



WHITE PAPER VERSION 2.0
(October 28, 2021)

What is our primary objective?

Seed2Need (SILO) is an organically grown crypto community. We are focused on bringing blockchain awareness to the Agriculture Sector. We feel that having both a strong DIY community and Knowledgeable block chain development team, we can help lead the way to better results. We built our community with a few core values. We feel that these values touch upon all humanity.

Re-useable or Sustainability is among those core values. These are seen as movements that embraces all facets of human endeavor. “Sustainable” means to perpetuate existence as well as to provide sustenance and nourishment. We hope to expand upon these ideas in future.

This document attempts to answer the following questions:

1. What is Seed2Need (SILO)?
2. What is the hashing algorithm?
3. What is Proof-of-Stake/Proof-of-Work?
4. What are masternodes?
5. What is required to run a masternode?
6. What is Cold Staking?
7. What is the pre-mine allocation?
8. What is our Smart Farm and Farm Pods?
9. What is the Seed2Need (MY FARM) platform?
10. How will \$SILO be utilized?
11. What is the Total Rewards Program (TRP)?
12. What are the community goals and rewards?
13. What are Seed2Need (SILO)’s farmers incentives?
14. What are the business and partnership incentives?

1. What is Seed2Need (SILO)?

Seed2Need (SILO), also officially known as \$SILO, uses an advanced blockchain technology that utilizes three types of block generation. With this, we begin with Proof-of-Work (**PoW**). From there, we incorporate Proof-of-Stake (**PoS**) and masternode (**MN**) technology. Once the

PoW phase ends, only **PoS** and **MN** will remain. The total supply of \$SILO is 22,500,000,000 coins. Our block time that has been issued is 1.5 minutes. We have placed a difficulty algorithm that allows our blockchain to retarget block difficulty every block. This protects our chain from insta-mining and ensures rewards for the community for contributing are easily obtained. The **PoW** phase of the coin will end at block 2,000.

From there on, Seed2Need (SILO) will exclusively use **PoS** and **MN**, which allows the network to be more stable. Removing **PoW** aims to make Seed2Need (SILO) an Eco-friendlier coin as it reduces the need for the big amounts of electricity needed to run **PoW** oriented coins such as Bitcoin. This also means that it costs less for users to receive rewards. Please refer to table 1.1 for more information

Phase	Start Block	End Block	Blocks In Phase	Days for Phase	Phase Reward	PoS Daily	MN Daily
1	382	140000	139848	97.11666667	1100	1029600	554400
2	140001	414600	274605	190.6979167	750	648000	432000
3	414601	599931	185330	128.7013889	375	297000	243000
4	599932	999931	399999	277.7770833	180	129600	129600
5	999932	1499931	499999	347.2215278	90	58320	71280
6	1499932	2499931	999999	694.44375	45	25920	38880
7	2499932	5499931	2999999	20833.33264	22	11088	20592
8	5499932	9499935	9999999	69444.4438	11	4752	11088

2. What is the hashing algorithm?

The Seed2Need (SILO) blockchain utilizes the QUARK algorithm for security purposes. Quark is an algorithm for mining cryptocurrency based on a one-level hash function, which consists of 9 levels of encryption by six different cryptographic algorithms. Quark is not demanding for large amounts of RAM. Also, the Quark has a high 64-bit protection against hacker attacks. The change in algorithms aims to improve security and stability.

3. What is Proof-of-Stake/Proof-of-Work?

The Proof-of-Work (**PoW**) system, when referencing cryptocurrency, was constructed and designed by the entity Satoshi Nakamoto, the creator of Bitcoin.

PoW is the competition of hardware contending against one another to generate the next successful hash assisting to secure the next block within the corresponding blockchain. The manner of this overall process creates a decentralization of workers, thus producing a trustless consensus.

PoS is the competition between the holders of the cryptocurrency. Based on arbitrary chance and the connectivity of the network, a holder may receive additional coins for assisting the continued decentralization of the network. **PoS** is the most energy efficient as it requires no added hardware or substantial amount of electricity to reward the user. Additionally, in many cases, it proves to be substantially resilient to a 51% attack on the network (Blackcoin Coin Team, 2016).

With the information provided, the route of a **PoS** network does come with vulnerabilities. As the network is not aware of anything except for the blockchain, a physical anchoring is absent.

With this void, there are multiple methods that can influence the harming of the network. One specifically is titled a “bribe attack”. This occurs when the attacker performs a spending transaction to inevitably reverse later. This is possible by building a false chain after the transaction ensues and publishing it once it is longer than the valid chain, resulting in the original transaction reversing. Even though this is possible to occur on the **PoW** network, it is targeted more often on one solely built on **PoS** because of it being inexpensive and less difficult.

4. What are masternodes?

Masternodes (**MN**) are simply a node that retains a full copy of the blockchain in real time. It is active 24/7 and is consistently interacting with other masternodes to ensure a fully stable and performing decentralized network is maintained.

Masternodes allow:

- Instant sending
- Increased transaction privacy
- Reward collection without active us
- Enabled budgeting and treasuring systems

Operating a **MN** assists the network, as there will always be a stable node with multiple connections around the world running. As a reward, any individual that hosts a **MN** will be compensated with \$SILO paid straight to their wallet on a reoccurring basis.

5. What is required to run a masternode?

- A dedicated IP address
- Collateral: 1,000,000 \$SILO
- A VPS, or server, to host the wallet 24/7
- Additional storage space to hold a copy of the blockchain

6. What is Cold Staking?

Cold staking is enabled by smart-contract functionality and lets users securely delegate staking powers to “staking nodes” which contain no coin. The purpose of these “staking nodes” is to provide a dedicated resource connected to the \$SILO blockchain and stake on behalf of another wallet without being able to spend its coins.

Cold staking nodes are intended to be used in combination with cold, hardware and multi-sig addresses, making it possible to stake “offline” coins with no risk of being hacked or exposing your public key to the network. Staking nodes can be set up on any device, secure or not, such as public/cloud servers, virtual machines or DSDs.

7. What is the pre-mine allocation?

There was a 4% pre-mine of 750,000,000 \$SILO that was generated to cover expense towards the swap, development, exchange listing and growth of the project. When developing the MN, we hold the right to limit sales in any way deemed necessary. This ensures that not one person will have the ability to purchase all MN available. Below, Table 4.1.1 displays the developer, MN, and PoS reward percentages assigned to each of the eight phases within the Seed2Need blockchain. This ensures that not one person will be able to purchase all masternodes that are currently for sale.

Premine Block Allocation			
Phase Number	Number Blocks	Coins Per Block	Total Coins Created
1	100	7350000	735,000,000.00
POW Reward Allocation			
Start Block	End Block	Coins Per Block	Total Coins Created
101	381	50	14000

8. What is our Smart Farm and Farm Pods?

Smart Farms are growing environments that have been outfitted with our Smart Farm Controller unit. The Smart Farm is a small IOT device that will report data from over 3k+ possible sensor units. We call the sensor units Farm Pods, or PODS for short. PODS report back items such as PH, heat, humidity, and other environmental conditions to the Smart Farm Controller.

9. What is the Seed2Need (MY FARM) Portal?

SILO is a next generation of cryptocurrency projects that working together with the farming community to create awareness of blockchain technology, and how it can help give insight into the agricultural space. Our "My Farm Portal" can help even the newest grower product stronger, healthier, and more plentiful results by improving the conditions we are growing in. Please see below for the targeted audiences:

1. Small Growers who want more insight
2. Small growers who have time management needs
3. Small growers who want a DIY solution

4. Growers that need a Central Point of view over growing conditions

10. How will \$SILO be utilized?

Seed2Need (SILO) allows the opportunity to utilize \$SILO in several manners. As opposed to other cryptocurrencies, you will pay 0% in platform fees. Essentially, the platform incentivizes itself to users. There are numerous uses to \$SILO including:

1. Buying/selling directly from the merchant
2. Buying/selling directly from partner services
3. Purchases that are obtained from brick and mortar merchants
4. Purchases from partners through the My Farm service portal platform

11. What is the Total Rewards Program (TRP)?

Creating ways to give back to our community is a key objective of ours. For this reason, we have developed a system titled the “Total Rewards Program” or “TRP”. This will include, but is not limited to:

1. Community Goals and Incentives (FarmCommunity)
2. Seed2Need Data Bounty (FarmScientists)
3. Partnership Discounts and Business Rewards (FarmEveryWhere)

12. What are the community goals and rewards?

It is imperative that we develop a strong community that is willing to work together to create a more secure blockchain network. No matter your role within the Seed2Need (SILO) project, we are the “FarmCommunity”. We will implement numerous community incentives that will reward those who participate. These incentives are designed to bring together community in a positive manner that promotes overall growth. Each incentive will have a custom amount of reward based on the rules of the project. A few examples of these incentives include: community bounties, invite challenges, and world community grid.

13. What are Seed2Need (SILO)’s farmer incentives?

SILO is a next generation of cryptocurrency projects that working together with the farming community to create awareness of blockchain technology, and how it can help give insight into the agricultural space. Sending your data to the "My Farm Portal" can help us improve our

service and improve your grow. Using data algorithm's, we can help spot trends that may produce a negative impact in your grow. Working together with 1000's of small grows we can create rules and alerts for conditions that are showing in advance.

14. What are the business and partnership incentives?

Partnerships are an imperative key to any cryptocurrency project's survival. We strive to establish partnerships in multiple industries. All future partnerships will be based on our "FarmEveryWhere" incentive, as instructed within our TRP program. This rewards program will establish a discount to those who choose to obtain goods and services utilizing Seed2Need (SILO)'s cryptocurrency.

