

Fair Crypto Foundation (Litepaper v1.2 - Draft, Jack Levin)

XEN - CryptoCurrency For the masses

General

What is the mission of XEN?

XEN aims to become a community building crypto asset that connects like minded people together. If you are a seasoned OG or simply Crypto curious, XEN has the lowest barrier to entry through its unique tokenomics.

Fair Crypto Foundation is designing XEN as a universal cryptocurrency to achieve the original mission of Blockchain, following the Blockchain Tenets of decentralization, transparency, counterparty risk resistance, peer-to-peer value exchange and self-custody. Its unique tokenomics focuses on the mass market adoption with the lowest barrier to entry compared to the rest of coins on the market today.

What problem does XEN solve?

Today's crypto world exists on a very bipolar plane, namely, the well known cryptocurrencies are overbought (pumped) and subsequently sold off (dumped). The unknown cryptocurrencies are often left undiscovered for a long time by general investors while suffering from pre-mining and whale accumulation by the founding teams. XEN aims to solve both problems through a fair launch.

Tokenomics and Philosophy

What makes XEN unique?

Simplicity - XEN is (will be) based on the ERC20 token standard with a minimum amount of code. There are no pre-minting, hidden doors, admin keys, or origin (OA) wallets. All XEN ecosystem participants mint their own coins using their own ethereum compatible wallets.

XEN cryptocurrency is Free as it does not require participants to deposit any funds to start minting their XEN crypto.

XEN starts with zero supply and will only be minted by the participating community.

XEN does not have a maximum cap on the supply, is inflationary in the beginning, becoming disinflationary as adoption increases.

XEN is a digital asset which has no backing by investors or starts with any intrinsic value.

XEN is immutable, and can not be changed or stopped by anyone. With its open source code it is truly trustless through consensus and belongs to the people.

XEN does not have a controlling or management team, it is simply a segment of an immutable code secured by the Blockchain.

XEN is neither a proof of stake or proof of work token, however it is a *Proof of Participation* (POP) crypto. Whoever participates in XEN creation has full rights of ownership through self custody.

XEN smart contract uses a fair system of new token distribution. All participants are subject to the same immutable rules secured by Blockchain.

XEN continuously increases token rewards through minting based reward time locks and the total number of participants.

Generally, all crypto currency must be purchased or exchanged with other cryptocurrencies on the open markets. XEN does not require purchasing as anyone on the Ethereum network can mint their own XEN tokens by connecting their compatible crypto wallet (such as Metamask, etc).

What is the formula to generate rewards for the participants?

XEN tokenomics have no locking or staking of any assets, only your wallet is required. The process to generate XEN is based on several variables. First, your intention to receive XEN must be initialized by connecting your wallet to the XEN smart contract, you will be asked how long you are willing to wait (in days) to receive XEN. The smart contract will generate and provide a XEN rank (cRANK), which is based on how many people interacted with the contract before you. The final formula to receive (mint) XEN is the LOG base2 of the current Global XEN rank minus your rank raised to the 3rd power, multiplied by days you have specified during the first interaction with the smart contract.

If XEN has no cap, does it mean it has no value?

XEN has no cap, however as more and more people join and participate in minting, it will be harder to generate (or mint) more XEN due to naturally sloping adoption curve which is logarithmic in nature. This will make XEN tokenomics disinflationary in nature.

Each participant makes it harder for new participants to receive rewards, unless new participants extend the amount of time to get their rewards. This is similar to Bitcoin mining difficulty.

Does XEN have an initial supply?

XEN has no initial coin supply. Supply is generated by all people that participate in the *Proof of Participation* (POP) protocol through minting of their own coins.

Why will XEN appreciate in value?

XEN token's value is pegged to the difference between world's inflation vs built-in distribution of the tokens. In short, the value of XEN is linked to its difficulty to be minted, which is very similar to Bitcoin. Ultimately, the value is created by the market forces of all participating parties. As more market participants get involved in generating XEN, the total amount of generated XEN drops (disinflation) and is distributed between participants making XEN more scarce and valuable. The only way to mint more XEN in the future, will be by extending the time one has to wait to receive the mint.

Is there a way to increase rewards?

XEN rewards are loosely based on game theory with several variables that influence the reward outcome. To mint new XEN coins, one must generate their Crypto Rank (cRank).

Your cRank is a natural number, representing the relative standing across the XEN ecosystem. For example, a cRank of 5,000 represents the fact that 4,999 people before you have decided to mint XEN for themselves. XEN smart contract tracks a Global cRank within the ecosystem and increases every time someone else joins as a participant and generates their cRank.

Your end Reward (R_u) is computed by multiplying the difference between your rank cR_u against the Global cRank cR_g , multiplied by the number of days (t):

$$R_u = 3,000 * log_2(cR_G - cR_u) * t.$$

So in order to increase your rewards, one must indicate the maximum number of days they are willing to wait for their rewards. Likewise, inviting new people to join the network will create more rewards for all of the participants (including the invitees).

Term limits

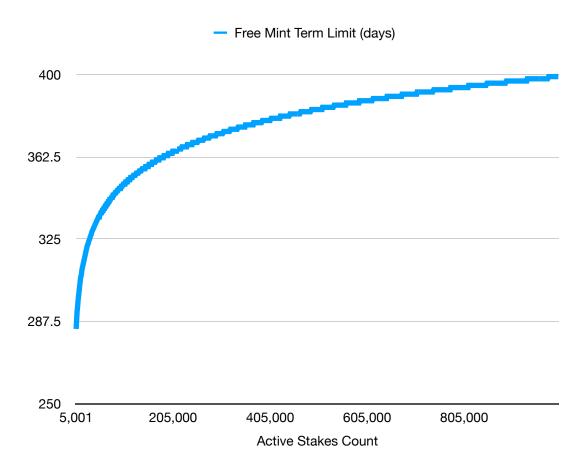
Term limits (in days), are set to follow total activity of Proof of Participation protocol. Specifically, the maximum Free Mint Term is capped to 100 days until the protocol registers more than 5,000 unique participant addresses as tracked by Global Rank. The term will start increasing logarithmically as more participants join the protocol, using the following formula:

$$\label{eq:freeMintTermLimit} \begin{split} \text{freeMintTermLimit} &= \begin{cases} 100, & \text{if } |S_u| \leq 5000 \\ 100 + log_2(|S_u|)*15, & \text{if } |S_u| > 5000 \end{cases} \end{split}$$

where

 $|S_u|$ is total number of Active Stakes

as shown in the chart below:



What is the process to mint XEN after the established term (in days)?

You will be able to visit XEN's web3 web panel where you should be able to check how many days are left before you can claim / mint XEN. Generally,

you should be able to claim / mint within 24 hour period after the end date, however XEN rewards will be progressively reduced if you do not claim / mint XEN close to the date of the term you've established. The reason for progressive reduction is to avoid bad actors that create ladders of "invisible" claims, and then claim all at once to crash the value of XEN. The penalty for not claiming/minting XEN is progressive and becomes 100% after 7 days, this means after 7 days claiming/minting XEN is not possible no matter how many days the term of participation was.

Days Late	Penalty, %
0	0
1	1
2	4
3	8
4	17
5	36
6	72
7	100

Staking XEN

The staking period is limited to the following range: 1 to 1,000 days.

XEN staking period can be terminated without penalties any time within the agreed term; however the APY rewards will not be prorated or paid if staking is terminated before the staking period is over.

You will be able to stake XEN for any number of days between 1 and 1,000, and receive APY rewards, which will start at 20% on XEN Genesis and will decrease by 1 percentage point every 90 days thereafter until it reaches 2%, whereupon it will stay at 2% indefinitely. Each stake's APY is fixed at the time of the stake, depending on how many days have passed since XEN Genesis.

Stake start (days since Genesis)	APY, %
0	20

XEN Litepaper v1.2 (draft)

90	19
180	18
270	17
360	16
450	15
540	14
630	13
720	12
810	11
900	10
990	9
1080	8
1170	7
1260	6
1350	5
1440	4
1530	3
1620	2
after	2

Here is how the whole process works:

- First, claim your CryptoRank with Proof of Participation (POP)
- Then, claim/mint your XEN crypto
- · After that, stake XEN for APY rewards.

So, if you are staking 100,000 XEN for 365 days within the first 90 days since XEN Genesis, you will be able to claim 120,000 XEN after this period. The stake reward amount is based on non-compounding APY and will be calculated using this formula:

$$R_{\rm u} = \frac{S_{\rm u} * APY * t}{100 * 365},$$

where

$$APY = max(20 - \frac{dt_g}{90}, 2), \ dt_g = \ days \, since \, Genesis$$

Internally, the smart contract will burn staked XEN to reduce Total Supply of XEN crypto, recording the debt to the original stakeholder. Smart Contract will re-mint the original stake XEN crypto together with extra 20% rewards as newly minted XEN. Can interested parties buy or sell XEN crypto?

Anyone can buy XEN tokens by using any number of popular distributed exchanges (DEXes), such as Uniswap or Sushiswap. Selling or trading XEN tokens will be possible on the same exchanges.

What can I do with XEN crypto?

Anything you can do with ERC20 token, you can do with XEN. Trade it for other crypto tokens or NFTs, tell your friends about it, play with the Uniswap ecosystem by creating Limit orders or Liquidity Pools to automatically trade your XEN crypto. At the end of the day, XEN strives to achieve the maximum liquidity though maximum adoption, so holders of XEN crypto are invited to give it away to as many people as possible.

Technology

Does XEN crypto run on its own blockchain?

No, XEN is deployed on the Ethereum mainnet, the second largest blockchain network in the world, with a peak market cap of \$570Bn. XEN is open source and modeled as ERC-20 token (fungible token standard) on Ethereum.

The cause of it all

The crypto world has come a long way since Timothy May in 1988 wrote "the Crypto Anarchist Manifesto, where he introduced the basic principles of

crypto-anarchism, encrypted exchanges ensuring total anonymity, total freedom of speech and total freedom to trade (<u>LINK</u>).

In 2008 Satoshi Nakamoto wrote *Bitcoin: A peer-to-Peer electronic Cash System*, and for the first time introduced a system that would allow a pure peer-to-peer version of electronic cash to be sent directly from one party to another without going through a financial institution (<u>LINK</u>).

But just like the internet has clustered into centralization by tech giants, we can see the trend within DLTs not escaping human nature of corruption and deceit. We see governments wanting to introduce their own versions, so called CBDCs. We see corporations claiming to be pro crypto but using every way possible to lure you into giving up your keys, and in doing so violating the true first-principles of crypto. Both create filter bubbles of innovation.

The L1 narrative emerged where multiple systems are competing to become the most fundamental and interoperable. Although there are local maximalist convictions - there is no widespread consensus as to which system that ultimately will prevail. And as long as that is the case the necessity to go back to the roots of first principles is inevitable.

XEN goes back to the roots of consensus making systems and takes a carte blanche approach to innovation.

Pure innovation tends to always come from the people - for the people. Based on first principles.