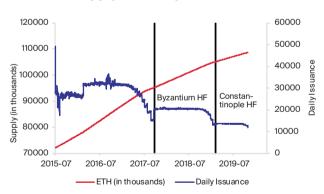
Ethereum 2: Implications for Tokenomics

he switch from proof-of-work to proof-of-stake will also bring about significant changes to the economics of Ethereum. Currently, ETH is issued at a rate of about 4.8% of the total supply per year.



ETH Total Supply and Daily Issuance

This issuance rate has undergone several changes throughout the years. With the Byzantium hard fork in October 2017, the block reward handed out to miners was reduced from the original 5 ETH per block to 3 ETH. Constantinople further reduced the block reward to 2 ETH in February 2019. However, the difficulty bomb – which raises the mining difficulty and hence increases the time between blocks – was also delayed at the time of the forks, making sure total rewards do not drop further due to longer block times.

With Ethereum 2, this issuance rate will change again. Initially, the rate will increase slightly due to rewards being handed out on the beacon chain as well as the legacy chain. Assuming a (generous) 30 million of staked ETH, the annual issuance on Ethereum 2 would amount to 0.62 %,¹⁰ bringing the overall issuance on both Ethereum chains combined to about 5 %.

However, once Ethereum 2 is used to secure the legacy chain or – at the latest – the current chain becomes a shard, the issuance rate will be drastically lower. The 4.8 % of the total supply currently handed out over the year to miners will be unnecessary, leaving only the issuance on Ethereum 2 – which could range from about 0.4 % to 1.2 % with the current specifications. This would be equivalent to two of Bitcoin's halving events conducted at the same time. Only time will tell how this change in the supply and demand equilibrium will impact the price of ETH – and the effects of this issuance rate change will be hard to separate from other price drivers. Also, the beacon chain first must prove that the currently suggested numbers are sufficiently attractive for validators to secure the network.

Source: etherscan.io, Bitcoin Suisse Research.

Daily issuance of ETH to miners has been subject to various changes over the years and is now sitting at around 12'500 ETH per day.