

# DAAA WORKSHOP ETHEREUM NODE

Georg Brameshuber  
VALIDVENT

# PROOF OF STAKE: A NEXT-GENERATION CONSENSUS MECHANISM

DAAA Workshop Ethereum Node



# CONSENSUS MECHANISMS AND VALIDATORS

- Consensus mechanisms determine the accurate state of the blockchain
- Validators validate transactions and maintain the blockchain database
- Proof of Stake rewards validators with tokens for securing the network

## PROOF OF STAKE VS. PROOF OF WORK

- Proof of Work (PoW) requires computational power for transaction validation
- Proof of Stake (PoS) eliminates the need for massive computing power
- Validators stake their tokens for the right to propose transactions and add blocks

## ETHEREUM'S TRANSITION TO PROOF OF STAKE

- Ethereum switched to PoS in 2022
- Reduced energy consumption by over 99%
- Increased market share for PoS blockchains

# STAKING AND PROTOCOL STAKING

- Staking refers to participation in securing a blockchain
- Protocol staking is distinct from crypto-lending
- Ownership, risk profiles, and compensation structures differ

## PARTICIPATING IN PROOF OF STAKE

- Direct participation as a validator requires technical know-how
- Staking-as-a-service (StaaS) providers offer easier participation
- Delegation allows tokens to be staked on behalf of participants

## STAKING-AS-A-SERVICE (STAAS)

- StaaS providers assist in the staking process
- Operate validator nodes and validate transactions
- Stakers maintain legal ownership of their staked assets



# LIQUID STAKING

- Allows stakers to use their digital assets while staked
- Receipt tokens prove ownership of staked assets
- Enhances security and provides additional functionality

## Examples:

- Analogize with a coat check system
- Receipt tokens can be invested or used in other web3 applications

## CONCLUSION

- Proof of Stake offers energy efficiency and scalability
- Growing adoption among major blockchains
- Staking and liquid staking provide secure participation and additional utility

Thank you for your attention

Georg Brameshuber

CEO Validvent.tax

[georg@validvent.tax](mailto:georg@validvent.tax)

validvent.tax

+43-664-4067252

