

Photo by Nenad Novaković on Unsplash

On September 15, Ethereum will undergo the biggest transformation in its history— and we couldn't be more excited. The Vayner3 team has done all the homework for you and broken down the 3 most important takeaways of The Merge.

# 1. Ethereum will never be the same, but you don't have to change a thing

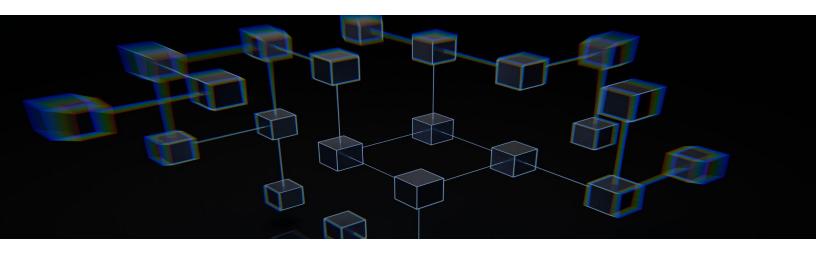
All the coins, NFTs, metaverses, and every tool and token on the blockchain is moving from the old Proof-of-Work system to a far more efficient Proof-of-Stake protocol. What do you need to do to transfer all of your ETH-based assets over to the new network? Absolutely nothing.

### 2. The Merge is a major win for Mother Nature

RIP mining. With Proof-of-Stake, there no longer needs to be countless computers toiling away on endless transactions to keep the blockchain churning. The PoS protocol that ETH 2.0 uses is infinitely more eco-friendly than the old system and drastically reduces Web3's carbon footprint now and in the future.

# 3. Lower gas fees and transaction times are a myth

The Merge will be the evolution of Ethereum we've all been anticipating. Further decentralization, increased stability, and way less of a burden on mother nature. It's a win for everyone using Ethereum, but one thing it won't likely do is decrease gas prices or transaction times. But at least you can feel better about the impact you are making while on the blockchain.



### **FAQ**

#### So...What's Happening?

You may have heard rumblings about "The Merge" in the Web3 space over the last few months. Simply put, Ethereum is moving from Proof-of-Work to Proof-of-Stake consensus on September 15th.

### What is Proof-of-Work (PoW)?

PoW is a consensus system used by blockchain networks to secure and write information to the blockchain by using high energy mining hardware run by "miners." The most popular examples of this today are the Bitcoin and Ethereum blockchains. One major difference is that Ethereum has an execution layer which can run programs and execute complex mechanisms via programmable objects called smart contracts, while Bitcoin does not support smart contracts.

### What is Proof-of-Stake(PoS)?

A very low energy usage (99.85% less energy consumption than PoW) consensus system utilizing validators who have locked up collateral (e.g. 32 ETH coins) to be able to participate in a blockchain for the purpose of securing and writing information to the blockchain.

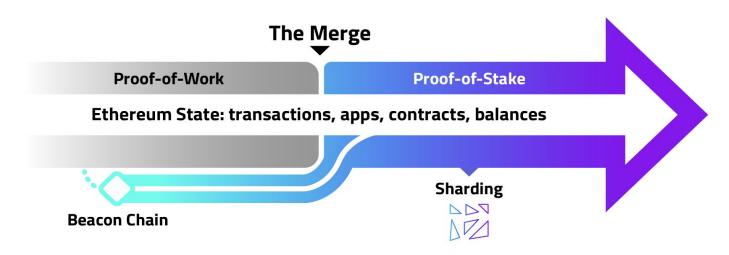
## Why is Ethereum switching from PoW to PoS?

The plans to move from PoW to PoS have been in motion since the whitepaper for Ethereum was released. Before PoW Ethereum was operational, the Ethereum community and foundation was working towards a transition to Ethereum PoS to promote decentralization, better scalability, functionality and lower energy consumption.

## How does this impact your organization's ESG initiatives?

With the significant reduction of power consumption by the transition to Proof-of-Stake, the concerns around crypto and NFTs impacting the Earth's climate should significantly decline and eventually go away completely. This should free up your organization to focus on strategic Web3 programs in alignment with internal ESG initiatives. While many hoped The Merge would bring some relief to gas prices in the ETH ecosystem, that likely isn't a reality. But Mother Nature's health is priceless and this Merge ensures that Web3 is less of a burden on our planet's precious environment.





### Is there a debate as to what is the "real" Ethereum network?

Part of the transition from PoW to PoS will require a majority of users and operators of the existing Ethereum network to acknowledge the PoS network as the authentic network over the abandoned PoW network through their chain activity and resource allocations.

These acknowledgements have occurred overwhelmingly and have been officially stated by many major platforms in the space like Coinbase, FTX, Binance, as well as countless thought leaders, infrastructure operators, etc.

### What is actually happening during The Merge?

The Merge is the joining of the consensus layer and the execution layer into one cohesive decentralized network. The Ethereum PoS consensus layer was activated in December 2020 and is called the Beacon chain. It currently has over 415,000 validators.

### How much testing has happened?

The Merge is the culmination of years of work by the Ethereum Foundation, independent researchers, developers, testers, client teams, infrastructure providers and many others. Significant testing has occurred for the last several years at every stage of the development and deployment process.

#### What do enterprises need to do?

Whether your organization holds any tokens or ETH on the Ethereum network or not, you do not need to do anything to prepare for The Merge.

# How are partners and vendors preparing for The Merge?

Vayner3 works with many different technology partners and service vendors to support our enterprise clients in their transition to the Web3 world. We expect these partners and vendors to issue further communications as they update their smart contract applications and integrations in anticipation of The Merge.

#### What now?

If you have any additional questions as it relates to The Merge, Proof of Stake, NFTs, or the transition, please feel free to reach out to your Vayner3 client partnership representative. We look forward to supporting you during this transition and keeping you up-to-date with your comprehensive Web3 strategy.

