

The Energy Web Foundation

Enabling and accelerating the transition to a democratized, decentralized, decarbonized, and digitized electricity grid

EUW 2018

Ewald Hesse - Chairman of the Board



How is EWF bringing blockchain technology to the energy sector?

Founded in 2017, EWF is working to develop a public, open source and decentralized blockchain to support global applications of blockchain in energy

EWF's Mission

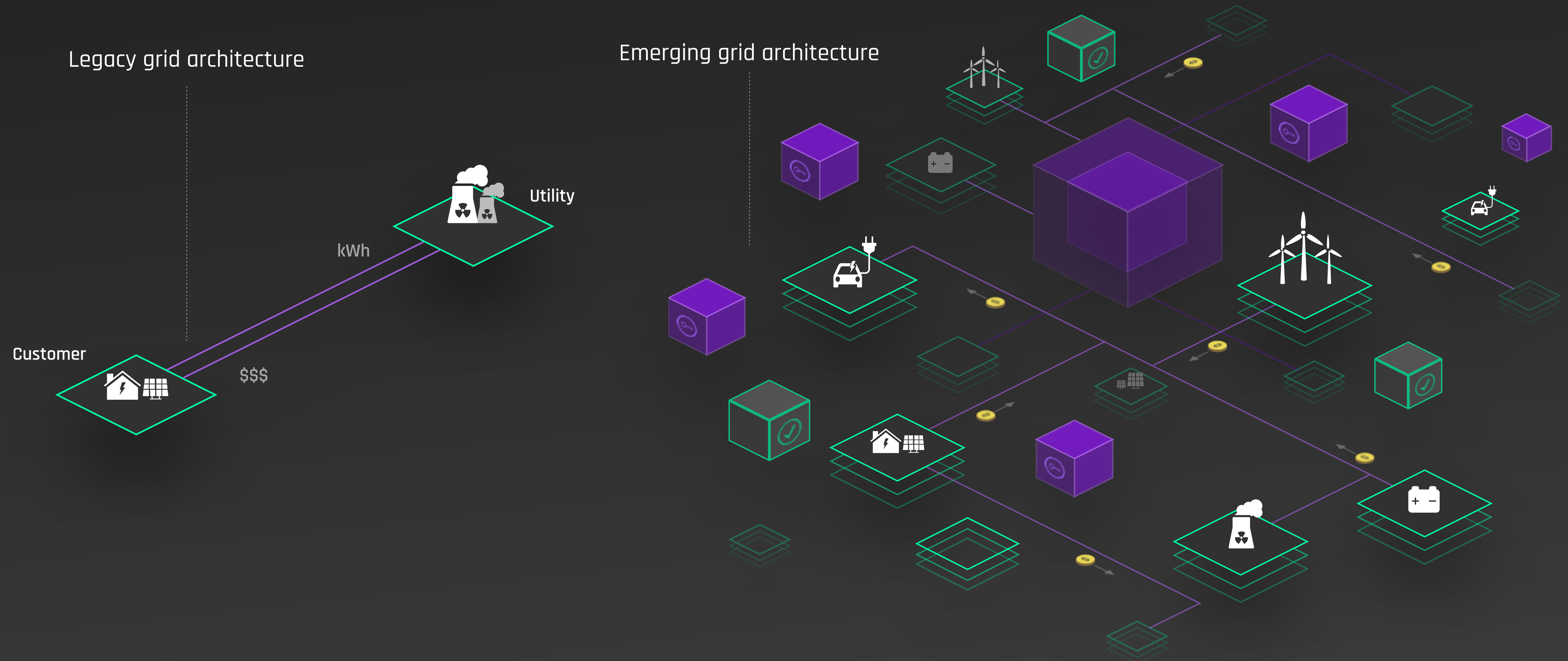
We are an entrepreneurial nonprofit foundation unleashing blockchain's potential to accelerate the transition to a decentralized, democratized, decarbonized, and digitized energy system.

What we are doing

- 1) Building a commercial-grade, open source blockchain-based infrastructure that is purpose-built for the energy sector.
- 2) Facilitating, educating, and incubating a diverse ecosystem of market participants, innovators, and regulators in support of the technology

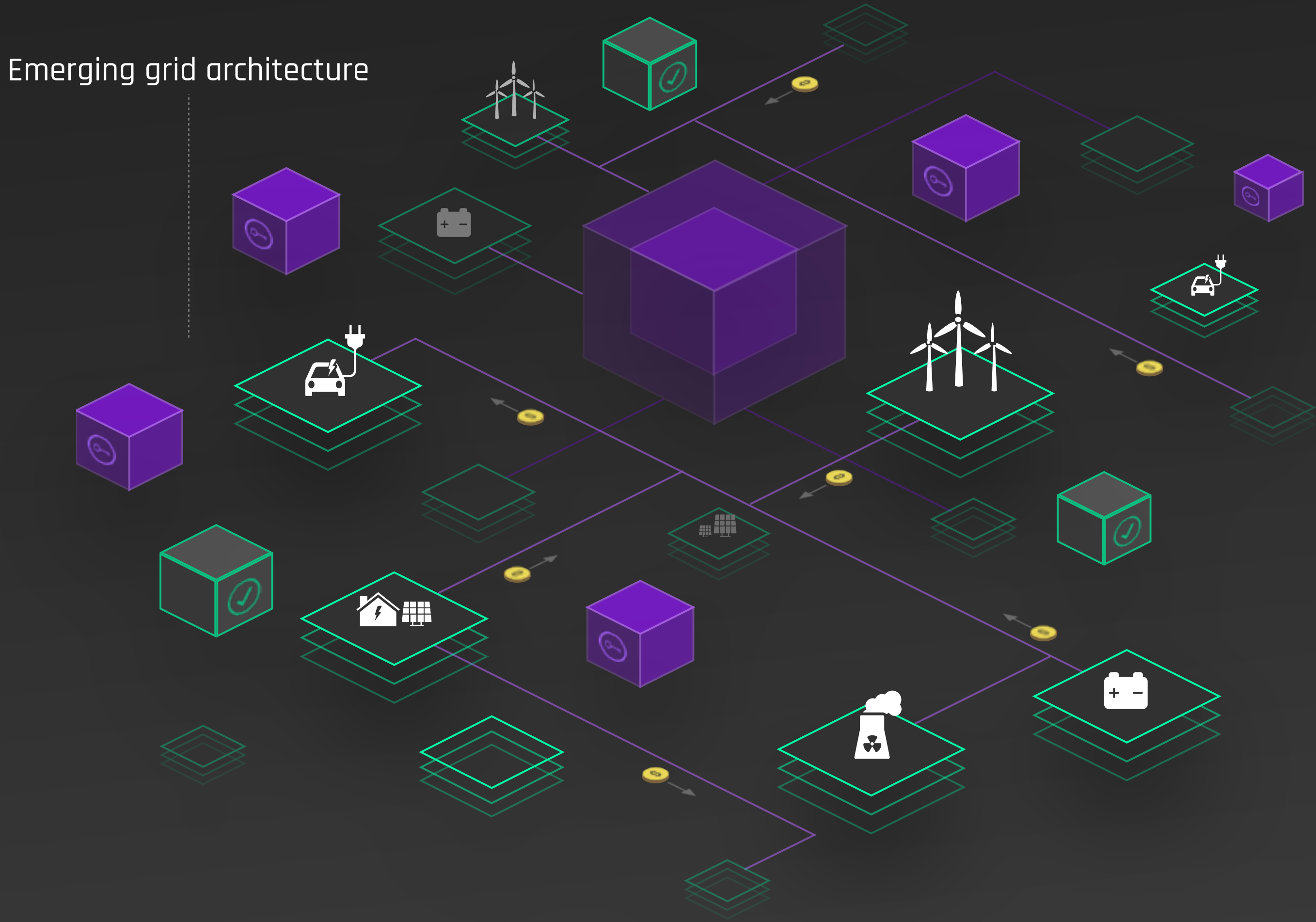
The energy system is fundamentally transforming

A grid based on low-cost, renewable, intermittent power needs a new architecture capable of securely coordinating an increasingly distributed, decentralized electric system.



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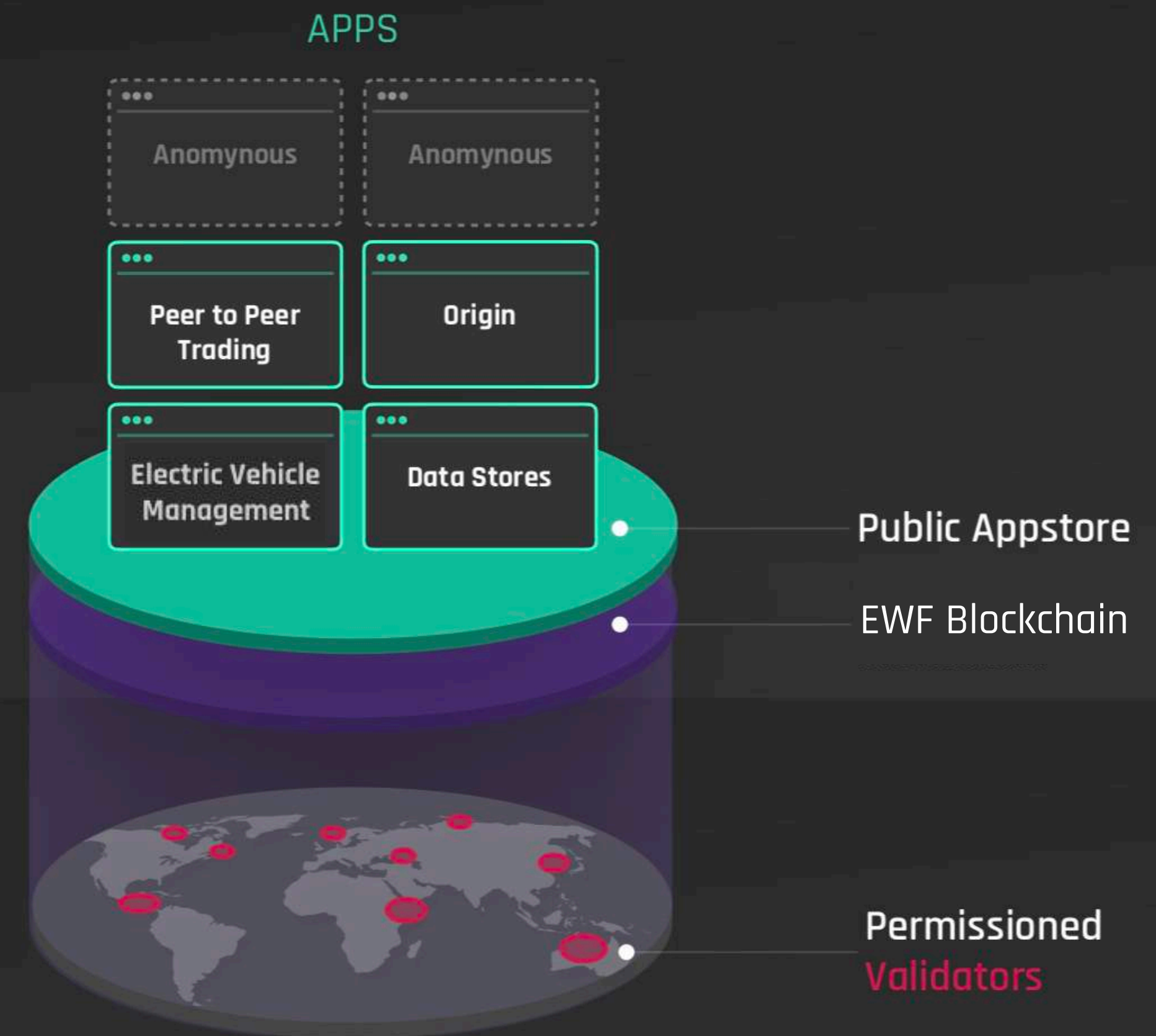
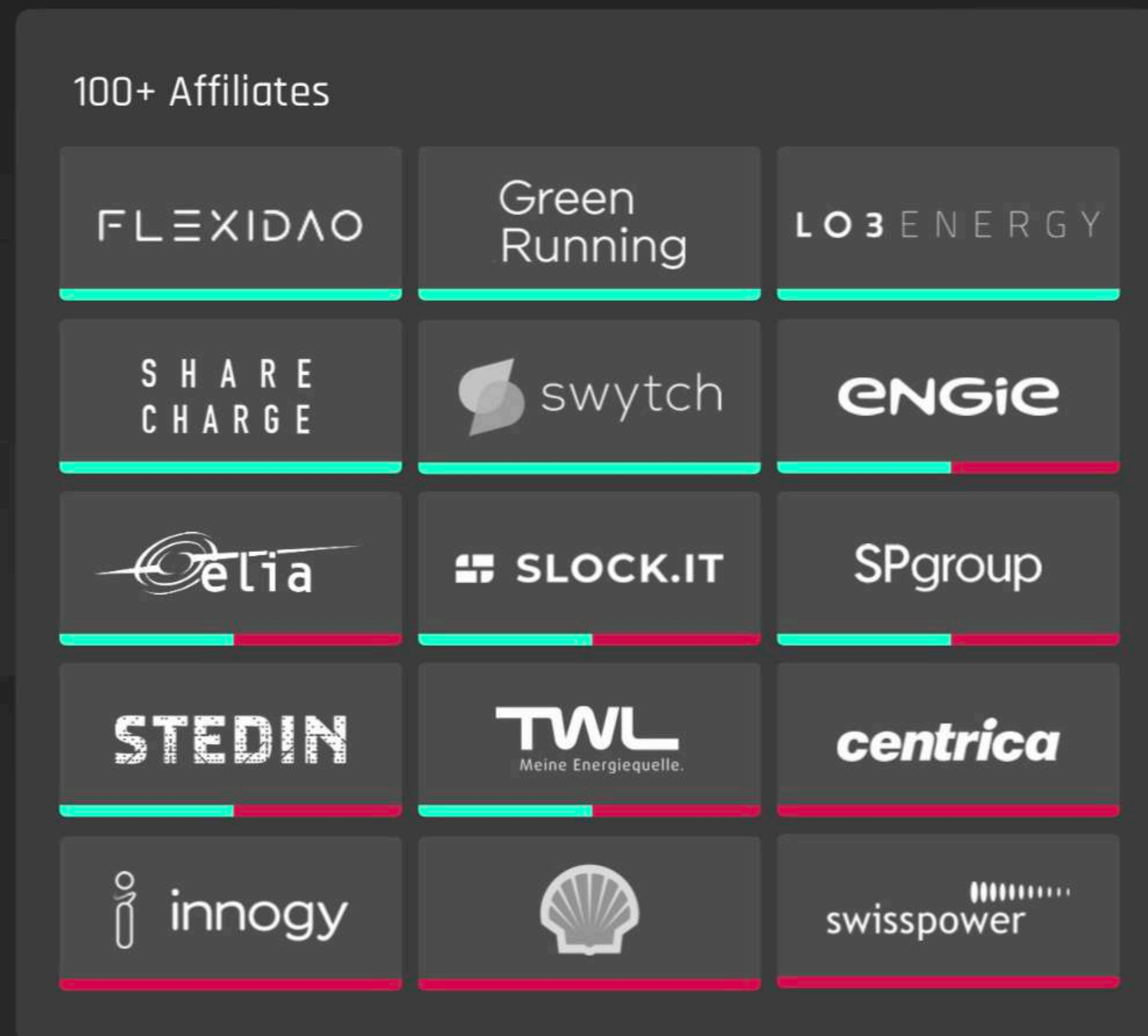
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Requirements	Addressed by blockchain
High cybersecurity	✓
Low transaction costs	✓
Low latency	✓
Ability to coordinate autonomous assets	✓
Reliable measurement and verification	✓
Secure data sharing capabilities	✓
Regulatory compliance	✓

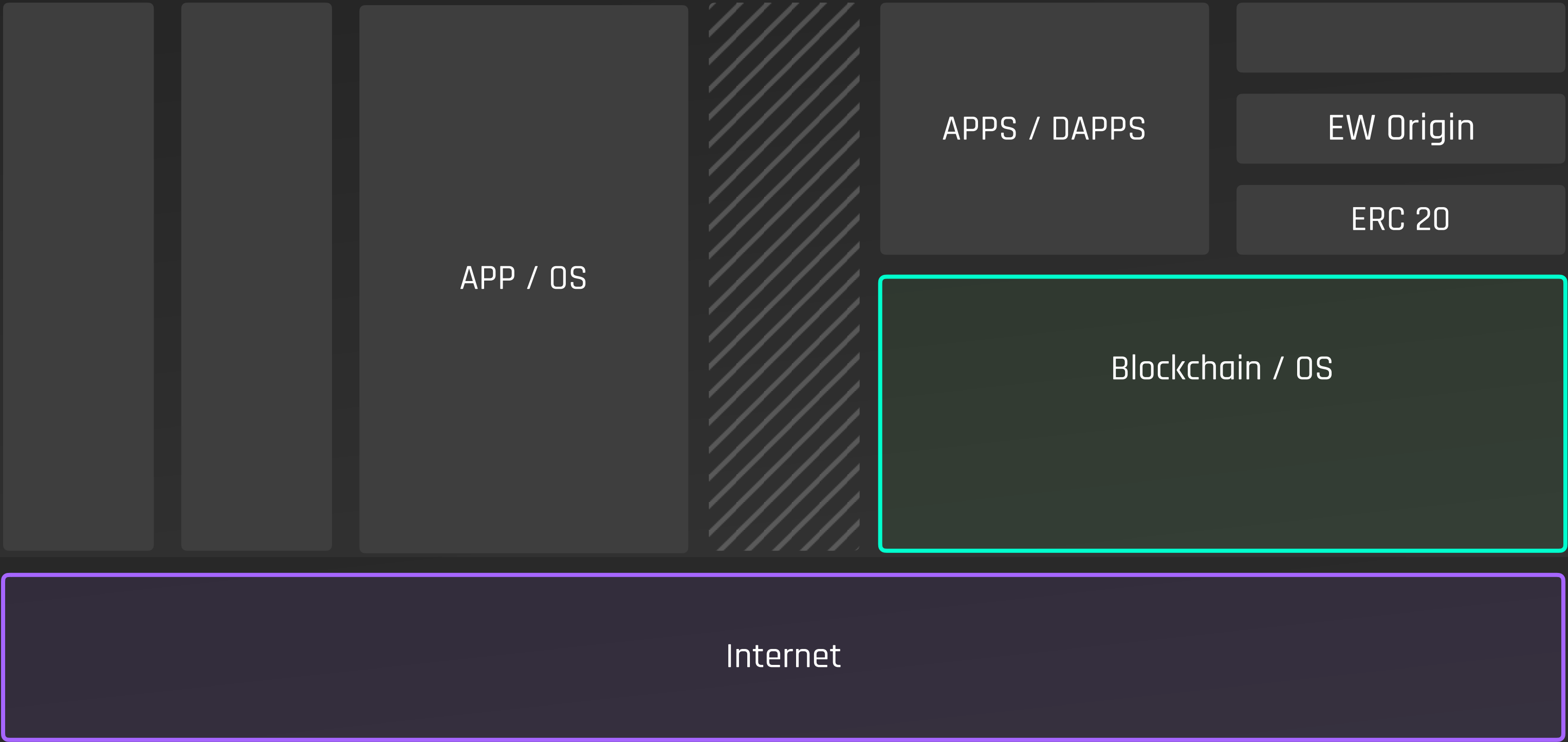
EWF is building a blockchain platform specifically for the energy sector

EWF's vision is to create and deliver an **open-source, public, blockchain-based platform** capable of supporting energy blockchain applications at commercial scale.



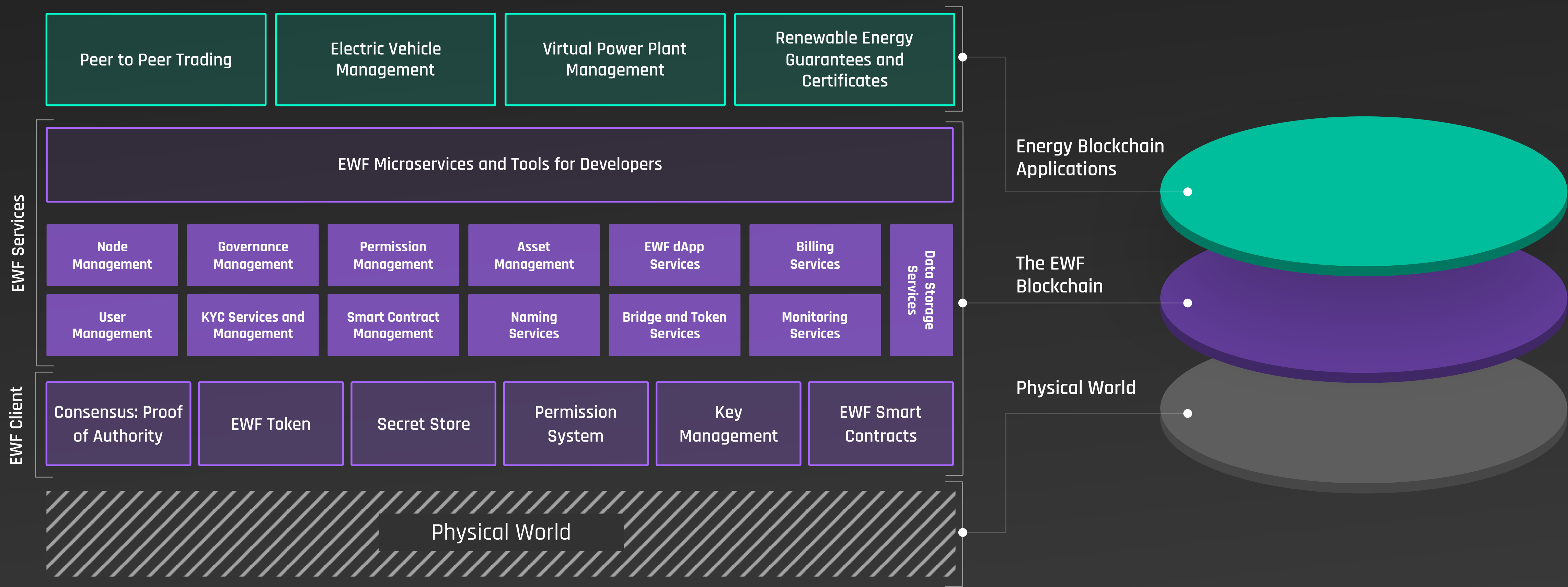
Outsource the repetitive and scale innovation

Shorten the App development cycles by re-using standards



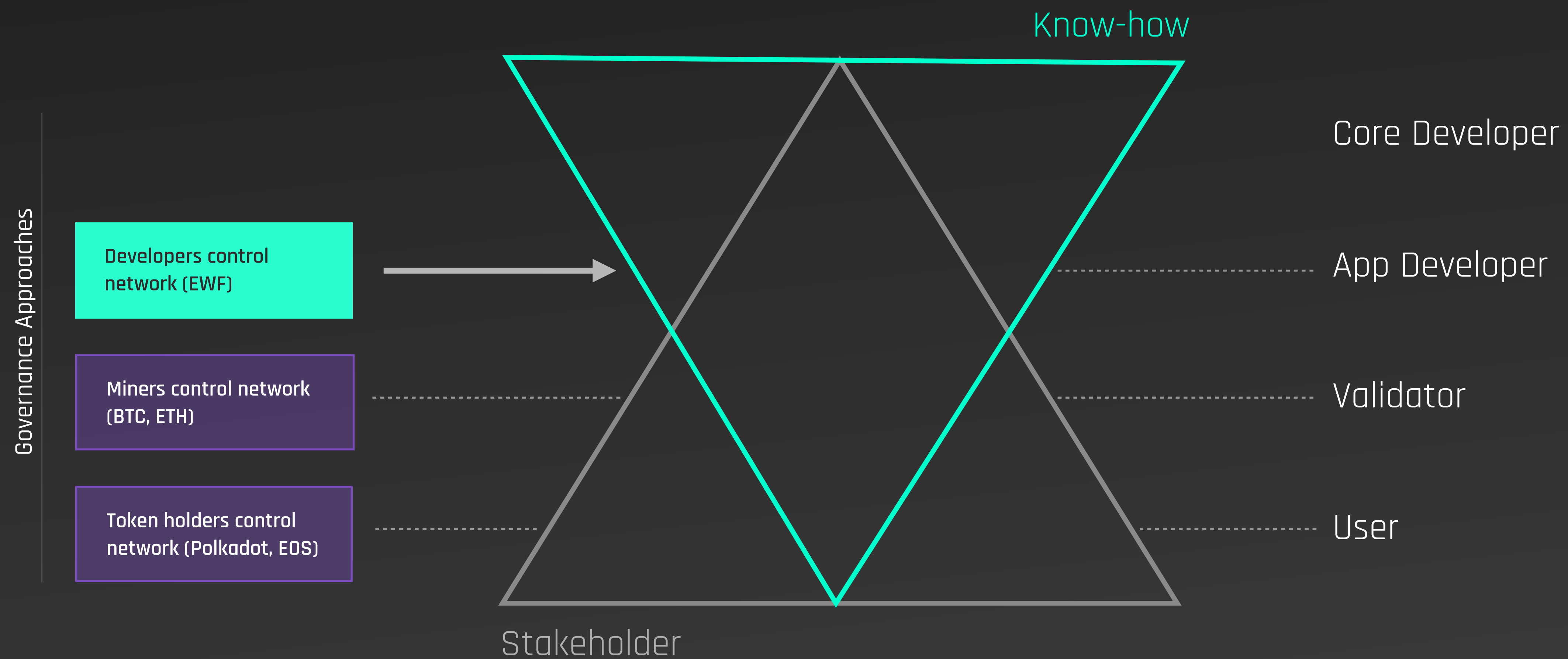
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Energy Web Blockchain; Governance by Gas

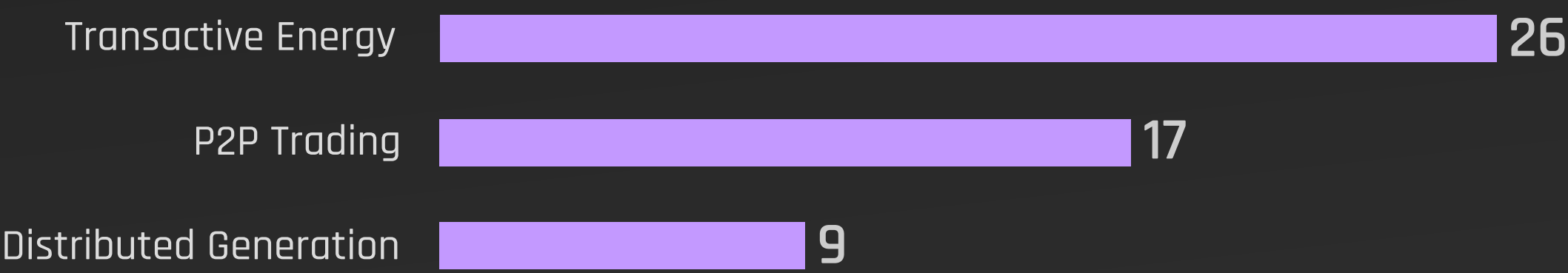
In contrast to other blockchain projects where miners or token holders are the primary decision makers, our governance structure empowers the stakeholders with the most knowledge in the space: developers vote on network upgrades.



Blockchains unlock value for a new energy future

A grid equipped with blockchain technology can improve existing processes and create disruptive opportunities for value creation

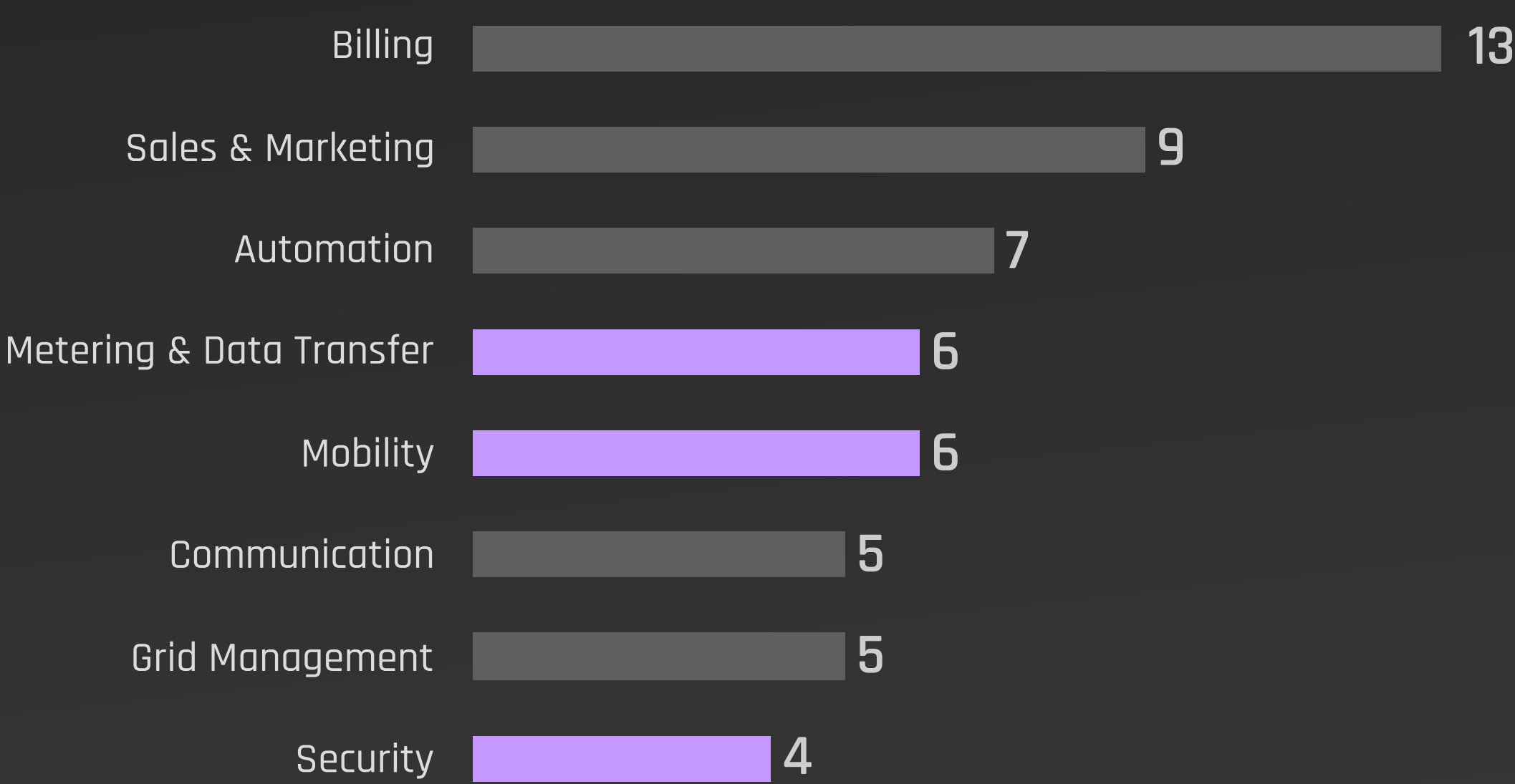
Disruptive platforms (total = 52)



Additional Use Cases

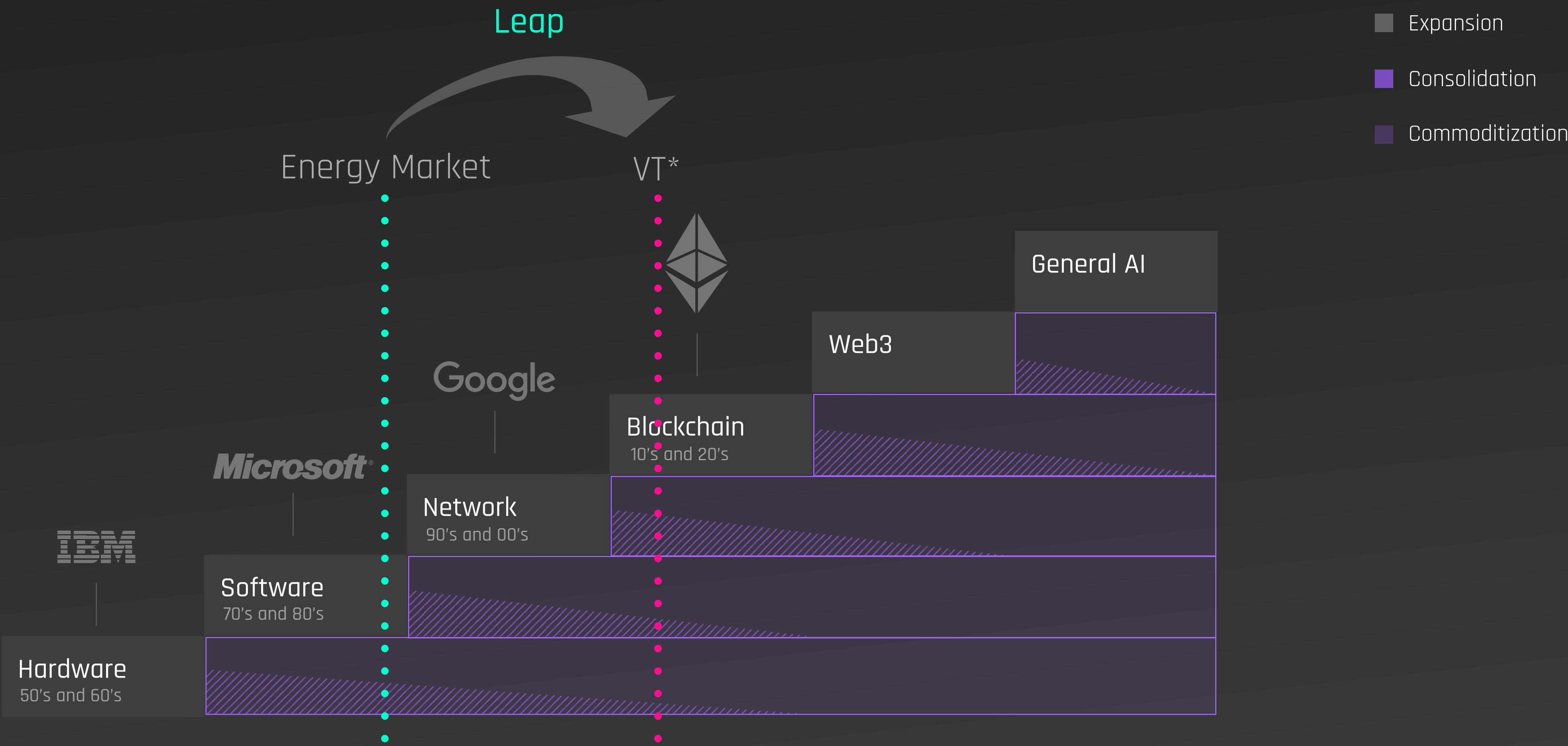
RMI: 27 GSy: 30 PWC: 20 ■ Game changer to potential game changer

Process improvement (total = 55)



Business model disruption in the energy sector

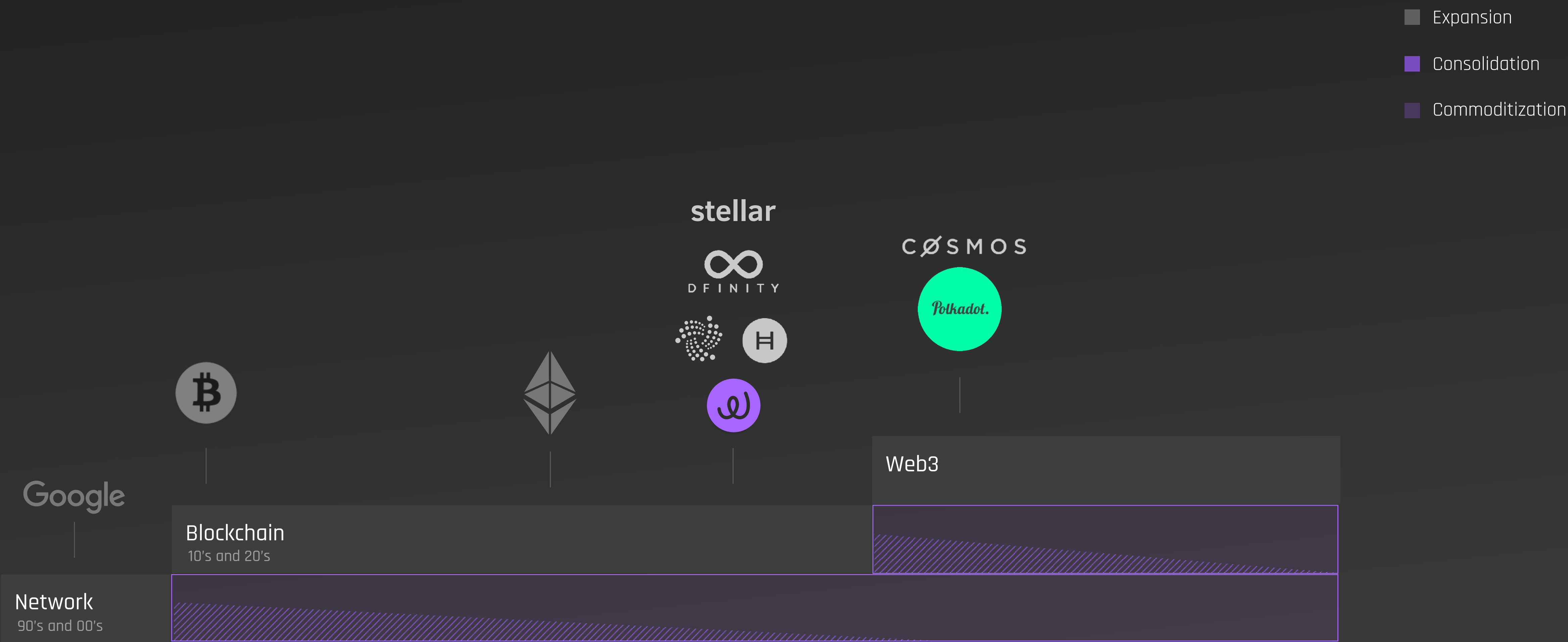
Legacy IT network business models could transform into “value technologies” by commoditising networks



* Value Technologies

Business model disruption in the blockchain sector




Blockchain is becoming commodity





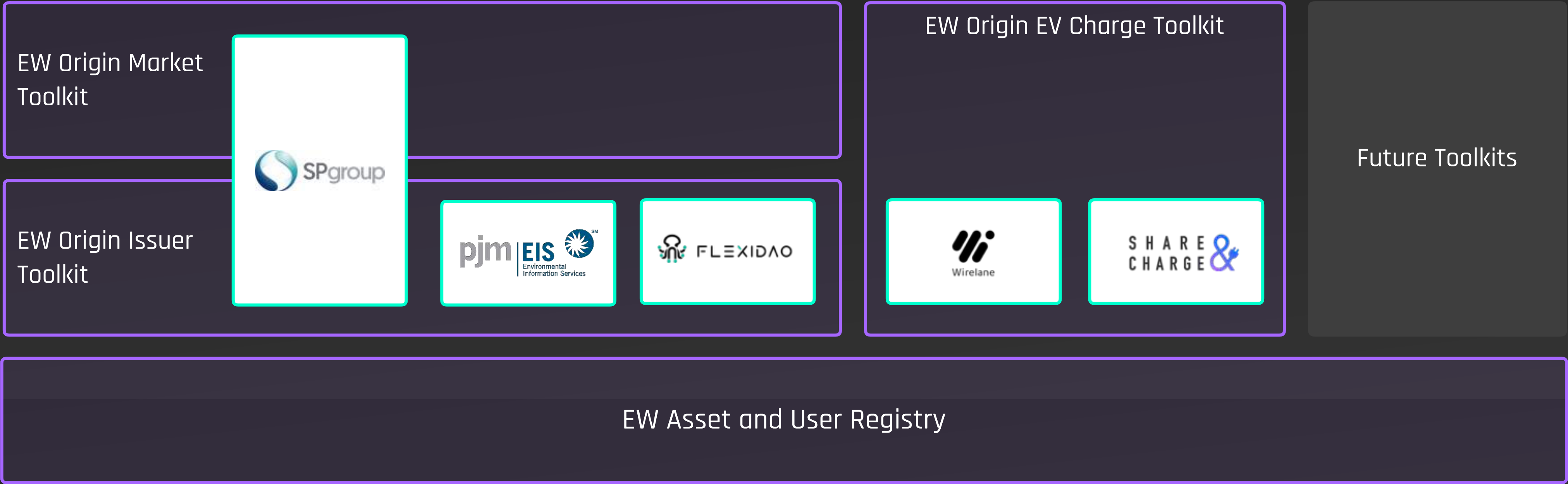
The community is experimenting with our technology

Utilities and startups across the globe are experimenting with pilots and proof of concepts. Initial projects focus on solving utility and end-user pain points in three primary opportunity areas.

Application Domain	Value unlocked with blockchain	Ecosystem Examples
Renewable Energy Certificates & Guarantees	Allow customers to accurately, transparently choose the source and/or attributes of their electricity	
Electric Vehicle and Distributed Energy Resource Management	Enable grid operators to more easily integrate, coordinate, and manage distributed energy resources	
Energy and flexibility trading	Increase market efficiency and reduce operational costs for wholesale market trading; enable trading at medium and lower voltage levels of the grid	

Energy Web Origin will drive renewable energy trading liquidity and provenance

Open Source EW Origin dApps drive adoption around the globe and shorten development cycles of EW Affiliates



EW Frameworks & Services

Implementations



Come to the EWF dApp - Store booth at the Initiate stand to see example implementations

Try the fastest bike on earth - charged with Green Certificates



100 Affiliates

Corporates



Start-Ups



Funds



Digital Virtues

1kx



100 Affiliates



We are in the midst of a research and development phase

Our objective is to create the genesis block of the EWF chain in 2019

Phase 1: Initiation

Jan 2017–April 2018

- 12 founding Affiliates recruited from energy sector
- \$2.5 M raised
- Most promising use cases identified to inform design of chain requirements
- Technology partnerships formalized, alpha version of test network deployed

Phase 2: Development

April 2018–April 2019

- 100 Affiliates recruited ranging from energy sector majors to startup blockchain & energy developers
- Multiple Affiliate projects supported across ecosystem
- Beta version of testnet released
- On-chain governance framework deployment and testing
- Additional Affiliate recruiting

Phase 3: Decentralization

2019 +

- Create genesis block of EWF blockchain (planned for Q2 2019)
- Deploy on-chain governance framework
- Continue ecosystem growth
- Engage regulators
- Ongoing research, development, and network monitoring in support of network adoption and evolution
- Initial token generation event (TBD)



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