

# B-EACON POWD-E-R

Faster, Lighter, Mobile-Optimized: The Future of Eth2 blockchains

**WHAT GUIDES  
OUR  
EFFORTS?**

# Light Clients

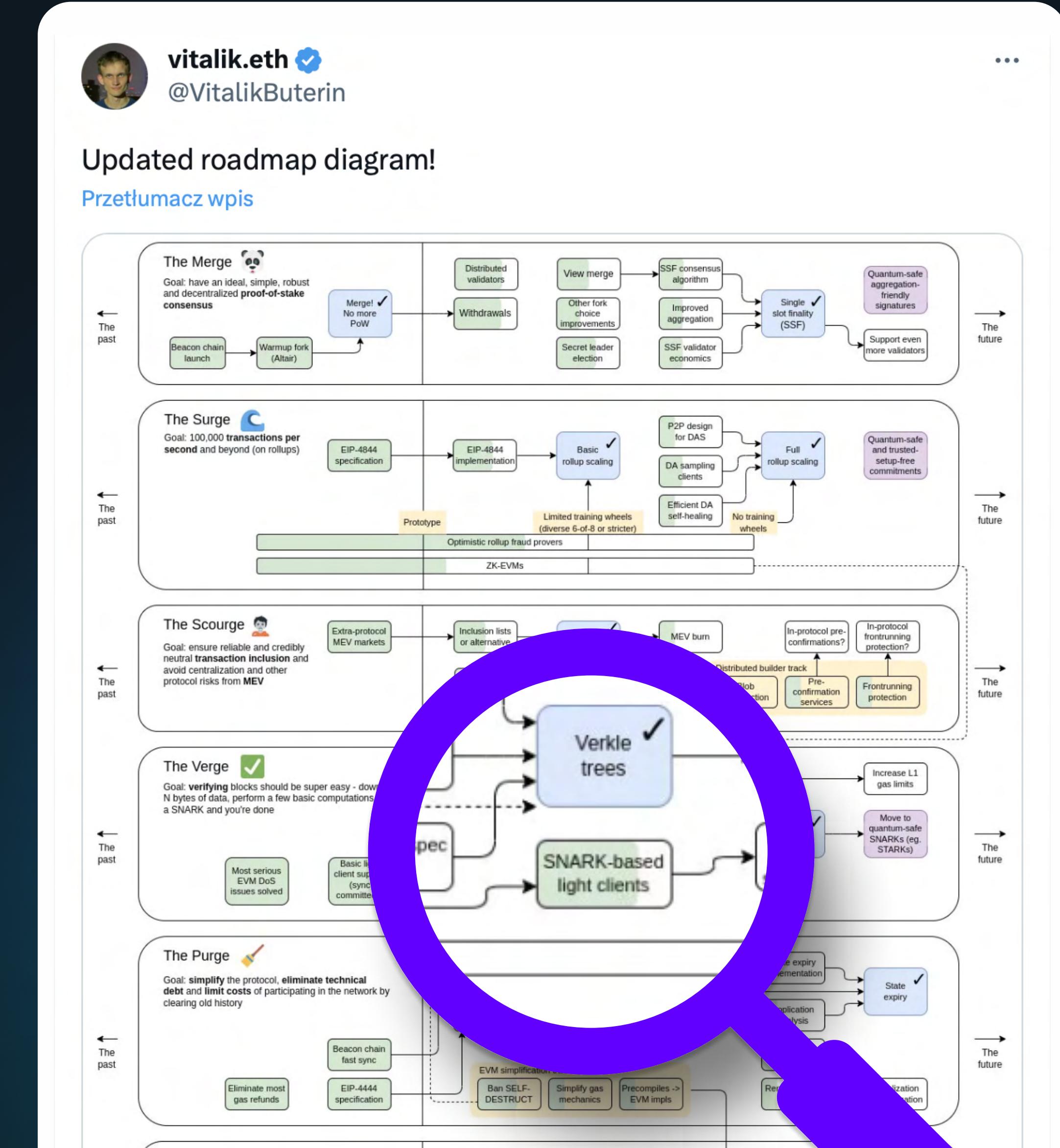
Node designed to operate in a very resource-constrained environment, where fully validating the consensus can be extremely challenging.

## Key values

- ★ Empower users to independently verify data with minimal computational resources.
- ★ Expand Ethereum's accessibility to devices with minimal storage, memory, and processing power.
- ★ Enable trust-minimized access to Ethereum, suitable for mobile phones, apps, browsers, and more, reducing reliance on third-party providers.

## The 'why'

In Ethereum's roadmap, 'The Verge' stage represents a pivotal milestone that will change this situation. The objective is to streamline verification of both consensus and execution using the power of zero-knowledge proofs.



**HOW CAN IT  
BE DONE  
BETTER?**

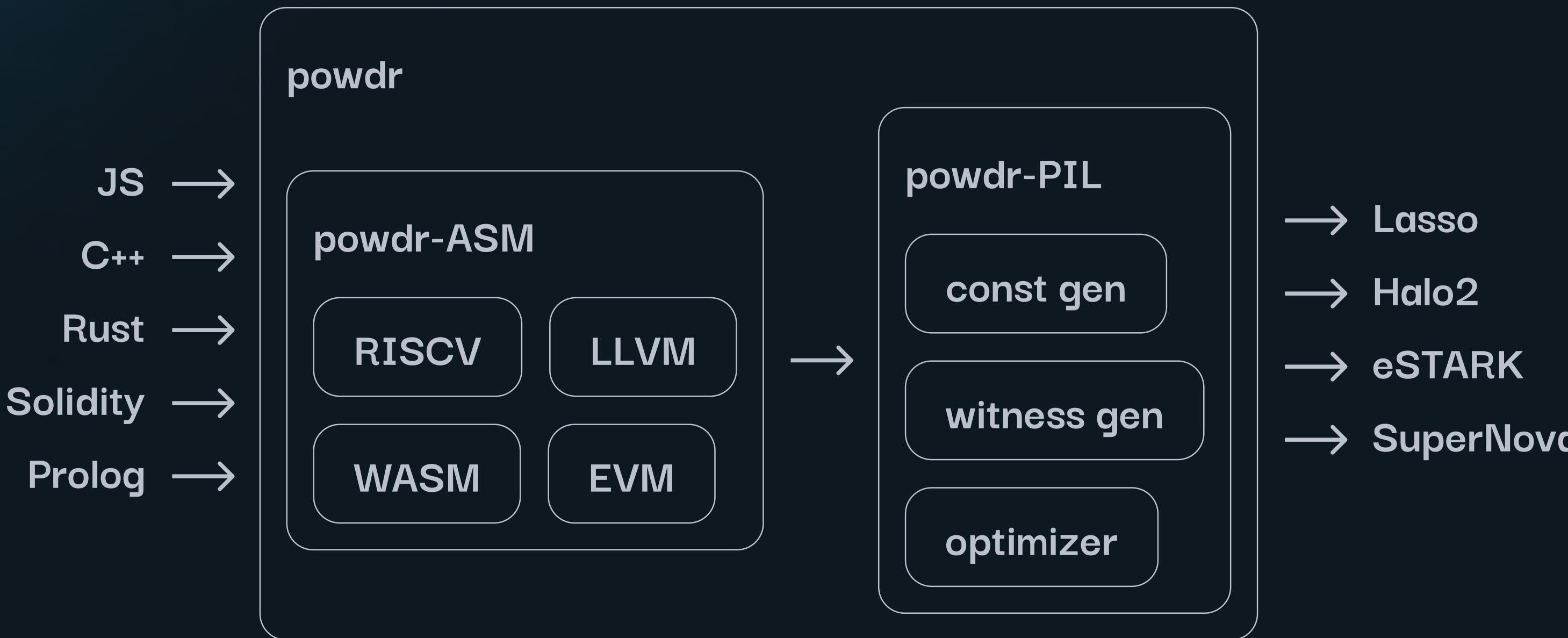
### The vision

Rapid development of STARK-based light clients  
capable of trustlessly verifying consensus state  
transitions of arbitrary networks  
using zero-knowledge proofs.

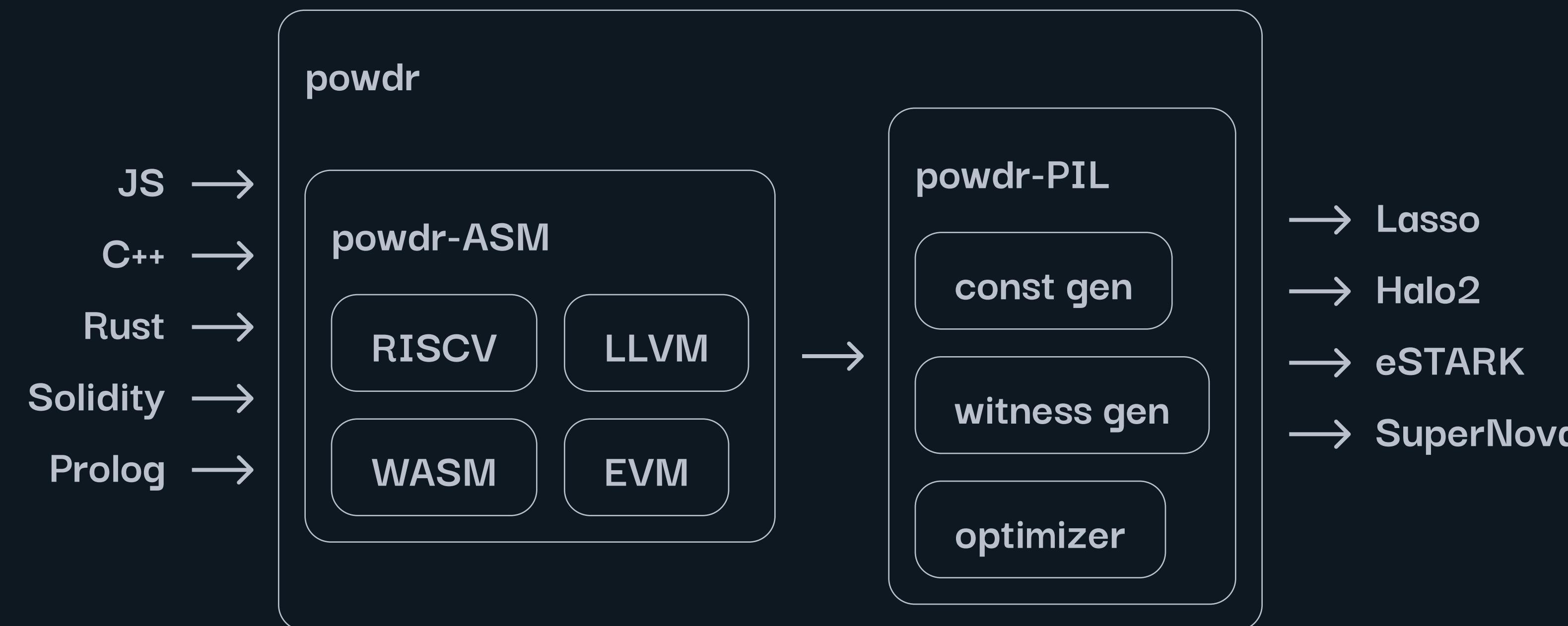
# powdr

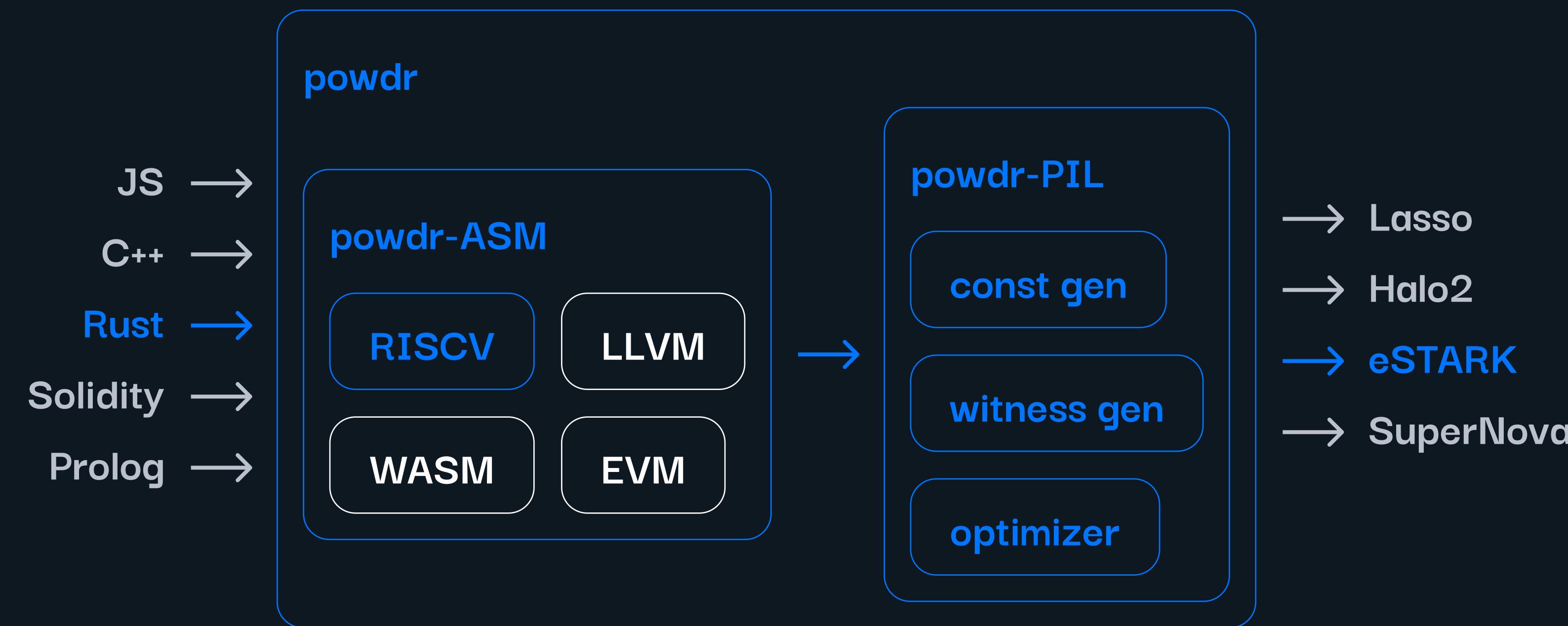
A generalized mechanism to generate circuits for multiple zk-proof systems, eliminating the need to write circuits by hand in specific low level circuit languages.

- ★ Significantly reducing development time and complexity.



**WHAT DOES  
OUR PROJECT  
SHOW?**







**BLS signature verification**



**powdr**

**BLS signature verification**



**SHA256**



**powdr**

**BLS signature verification**



**SHA256**



**state transition verification**



**powdr**

**B=ACON  
POWD=R**

**BLS signature verification**



**SHA256**



**state transition verification**



**powdr**

**B=ACON  
POWD=R**

**BLS signature verification**



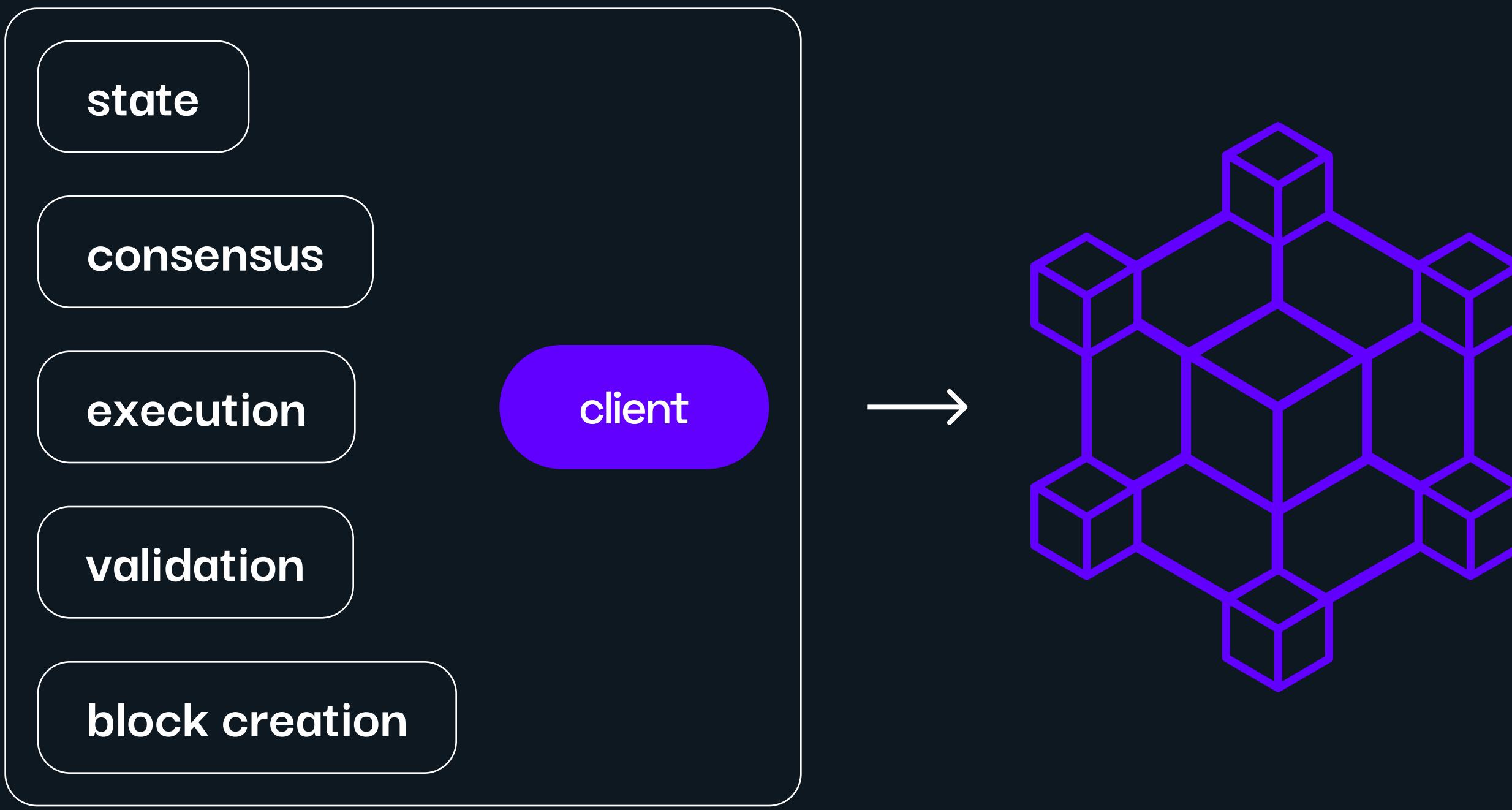
**SHA256**

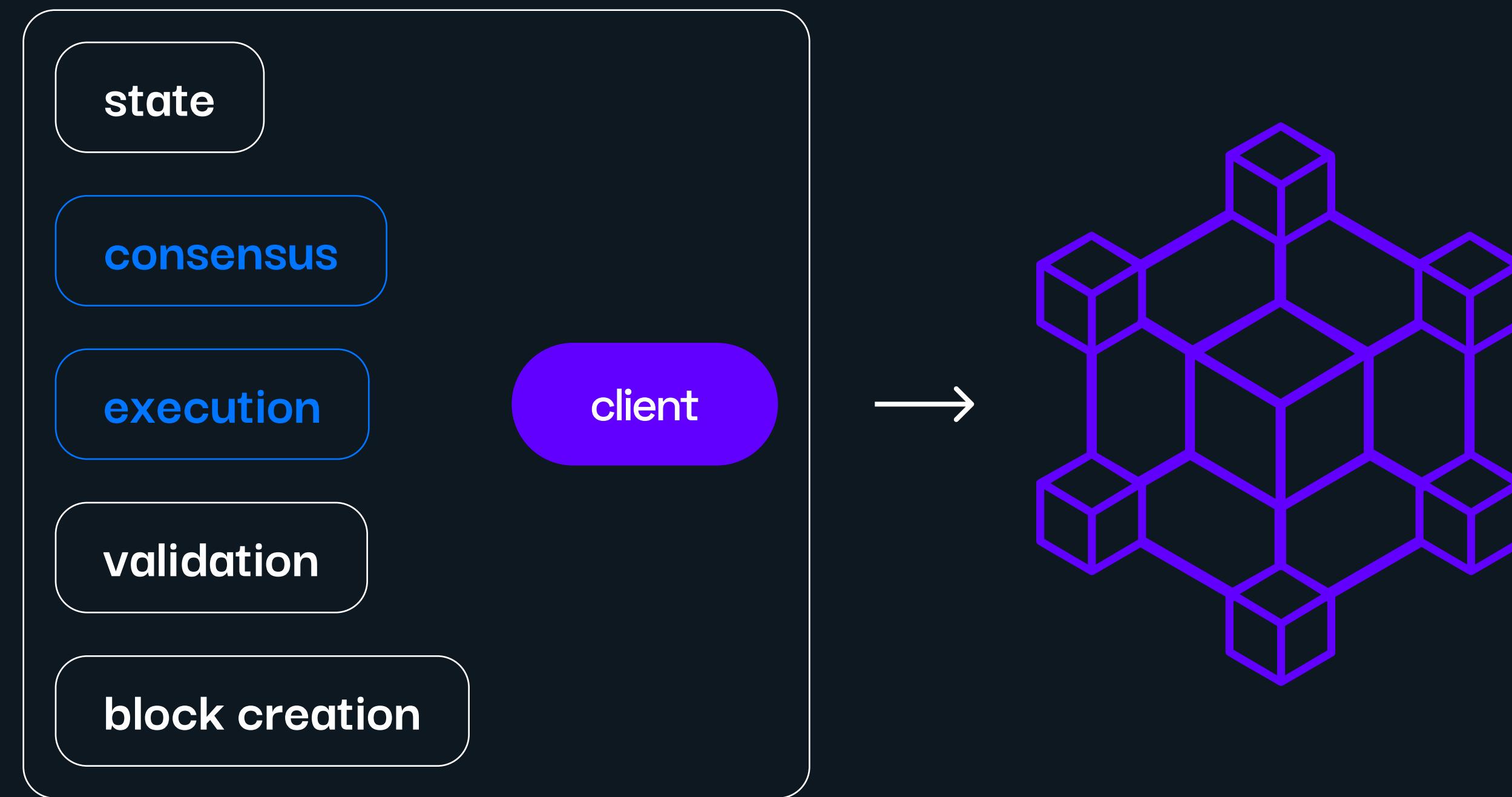


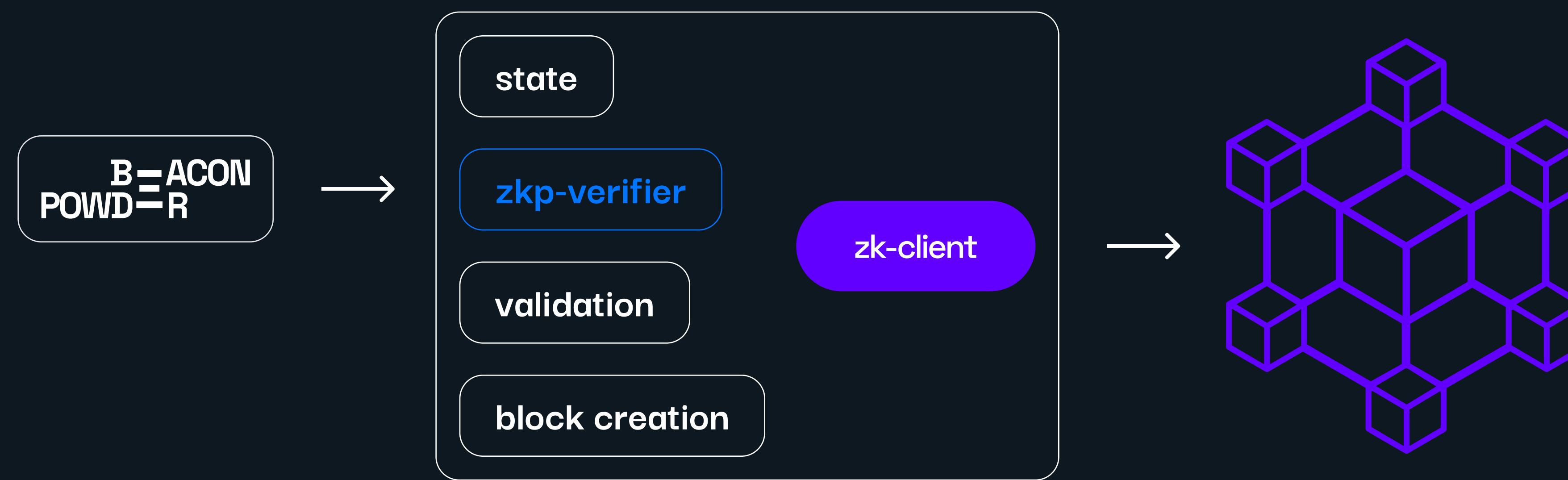
**state transition verification**

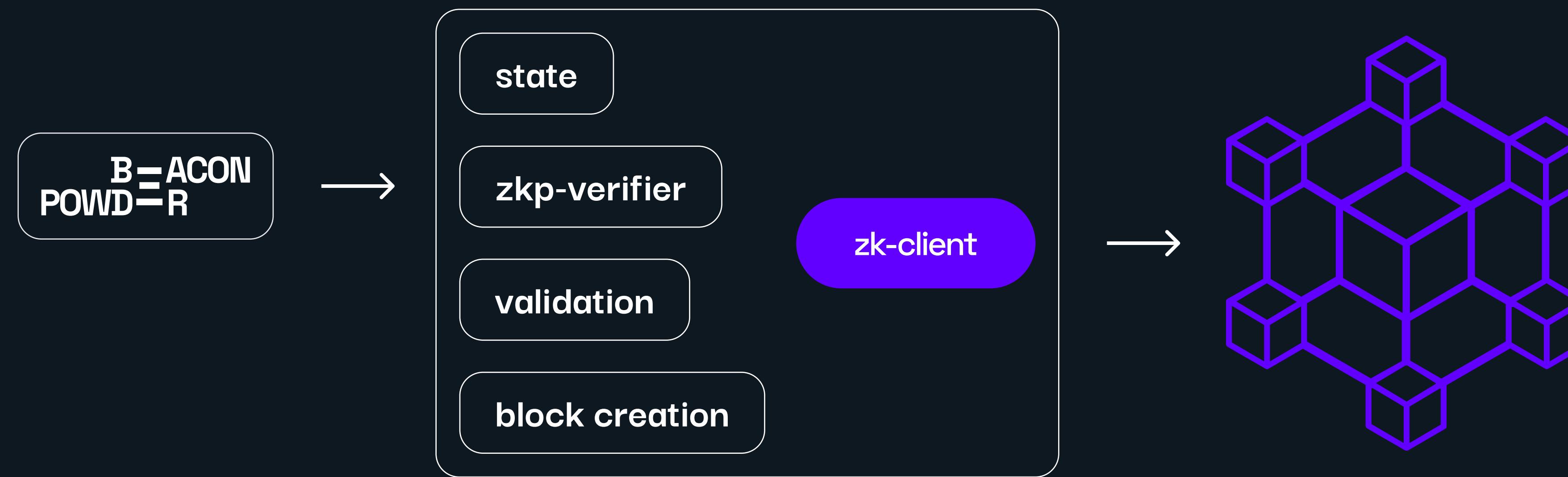


**powdr**









Let's taste

B=ACON  
POWD=R