POLYMESH
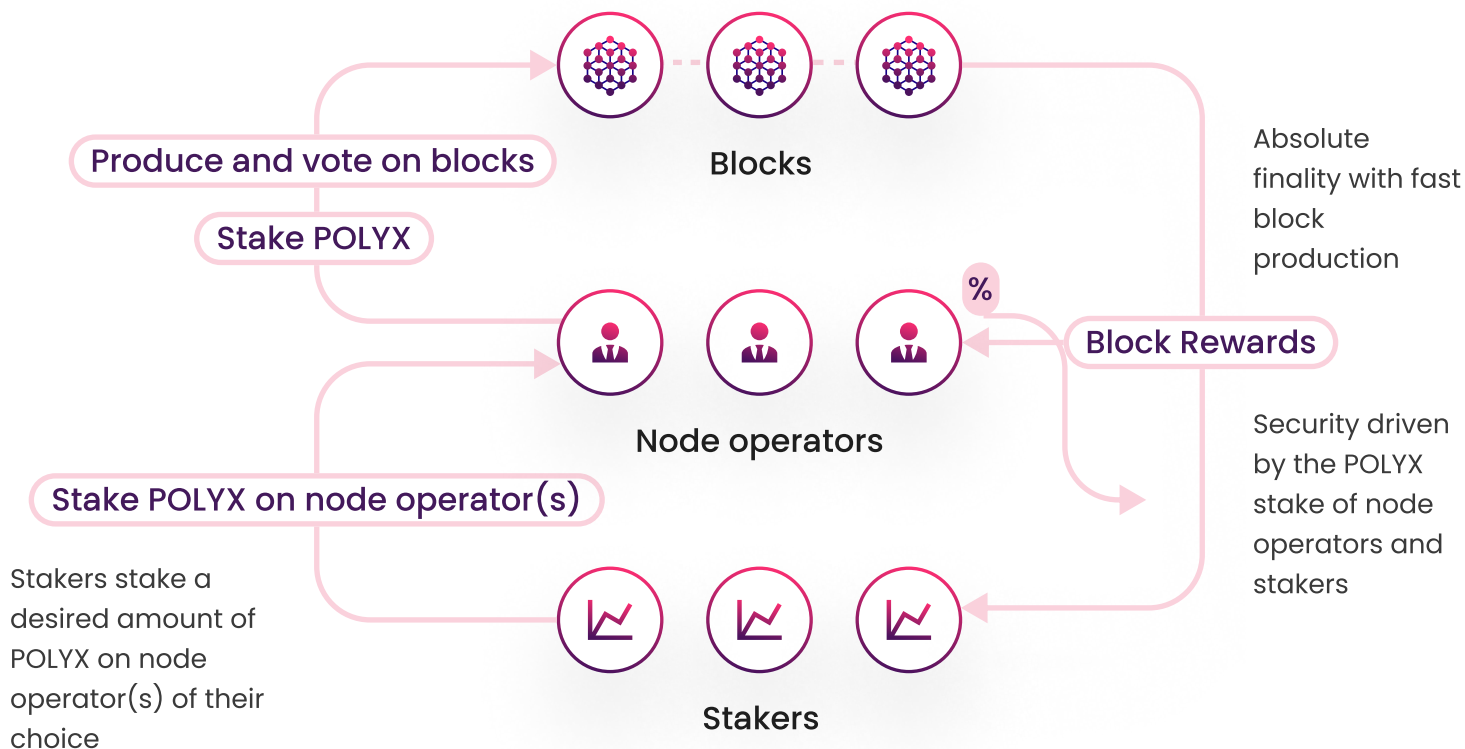
Staking on Polymesh

Economic incentives for network participants secure the Polymesh blockchain, supported by the nominated proof-of-stake consensus mechanism.

Proof-of-stake on Polymesh

Node operators and stakers fulfill roles and rules on Polymesh by staking POLYX. By following simple economic incentives they not only ensure the chain operates as intended, but also make Polymesh more secure by building in benefits for adhering to the rules that outweigh the cost of malicious or negligent behaviour.

Produce and vote on blocks

Stake POLYX

Blocks

Absolute finality with fast block production

Stake POLYX on node operator(s)

Node operators

%

Block Rewards

Security driven by the POLYX stake of node operators and stakers

Stakers stake a desired amount of POLYX on node operator(s) of their choice

Stakers

Who are Polymesh node operators?

Node operators run authoring nodes on Polymesh. Their role involves gathering transactions into blocks to be written to the chain as well as voting on block finality. Node operators must be licensed financial entities permissioned by the Polymesh Governing Council.

Who are Polymesh stakers?

Stakers use their POLYX to stake node operators of their choice. Stakers can be any POLYX holder whose identity has been verified with one of Polymesh's designated customer due diligence providers.

Approving a block

1 A node operator proposes a block

2 Remaining node operators vote on writing it to the chain

3 If 2/3 of node operators have voted in favor of a block, the block is finalized and written to Polymesh

4 The block-writing node operator and its stakers receive POLYX

5 The process repeats for each block successfully written to the chain

POLYX

Polymesh is fueled and secured by the network protocol token, POLYX. POLYX is used for network processing fees, accessing smart contracts, incentivizing node operators and stakers, and for Polymesh governance. Since POLYX is needed to participate on the chain, it ensures security by incentivizing good behavior.

Block rewards and fines

Block rewards and fines secure Polymesh by ensuring node operators and stakers are incentivized to fulfill their roles and behave reliably. When a node operator successfully writes a block to the chain, the node operator and its stakers receive POLYX, but if a node operator is delinquient in its duties (e.g. is offline; double-signs a block), the node operator will be fined in POLYX.*

To deter node operator collusion when writing blocks to the chain that would typically be invalid, Polymesh uses superlinear fines that increase the percentage of the fine as the number of node operators involved increases.

* Currently stakers will not be fined, but this could change with time.

Watch a demo of Polymesh staking at polymesh.network/staking