12 months will be at a minimum of 3% per month and could double over the next 12 months. This is a net positive for the industry and Satoshi Mining. Even though Satoshi Mining's market share would be reduced by 50% in the event the computing power doubled over the next 12 months (assuming zero reinvestment into new equipment), this supply tightening will drive the price ultimately higher in the long run. Satoshi Mining is not interested in short-term price movements and does not consider them when evaluating operational performance. Satoshi Mining expects to mine operationally at a substantial profit margin that enables Satoshi Mining to continue to reinvest in the operations to withstand competitive pressures over the long run. Satoshi Mining believes it can mine bitcoin at a substantially lower cost than the spot price. This creates the incentive to mine bitcoin instead of purchasing bitcoin on the open market. Satoshi Mining expects to continue to increase the hashing power contributed to the Bitcoin network thus resulting in an increase in bitcoin captured relative to other market participants. Satoshi Mining will be a stacker of bitcoin and believes it can mine in excess of 100 or more bitcoin in the future based on current market conditions including taking into consideration various future risk factors.

Satoshi Mining will be actively trading an A.I.-based derivatives overlay strategy on the company's bitcoin treasury. The A.I.-based derivatives strategy will reduce the

volatility of our portfolio by 50% without affecting the treasuries bitcoin's upside potential.

Part of Satoshi Mining's roadmap is to implement a governance platform or token, which would be airdropped to SATM token holders in our ecosystem in order to become a fully operating DAO.

Tokenomics

What is the total supply of SATM?

- 100,000,000 SATM

What is the token distribution?

- 20,000,000 ICO
- 20,000,000 Founders
- 50,000,000 Circulating supply
- 1,000,000 Bonuses, Bounties, and Rewards
- 9,000,000 Mesures & Acquisitions and Treasury

The teams founding tokens have a 2 year lockup period. Only founders and certain partners are locked or vested. We will have more updates on the number of locked/ vested tokens in the future.

How often does the circulating supply increase?

The supply will only increase to scale the bitcoin mining operation. We know a healthy amount about the dynamics of circulating supplies and their effects on price movements, this is called the 'float' in the traditional capital markets and you want your float as low as possible and not bloated. The majority of cryptocurrencies out there

have far too many of their tokens in their circulating supply and that prevents the token from appreciating. This also connects to how your overall capitalization table is structured.

What is the purpose of the SATM token?

To fund and scale a Bitcoin mining operation within a DAO and lending capabilities. There are two smart contracts one where sellers of the token will be charged a small hash fee of .1% per transaction. The second smart contract is to take 10% of annual profits to buyback tokens and burn them to reduce the circulating supply.

Is it possible to obtain a yield on holding or staking SATM?

Part of our roadmap is to start borrowing SATM tokens from holders. Holders can expect a minimum of 10% yield paid out annually in bitcoin. Longer term loans will guarantee higher rates. We are initially planning 1 to 5-year lending periods. All SATM borrowed will be used to scale the Satoshi Mining operation.

Will there be SATM buybacks from Satoshi Mining?

Yes, 10% of annual profits will go to buybacks and will be burned. This will reduce the circulating supply and therefore should increase the value of SATM tokens. There is no set strategic schedule of buybacks, but they will occur on a yearly basis.

Buybacks help to control float, which grants control over the uncertainty of the market. Controlling float is important so that a company cannot manipulated by anyone who does not have the company's best interests at heart.

40% of annual profits will be used to reinvest into Satoshi Mining to scale the operation. 50% of profits will be used to pay team member salaries, research, marketing, conferences, and other necessary costs to grow the company and token.

It should be understood that some altcoins have altruistic purposes founded on decentralization, SATM is not one of those coins. SATM is a utility token that is central to the business plan of a for-profit company. As long as Satoshi Mining performs well, both equity and tokens should increase in value.

Can the team provide clarification on the strategic selling by the team from the main wallet?

There is no strategic selling by the main wallet. What is occurring is called capital raising? Questions around the movement of funds from the wallet are at the discretion of the team concerning capital, deals, and scaling of the operation.

DeFi went beyond the hype in 2021, with the value of the DeFi economy increasing manifolds. Here we take a look at some trends in the DeFi economy in the third quarter of 2021.

To say that decentralized finance (DeFi) came into its own in 2021 would be an understatement. As an increasing number of investors—individual and institutional—put their bets on DeFi, the value of the DeFi economy went up manifolds. The value of all DeFi assets topped $100B for the first time in October 2021, according to data compiled by DeFi Pulse.

Here we take a look at some trends in the DeFi economy in the third quarter of 2021.

Borrowing and Lending

Borrowing and lending in DeFi saw significant growth in terms of outstanding loans in Q3, reaching an all-time high on September 6th, with approximately $24.7 billion worth of debt outstanding. This dramatic rebound in Q3 came after a precipitous drop-off in activity at the end of Q2, where total debt outstanding stood at around $14.3 billion.

Aave leads the DeFi lending protocols with outstanding debt on the protocol standing at $7.4 billion. Interestingly, the market foresaw Aave becoming the leading lending protocol, as the AAVE token has significantly outperformed leading competitor Compound's COMP token. Furthermore, Aave has attained an approximately $4.6 billion fully diluted market cap while Compound lags at around $3.1 billion fully diluted market cap.

Approximately 68.2% of outstanding loans reside in DAI versus 21.9% for USDC, indicating a growing level of trust in the decentralized stablecoin. The increasing level of trust for DAI is likely driven by concerns over the SEC's ongoing investigation of Circle.

User growth for leading lending protocols, Aave and Compound, both slowed in Q3. While Aave's user base grew by 42% in Q2, from 46,588 total users to 66,083 total users, and grew only 16% in Q3 to approximately 76,909 total users. Similarly, while Compound's user base grew by about 4% in Q2, from 311,581 total users to 323,759 total users, their user base only grew by 1.9% in Q3 to a total user base of 323,759. While outstanding loans overall have increased dramatically, user growth has not experienced the same exponential growth, meaning that the average debt outstanding per user dramatically increased in Q3. This fact could be driven by the market rally we experienced starting in Q3. The DeFi ecosystem has experienced an unprecedented surge in volume in 2021 as more participants enter the market and more sophisticated financial instruments are built. Popular protocols like Uniswap, PancakeSwap, and SushiSwap are now generating well over $100 million in annualized revenue. dYdX, a decentralized derivatives exchange that supports perpetual, margin trading, and spot trading, realized over $45 million in revenue during the month of September.