

PUBLICATION

Everything You Should Know About "The Merge"

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Around September 15th, 2022, the ethereum blockchain will hit its terminal total difficulty and transition to a new consensus mechanism, moving from proof-of-work to proof-of-stake.

This upcoming event is known as "The Merge", and it is a huge deal.

But why?

Associate, Asher Macdonald, discusses the details of "The Merge" in detail within the video below.

For now, here is a summary of what you need to know:

1. Currently, in Proof-of-Work consensus, miners (individuals or consortiums) purchase hardware and consume electricity to solve cryptographic problems in a race to be the party who proposes a validated block to the chain.

This is because the party who proposes a validated block receives a reward in the chain's currency.

This is how Bitcoin or Ether (currently) is created and distributed, *and* the Proof-of-Work model is how blockchains as we know them were first implemented, going back to Satoshi's whitepaper on Bitcoin in 2008.

2. Proof-of-Stake eliminates the need to consume electricity to validate transactions and propose a block. There will no longer be any miners of ethereum, and no more races to solve math problems.

Instead, parties must stake (in other words, ante up) 32 Ether to participate in block validation efforts. By staking, these parties will be locking their 32 Ether into a smart contract programmed into the blockchain.

3. The *risk* is that if they are a bad actor and validate improper or false transactions, their stake will be slashed (in other words, a portion of the money they've invested will go poof).

As a *reward* for participation and validating proper and true transactions, stakers will continuously receive new Ether that works out yearly to a small proportion of their 32 locked Ether.

Further, successful block proposers will be rewarded with a chunk of Ether reaped from "tips" that accompanied

all transactions within that block.

Watch the full video here: