



WHITEPAPER

VERSION 2022.02

A photograph of a misty forest landscape with evergreen trees and rolling hills, partially obscured by fog.

"Blockchain For Next Generations"

OXO Chain

OXO Chain is a blockchain network with the support of the Ethereum Virtual Machine (EVM) that allows the creation of blocks by validator nodes which are selected with delegated Proof-of-Stake consensus. It is decentralized, environmentally friendly, fast and fully compatible with the Ethereum ecosystem.

By offering the same rights for each node, OXO Chain enables the creation of decentralized finance (DeFi), decentralized applications (dApps) and digital assets (tokens) smart contracts. It also provides fast, low-cost, secure and sustainable transactions.

A non-profit structure called **OXO.Foundation** (oxo.foundation) will be established to coordinate the development processes of the OXO Chain network.

\$OXO Coin

\$OXO is the underlying assets of OXO Chain. \$OXO is used for

- transaction gas fee
- creating and processing smart contracts
- To vote for governance (PoS)

Technical Specifications		
Chain ID		1881 (TestNet 91881)
Symbol		OXO
Total Supply		800.000.000 (36% PoS Rewards)
Block Time		5 seconds
Block Gas Limit		120.000.000 gas
Processing Capacity		~1100+ tx/sec (will be +80.000 after upgrades)
Smart Contract		With Ethereum Virtual Machine (EVM)
Consensus		Delegated Proof-of-Stake

“**Metamask**” (metamask.io) is a recommended wallet app. We are going to be in contact with other popular wallet apps for supporting OXO Chain.

Our road map also includes developing a native web and mobile wallet application.

We developed a different version of Go-Ethereum client (geth) which includes our Proof-of-Stake consensus. Our code will continuously be updated according to the geth client. All the code is open source and available on [Github](#).

Smart contracts are supported with EVM (Ethereum Virtual Machine). Smart contracts that are written in the Solidity language will run on the OXO Chain without any extra effort like other Ethereum compatible networks.

OXO Chain has 21 validator nodes, candidate validator nodes and plenty of RPC nodes. 18 validator nodes are determined by Proof-of-Stake consensus. OXO.Foundation has 3 constant validator nodes that do not participate in any elections.

During the OXO Chain development process and before the main net (MainNet) becomes active, 2 different test networks (TestNet) will be active.

The first TestNet works with PoA (Proof-Of-Authority) consensus and includes 3 validator nodes. This network is recommended for testing smart contracts and decentralized applications. There are enough \$tOXO (\$OXO on TestNet) coins in this network. \$tOXO can be requested from testnet.oxochain.com

The second TestNet is for testing the Proof-of-Stake system. There are only 9 validator nodes. Validator candidates are to be invited to this test network 1 month before the main net starts. Validator selection period is to be approximately 6 hours..

There is a Block Explorer for tracking blockchain records. For further information please visit testnet.oxochain.com

OXO Chain is an **independent** side chain project. It provides multi directional cross-chain bridges between Ethereum compatible networks. OXO Chain aims to be a fast, trusted and cost-effective alternative for decentralized apps.

OXO Chain **supports** developers who create applications like decentralized finance, NFT marketplace, and play-to-earn games with ecosystem incentive funds.

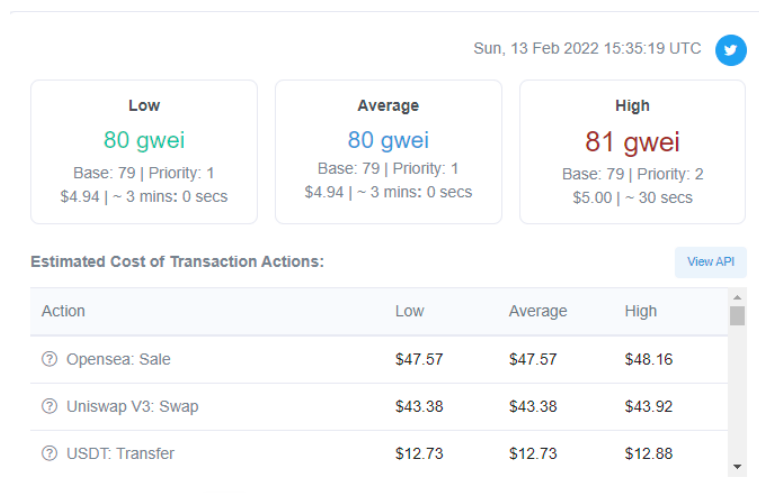
Proof-of-Work vs Proof-of-Stake

Many blockchain networks (including Bitcoin and Ethereum) use Proof-of-Work consensus. PoW is performed by cryptocurrency mining.

Cryptocurrency mining requires high computing power to solve an unpredictable problem. The miner who solves this problem before the others gets the right to create the new block on the blockchain. The miner is rewarded with cryptocurrency. With each block, the race to win this prize starts again.

For that reason, mining requires powerful and expensive equipment. Mining activities have high energy consumption which is devastating for the environment. In addition, the processing capacity of networks is very low, and often insufficient. Users who want priority for their transactions must pay higher-than-average transaction fees. Developers who have applications on blockchain networks (with PoW consensus) have to find alternatives because of high transaction fees. Thus, Layer 2 projects are being developed.

For example, the transfer fee is ~\$10 on Ethereum. It can go up to \$100 depending on the transaction density in the network.



Gas fees on Ethereum- Ref: <https://etherscan.io/gastracker>

The most important priority of a blockchain project is to have a consensus that will ensure decentralization. This consensus must be fast, secure and sustainable. In the Proof-of-Stake consensus model, transactions are very fast and cost is close to zero.

	OXO Chain	Bitcoin	Ethereum 1.0
Consensus	PoS	PoW	PoW
Capacity	1100+ tx/sec	~7 tx/sec	~20 tx/sec
Block Time	5 seconds	10 minutes	15 seconds
Cost per transaction	~0.0001 USD	more than 20 USD	more than 10 USD

Transactions must be securely recorded on the blockchain by validator nodes. The validator nodes are determined by a result of a selection. Validator nodes must not commit malicious transactions which is why new blocks must also be approved by other validator nodes.

One validator creates a new block on the blockchain and others validate the created blocks. Validator nodes are rewarded with \$OXO by the system if they are not malicious. If the system detects a malicious behavior of a validator node, the validator is automatically kicked out of the system. In such a case, the validator node loses all self-staked \$OXO. Validator nodes not only create blocks, but also validate each other.

Thanks to the Proof-of-Stake system, every user can benefit from \$OXO rewards even without technical knowledge or hardware investment. For governance and selection, we have a web site that works with the Metamask wallet. Any node owner with minimum hardware requirement and technical knowledge can become a validator node candidate by self-staking 10.000 \$OXO. \$OXO holders stake their \$OXO as 1 \$OXO equal to 1 vote in order to support these validator candidates. The amount of \$OXO locked in the voting processes is not available in the market during this period. As a result, less \$OXO will be available for trading. Therefore, the market value of \$OXO will potentially increase.

Most of the currently popular blockchain networks use the Proof-of-Stake consensus with their own election systems. OXO Chain uses multi-parameter algorithms for Proof-of-Stake selections so that the coin inflation is optimal and the rewards are satisfactory.

Our Projects

NFT (Non-Fungible Token) Marketplace

NFT is one of the most interesting parts of the crypto world. Infrastructure will be provided for integration with existing marketplaces in the NFT world. OXO Chain will also launch its own NFT marketplace project. This marketplace will focus on user experience.

Decentralized Finance (DeFi)

We are developing a decentralized financial portal where investors can exchange \$OXO, native tokens on OXO Chain and valuable tokens migrated from other EVM based networks with each other. This portal will include a fast lending module based on crypto asset collateral.

Games On-Chain SDK

In the gaming industry, keeping user assets on the blockchain is now a must. In cooperation with many game companies, a software development kit (SDK) is being prepared that will allow keeping common assets on the network. Many games will be supported with the ecosystem incentive fund, and the integration of these games with the blockchain will be accelerated.

Token Studio: A Token Studio project is being developed that does not require coding knowledge to generate and manage tokens. This project will be active on MainNet.

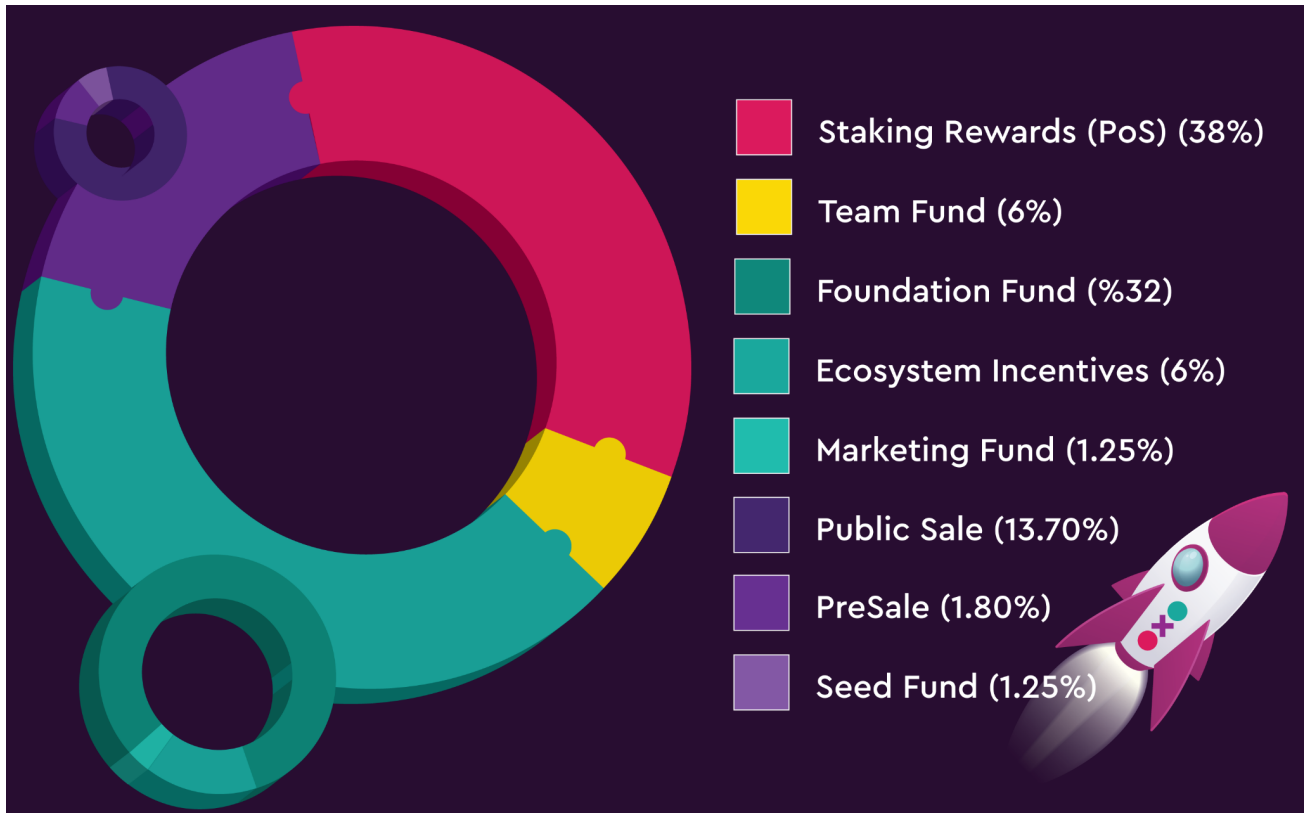
Invest on Chain: OXO Chain plans collaborations with real assets (home, land, artwork) to participate in the blockchain economy. Fixed income guaranteed real estate loan token supply is one of them. It is planned to deliver off-chain earnings with low risk for users via on-chain tokens. The off-chain part of this project will comply with local law.

Stable USD Token: We are developing a provable USD stable token project on the OXO Chain. It will be backed by some coins and tokens. This stable USD token will add value to the OXO Chain network. (Some popular USD stablecoins are said to be backed by the US Dollar in their bank accounts. But there is no proof or transparency. Users can only monitor token transactions on the blockchain.)

RPC Node Support Program: OXO.Foundation will create a RPC node pool to make OXO Chain network more accessible and visible. Each node operator who wants to be included in this pool can earn rewards from the ecosystem incentive fund. Rewards will be based on their active time and the amount of total requests.

Validator Node Support Program: OXO.Foundation will partner with cloud service providers to get discounted server services for those who want to operate a candidate validator node. Validator candidates will finance their own server costs. Technical support will be provided for the establishment and security of validator nodes.

\$OXO DISTRIBUTION TABLE



	Share	Amount	
OXO.Foundation	32%	256,000,000	Reserved for use by OXO.Foundation for the development of OXO Chain
Ecosystem Incentives Fund	6%	48,000,000	It will be distributed as a reward to projects for their contribution to the OXO Chain ecosystem.
OXO Core Team	6%	48,000,000	Fund allocated for core team members.
Seed Investors	1.25%	10,000,000	It will be released after 2 years.
Marketing Fund	1.25%	10,000,000	Reserved for airdrops and promotional activities.
PreSale	1.8%	14,400,000	Pre-sale as \$wOXO token on BNB Smart Chain (BSC)
Public Sales	13.7%	109,600,000	Public sale as \$wOXO token on BNB Smart Chain (BSC)
PoS Staking Rewards	38%	304,000,000	It will be distributed as a reward within the PoS system for the coin supply.

OXO.Foundation Fund

A non-profit structure called **OXO.Foundation** (oxo.foundation) will be established to coordinate the development processes of the OXO Chain network. The foundation is responsible for financing the OXO Chain network. The Foundation has a fund which is to be used for the development of OXO Chain network.

The OXO Chain network is a decentralized blockchain network due to the validator nodes chosen by the \$OXO owners. The OXO Chain network is not owned by the OXO Foundation.

OXO.Foundation collects regular feedback from \$OXO owners and decentralized app developers and shares action plans based on the feedback on its website.

OXO.Foundation is to publish the fund details on its website. The Foundation may only use this fund for the following purposes:

- Selling \$OXO as needed for operating expenses,
- Adding extra rewards to the PoS reward system,
- Contribute to the Ecosystem Incentive Fund,
- \$OXO as a bonus to development teams,
- For promotional activities

256,000,000 \$OXO (32%) is allocated to be under the control of OXO.Foundation. When the MainNet opens, only 25,600,000 \$OXO (3.2%) will be available. Every 6 months for the next 6 years, 19.2 million \$OXO are added to the fund.

The foundation may temporarily lock some funds against the risk of coin inflation. OXO.Foundation will not do stupid actions such as coin burning.

The foundation does not transfer or sell \$OXO without notice, and always publishes the usage details.

Ecosystem Incentives Fund

An incentive program will be prepared to support decentralized applications like DeFi, NFT Marketplace and Games on the OXO Chain network. All terms and maximum reward amounts for this program will be announced on Grants web site. (grants.oxochain.com) Candidate projects will be published in detail on this web site. The Foundation management and \$OXO owners choose the winners by consensus. The Foundation manages a total of 48,000,000 \$OXO (6%) for incentives. These rewards will be locked at least for 6 months.

The incentive fund is planned to be distributed within 10 years. The Foundation can support the incentives fund from its own fund when necessary. However, the incentives fund cannot be transferred to another fund.

Core Team Fund

48,000,000 \$OXO (6%) is reserved for OXO Chain core team members. **Core team members do not have any \$OXO when MainNet opens.** Every 6 months for 5 years, 4,800,000 \$OXO will be available for the team. Released \$OXO in this fund can be locked again if desired. The decision to relock can only be taken by at least $\frac{2}{3}$ of the core team members' votes. \$OXO transferred from team funds to a team member is not refundable. Members can use their \$OXO as they wish.

Core team members are professionals who have specialized in blockchain and web3 technologies with many years of experience and have actively participated in many projects. The core team has been carefully selected for the success of the OXO Chain network.

Seed Investors Fund

10,000,000 \$OXO (1.25%) has been allocated to some private individuals and groups who have made financial contributions to the OXO Chain development process. These coins will be locked for 2 years after the MainNet opens. Names of individuals and groups will be included on the site with their permission.

Marketing Fund

10,000,000 \$OXO (1.25%) will be used in promotional activities. A part of this fund will be distributed free of charge by Airdrop method.

Pre-Sales

\$14.4 million of OXO (1.8%) will be available for pre-sales to fund the project. There will be 3 different prices that will be released at different dates. The pre-sales will start on March 7, 2022 and will continue for 30 days.

The purchased coins are not active at once, there is a vesting period. The vesting period for \$OXOs purchased in pre-sales is 10 days. Every day 10% \$wOXO is actively added on the BSC network. For \$OXO purchased at different stages, the vesting period starts on different dates.

Public Sale

109,600,000 \$OXO (13.7%) will be publicly available for fundraising. 20% of the collected funds can be transferred to the OXO.Foundation wallet. This fund can be used for promotional activities, listing on cryptocurrency exchanges and expenses in the ongoing development.

At the beginning of the public sale, 1 \$OXO will be 0.10 USD for 2 weeks. The price will increase at each stage and will be 0.65 USD at the end of the 21st stage. When the sale is completed earlier than expected, the next phase begins immediately.

The purchased coins are not active at once, there is a vesting period. The vesting period for \$OXOs purchased in public sale is 25 days. Every day 4% \$wOXO is actively added on the BSC network. For \$OXO purchased at different stages, the vesting periods start on different dates.

Investors can purchase \$OXO with selected USD stable tokens on the BNB Smart Chain (formerly known as Binance Smart Chain, aka BSC) All records for the sales are kept in a smart contract called “**Wrapped OXO**” (\$wOXO) on the BSC network. Investors can track sales history and coin release dates on the website. When the purchased \$OXO is released, the same amount of \$wOXO tokens will be available on the BSC network. The sale can only be completed using the Metamask wallet.

There is an 80% **buy-back guarantee for 3 months** after the public sale ended for public sale investors. This buyback is not guaranteed when the \$wOXO tokens are transferred to another address. You can use your BuyBack guarantee for each purchase separately. 80% of your purchase amount will be transferred to your wallet on the BSC network as USD stable tokens

When MainNet opens, a cross-chain asset transfer system (bridge.oxochain.com) will be active. You can transfer any amount of \$wOXO tokens by converting 1:1 with \$OXO

1 \$wOXO token will always be accepted at the OXO Chain worth 1 \$OXO coin. The \$wOXO token will continue to be actively used in the BSC network.

Pre-Sale

Unit	Unit Price	Minimum	Maximum	Locked	Vesting
4,800,000	0.070 USD	2,000 OXO (140 USD)	100,000 OXO (7,000 USD)	180 days	10 days
4,800,000	0.055 USD	5,000 OXO (275 USD)	200,000 OXO (11,000 USD)	270 days	10 days
4,800,000	0.040 USD	20,000 OXO (800 USD)	400,000 OXO (16,000 USD)	360 days	10 days

Public Sale

	Starting Date	End Date	Unit	Unit price	Unlock (Release) Date
1	April 11, 2022	April 24, 2022	9,600,000	0.10 USD	October 2, 2022
2	April 25, 2022	May 1, 2022	5,000,000	0.13 USD	October 1, 2022
3	May 2, 2022	May 8, 2022	5,000,000	0.15 USD	September 30, 2022
4	May 9, 2022	May 15, 2022	5,000,000	0.17 USD	September 29, 2022
5	May 16, 2022	May 22, 2022	5,000,000	0.19 USD	September 28, 2022
6	May 23, 2022	May 29, 2022	5,000,000	0.23 USD	September 27, 2022
7	May 30, 2022	June 5, 2022	5,000,000	0.25 USD	September 26, 2022
8	June 6, 2022	June 12, 2022	5,000,000	0.27 USD	September 25, 2022
9	June 13, 2022	June 19, 2022	5,000,000	0.29 USD	September 24, 2022
10	June 20, 2022	June 26, 2022	5,000,000	0.34 USD	September 23, 2022
11	June 27, 2022	July 3, 2022	5,000,000	0.36 USD	September 22, 2022
12	July 4, 2022	July 10, 2022	5,000,000	0.38 USD	September 21, 2022
13	July 11, 2022	July 17, 2022	5,000,000	0.40 USD	September 20, 2022
14	July 18, 2022	July 24, 2022	5,000,000	0.46 USD	September 19, 2022
15	July 25, 2022	July 31, 2022	5,000,000	0.48 USD	September 18, 2022
16	August 1, 2022	August 7, 2022	5,000,000	0.50 USD	September 17, 2022
15	August 8, 2022	August 14, 2022	5,000,000	0.52 USD	September 16, 2022
18	August 15, 2022	August 21, 2022	5,000,000	0.59 USD	September 15, 2022
19	August 22, 2022	August 28, 2022	5,000,000	0.61 USD	September 14, 2022
20	August 29, 2022	September 4, 2022	5,000,000	0.63 USD	September 13, 2022
21	September 5, 2022	September 11, 2022	5,000,000	0.65 USD	September 12, 2022

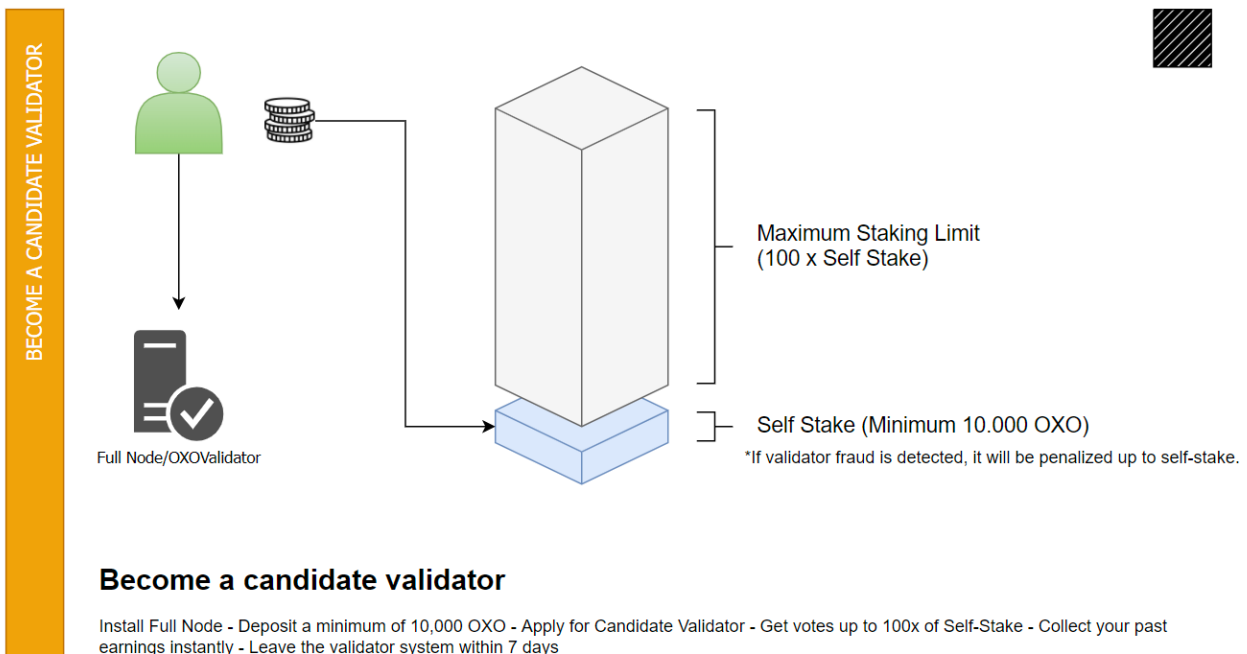
PoS Reward Pool and Governance

Network security is provided by 21 validator nodes. 3 validator nodes are continuously operated by OXO.Foundation There are no rewards or no voting requirements for those 3 nodes.

Validator candidates and voters contribute to governance using staking.oxochain.com This site uses Metamask wallet. Validator nodes are selected for one epoch (17,280 blocks = ~1 day).

Each candidate validator must self-stake at least 10,000 \$OXO. A candidate can collect votes up to 100 times of its self-staked \$OXO. If validator candidates want to get more votes, they have to increase their self-stake. Whereas, the self-stake amount cannot be decreased. Candidates selected as validators will receive a reward depending on their self-stakes and also earn commission from their supporters's rewards. The self-stake amount will remain locked during the election period.

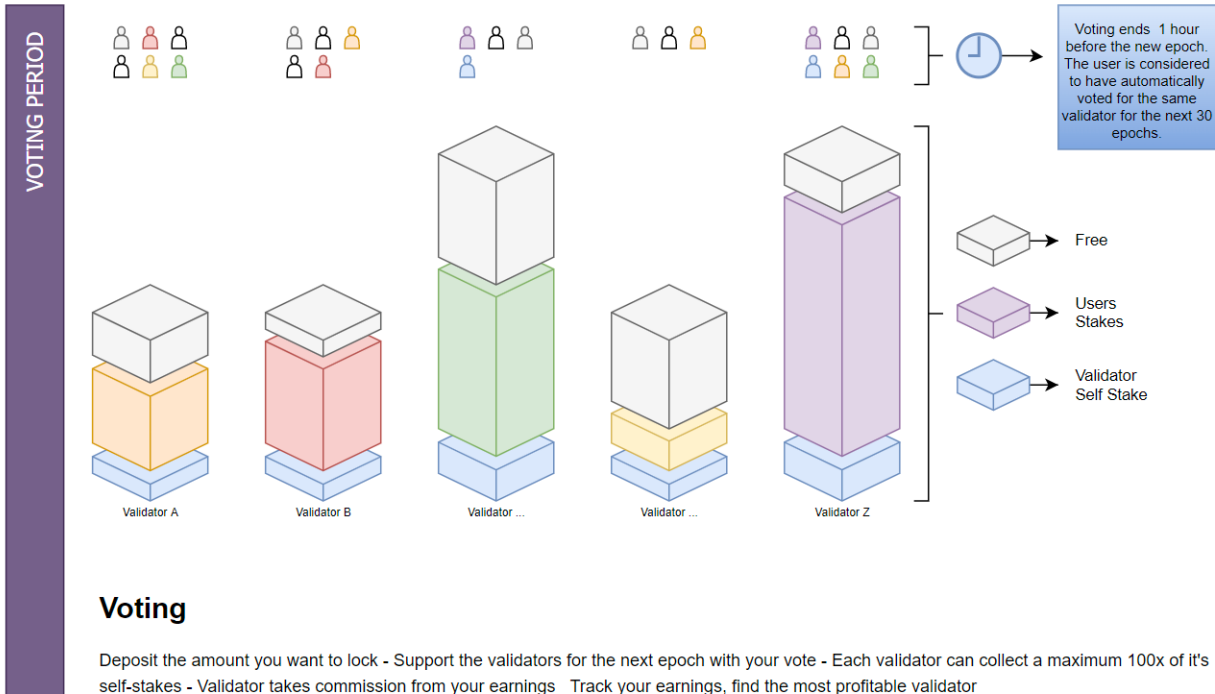
If a validator node is selected but the node client is not active, it will be penalized for the duration of its inactivity. **If malicious behavior of the validator is detected, it will be penalized with all locked \$OXOs.**



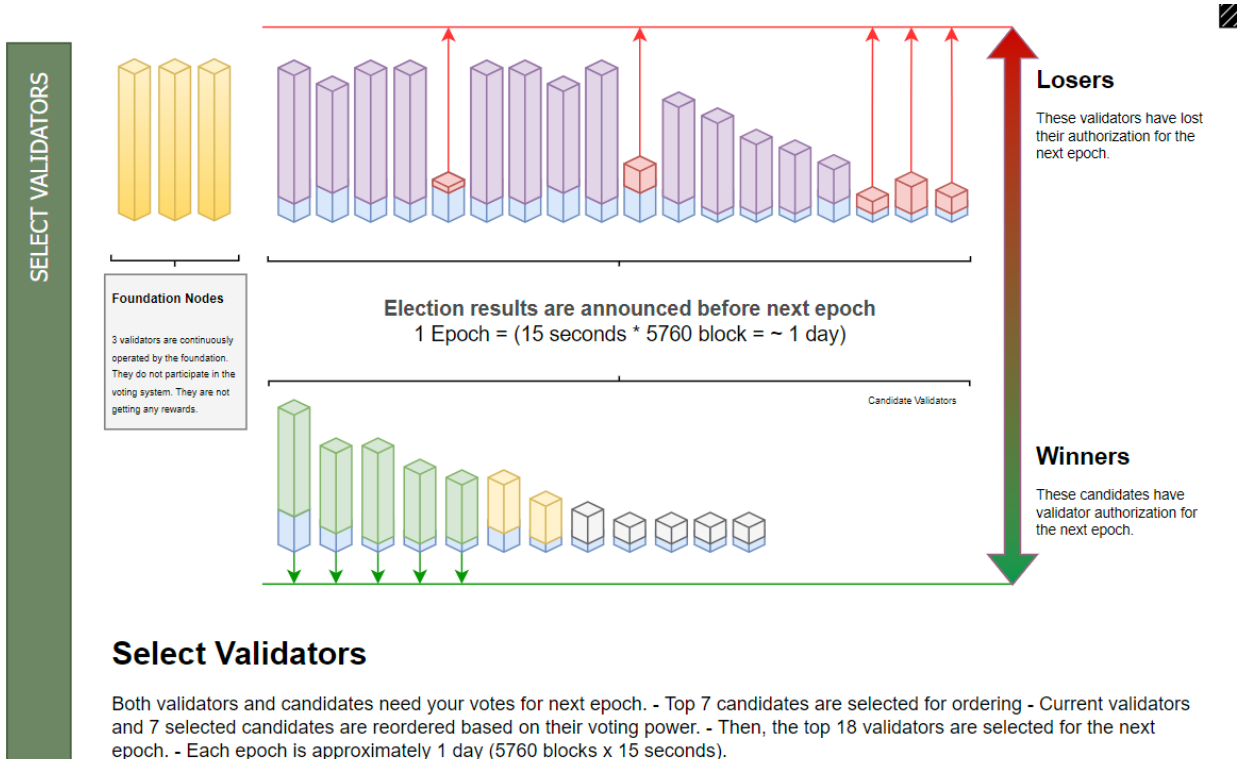
\$OXO holders who want to earn rewards can support validator candidates at staking.oxochain.com They firstly need to transfer any amount of \$OXO to the staking smart contract address. They will get one vote right for each \$OXO. With these voting rights, they can support any validators on the candidate list.

Users can vote for the same validator candidate for up to 7 epochs. Before the 7th epoch, they can extend the voting period up to 14 epochs with a single transaction. They do not have to do different operations for each epoch. However, a validator candidate can be supported by voters for a maximum of 14 epochs.

After the last voted epoch is over, they can calculate their earnings. The system does not automatically distribute rewards. The user claims the reward by himself/herself.



New epoch candidates can be voted on until ~1 hour (720 blocks) before a new epoch starts. Voting continues for 24 hours. Voters can see details such as how many epochs they already voted for which validator candidate. All votes (and locked \$OXO) cannot be withdrawn until the election is over.



When the new epoch starts, the validators to be protected are checked. The top 11 with the most votes are under protection. Other 7 validator candidates who were successful in the selection with 7 validators are ranked again. According to the voting power ranking, the first 7 of them are selected as validators. A maximum of 7 new validators are selected for each epoch. So in our OXO Chain governance system, up to 1/3 validators can change an epoch.

18 validator nodes and the next 19 validator candidates and those who vote for those candidates are rewarded. Reward distribution uses a different calculation method than voting power. Not every voter wins the same amount of rewards. In fact, those who support the most voted validator node receive less rewards than the others. Users sometimes have to change the candidates they will vote for. This system makes the OXO Chain **more decentralized**. No validator node will have loyal voters.

With the reward system, it is planned to provide a coin supply that will decrease every year. OXO.Foundation can transfer some \$OXO from its own fund to the reward pool.

A reward score is calculated based on the validator candidate's self-stake amount, the votes it has collected and the election result rank.

Example: \$36,000 OXO Reward Distribution

		18 Validators	Top 7 Candidates	Next 12 Candidates
%100	36.000 \$OXO	%90	%7	%3
%6	2.160 \$OXO	18 x 108 \$OXO	7 x 21.6 \$OXO	12 x 5.4 \$OXO
%94	33.840 \$OXO	See next table for reward scoring.		

Reward Score		18 Validators	Top 7 Candidates	Next 12 Candidates
Amount of Votes Collected	B	x3	x1	x0.5
Self-Stake Amount	A	x4	x2	x0.5

$$\text{Reward Score} = (\text{Self-Stake Amount} * A) + (\text{Amount of Votes Collected} * B)$$

In the first year, a maximum of 8% of the total number of \$OXO will be distributed. This reward depends on the amount of \$OXO locked in the voting system, based on the total amount of \$OXO in circulation. If a 60% \$OXO is locked in for voting, the reward that will be distributed that day will be 60% of the planned reward. During the first 10 years, 15% less reward will be distributed than the previous year. Starting from the 11th year, \$OXO rewards will continue to be distributed at a fixed annual rate of 1.5%.

REWARD DISTRIBUTION

		top 18 Validators	top 7 candidates	next 12 candidates
B	x3	x1	x0.5	
A	x4	x2	x0.5	

Total Reward Score = (Self Stake * A) + (Votes * B)

Rewards

The system distributes rewards to validators and their voters after each epoch. - Rewards are based on validator's voting power and their rewards score. - Change your votes frequently to earn more rewards. - Rewards are for the first 18 validators and the next 19 candidates. - Others candidates don't get any rewards. Transfer your rewards to your wallet whenever you want.

April 2021

OXO Chain Project Start
Built Core Team

February 2022

Test Network 1 Opened (PoA TestNet)

Road map

2022 March

Fundraising with Pre-Sales

2022 April - September

Fundraising with Public Sales

2022 - September

TestNet 2 (PoS TestNet)
Validator Node Invitation Starts

2023 Q1

The main network opens (**MainNet**)
Cross Chain (OXO Chain <> BNB Smart Chain (BSC))
Cross Chain (OXO Chain <> Ethereum)

2023 Q2

Token Studio
Proof-of-Stake Staking Starts

2023 Q3

Web Wallet and Mobile Wallet Applications
Official NFT Marketplace

2023 Q4

Chain.Link Integrations