



Ethereum Shanghai upgrade survey results

The most advanced insights on institutional staking behaviors

February 2023



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Introduction

The aim of this report is to give you an overview of the upcoming **Shanghai upgrade** which is planned for March 2023. We have created it to give you some answers on how current and upcoming stakers are likely to react to this upgrade.

Shanghai is the next milestone of Ethereum's transition to a full Proof-of-Stake consensus, which commenced in December 2020. It will allow withdrawals of staked ETH, enabling the first unstaking flows. This staking inflow and outflow will likely have an impact on Ethereum's staking APR and token value.

We received 117 responses from top brokers, market makers, exchanges, wallets, custodians, banks, and DeFi investment firms with over \$10 billion in assets under management. Let's now dive into what those institutions and individuals plan to do after this next major milestone.

Main takeaways

More than

68%

intend to start staking or compound their stake after Shanghai Of which

70%

will stake right away or briefly after Shanghai Only

9%

intend to unstake upon Shanghai

Since 2020 I am already using a mix of Liquid Staking Tokens (LSTs),
with the Shanghai upgrade I will complete my strategy with native staking.

— INTERVIEWEE 35

I hope staking rewards will still be good after the upgrade, but what

INTERVIEWEE 76 —

worries me is the entry queue that I will probably have.



01

What is the Shanghai upgrade?

Ethereum's transition from Proof-of-Work (PoW) to Proof-of-Stake (PoS) is a complex process that started in 2020 after years of preparation. Many notable milestones have already been realized, moving closer towards the full completion of the transition. Shanghai is a very significant step, but it won't be the last one:



The Ethereum Shanghai upgrade (scheduled to take place on February 28th on the Sepolia testnet before going to the mainnet) is the next most anticipated event for the Ethereum community and in the cryptocurrency space.

It focuses on **enabling withdrawals of staking positions** and validator consensus-layer rewards. Currently, these rewards are locked on the validator, and the balance cannot be withdrawn.

By implementing withdrawals, Shanghai brings Ethereum staking full circle: from staking to unstaking and earning rewards while contributing to the security of the network.

After the Merge in September 2022, a successful Shanghai upgrade should be seen as further evidence that Ethereum is on track to complete its transition to PoS.

Nevertheless, this doesn't mean Ethereum's transition to PoS is completed; there are more upgrades to come such as Danksharding for instance.

02

Survey results

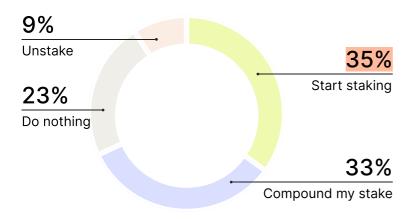
We probed more than a hundred members of the Ethereum community about their intentions with regard to staking following Shanghai. Through their answers we aim to understand how the upgrade will be welcomed, as well as the changes it will produce.

Do stakers intend to withdraw their staked ETH, or will they stake even more after the update? Will the Shanghai upgrade boost confidence around Ethereum's transition to PoS, as we noticed shortly after the Merge upgrade?

These results are based on over 100 responses from companies within the Ethereum ecosystem and members of the Ethereum community. This report does not attempt to speculate or guess Ethereum's staking ratio or asset price following the upgrade.



"Once withdrawals are enabled, I plan to..."

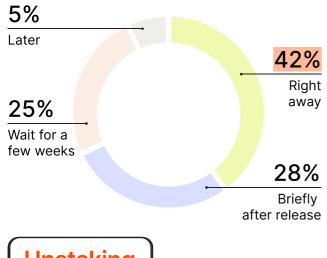


- A large majority (68%) of participants are waiting for Shanghai to start staking or commit further into it by compounding their stakes, likely from their skimmed rewards.
- Less than 10% intend to exit by withdrawing their staked ETH upon Shanghai, and 23% plan to remain unstaked.



Among those who intend to stake, what's the expected timeline to stake?

"When are you planning to stake?"



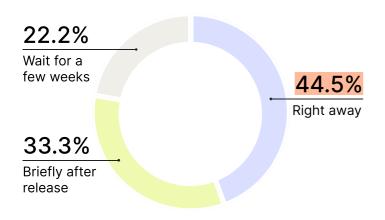
- 42% of survey respondants intend to stake just after the upgrade goes live.
- Another third (28%) is waiting to see how the upgrade goes and should stake briefly after.
- A quarter of respondants will be more careful and wait a few weeks, while the rest still have no clear timeline.

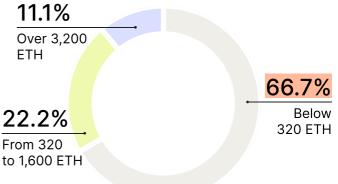


Among those who intend to unstake, do they plan to unstake right after Shanghai?

"When are you planning to unstake?"

"What amount are you planning to unstake?"







"Are you planning to change staking providers?"



- More than two thirds of those who will continue to stake stated they will stay with their current staking provider.
- The third who seek to change providers will likely exit their validator after Shanghai and restart them with their new provider shortly thereafter.

03

What to expect next?

The Shanghai upgrade is significant for ETH stakers as it enables two previously inaccessible actions at the protocol-layer: unstaking, and withdrawing one's initial staking deposit. This will make ETH staking fully liquid and significantly de-risk the protocol. As of today, only 14.7% of all ETH tokens are staked, but we can expect that this number will increase significantly following Shanghai, and boost staking adoption.

As 68% of respondents want to start staking or compound their stake, it seems fair to say that a large segment of the community is excited and looking forward to this upgrade to increase their stakes. As proof of this enthusiasm, nearly 70% of them want to stake immediately or only a few days after the release.

In this regard, it is important to note that there will be an entry queue just as there will be an exit queue. The entry and the exit queues depend on several factors such as the <u>number of active validators</u>, and the <u>number of validators</u> who want to enter and exit. So it could take days to stake or withdraw your ETH:

Entry queue - extrapolation simulation Assumptions 42% of ETH holders start staking right away 30% of their assets. Output Given the current supply, this will represent 408k new validators willing to enter. Delay Based on the queueing mechanism this will take 176.3 days to be completed

The next Ethereum PoS upgrade will focus on danksharding, a method to have more data pass through the network, as quoted by <u>Tim Beiko from the Ethereum Foundation</u>. It increases speed and efficiency by splitting the blockchain into smaller portions. This is a scaling solution to support an exponential increase in users and the need to remain decentralized at scale.

At Kiln we look forward to supporting these major milestones by testing them during the different launch phases and by providing simple and seamless tools to our customers to stake and unstake ETH fully on-chain.



^{* 30%} is an arbitrary value to simulate an entry queue volume, assuming 42% of all ethereum holders stake 30% of their assets.

About Kiln

Kiln is the leading enterprise-grade staking platform, enabling institutional customers to stake assets, and to whitelabel staking functionality into their offering. Our platform is API-first and enables fully automated validators, rewards, data and commission management.

Make the most out of staking with Kiln's enterprise-grade staking products:



Kiln Connect is a turnkey SDK for staking on all Proof-of-Stake blockchain protocols.

Standardize all staking/unstaking transaction formats and get consistent real-time staking rewards data & reportings across all protocols. Automate user rewards data and commissions. Works with all custodians and custody solutions.



<u>Kiln On-Chain</u> is the first Ethereum white-labeled staking solution, 100% managed on-chain.

Enable your users to stake from 0.01 ETH with a simple transaction and monetize an ETH staking offering with automated rewards and commission dispatching and programmatic validators deployment.



<u>Kiln Dashboard</u> is the most comprehensive interface to stake and track your performance for your entire team.

Connect your custody solution and stake in 1-click on a user friendly dashboard. Track your staking portfolio across all protocols and get informed in real-time and easily extract and share your staking data.



<u>Kiln Validators</u> is an enterprise-grade Validators-as-a-Service for all Proof-of-Stake blockchains making additional protocol integration super fast.

Easily manage your users' stakes and data, benefit from the highest standards with rewards guarantee, SLAs, and third-party coverage



Sources and appendix

- Kiln Useful Ethereum Spreadsheets
- https://www.kiln.fi/post/pos-ethereum-staking-rewards-a-deep-dive
- $\bullet \ \ \, \underline{\text{https://www.kiln.fi/post/how-ethereum-staking-withdrawals-will-work}}\\$
- $\bullet \ \underline{\text{https://www.kiln.fi/post/the-merge-and-its-impact-on-eth-staking-rewards}}\\$
- https://ethereum.org/en/history
- https://members.delphidigital.io/reports/the-hitchhikers-guide-to-ethereum
- https://ceremony.ethereum.org
- https://www.galaxy.com/research/insights/100-days-after-the-merge





