

# Blockchain

for the asset flow

## Challenges

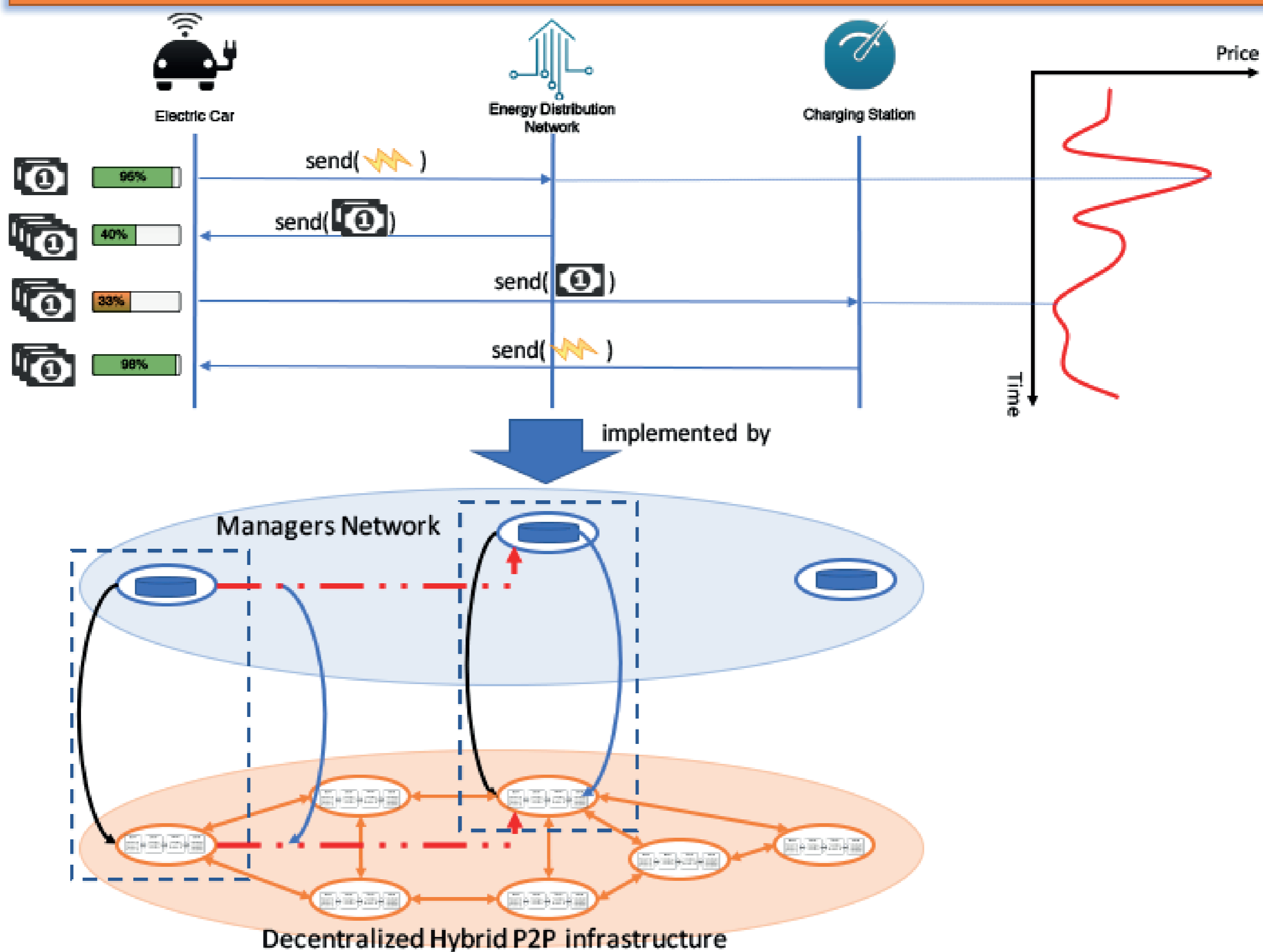
- Collaborating AND competing organizations
- Diversity of assets
- Trust management
- Asset ownership management

## Innovation

- A decentralized blockchain-based system: each stakeholder registers ownership exchanges into a collectively maintained distributed ledger
- Language for obligations specification
- Verification, execution, monitoring, violation detection

### A first example: energy trading

Electric car owner sells energy to the energy distribution network and buys energy from the car charging station by looking at the energy market value.



## Perspectives

- A formal framework for secure smart contracts in fully decentralized eco-systems
- Higher-level abstractions for efficient and scalable usage of blockchain

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