



RED



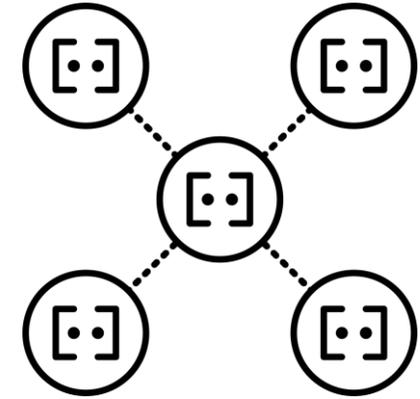
Risks and Benefits of Blockchain-based Energy Retail Technologies

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Why Blockchain?



- Be a part of the blockchain revolution - the recent *European Blockchain Partnership*, backed by the European Commission, has shown the maturity and importance of blockchain as a transformative technology in business, day-to-day life, and on the European stage
- Blockchain breaks down barriers and lowers operating costs leading to more efficiency through the use of smart contracts
- Blockchain unlocks the power of smart contracts and trustless networks, leading to the automated and instant resolution of pre-determined, customizable contracts
- Blockchain provides a permanent, immutable, and decentralized ledger, leading to transparency, security, and accountability



Transaction Speed, Scalability, and Related Costs

faster services for blockchain-based energy consumers, an ability to scale up to millions of clients, while also reducing the computational upkeep, and therefore cost, associated with cryptographic validation.

Energy consumption of Blockchain Transactions

blockchain requires cryptographic proof for validation - this is called mining. This can be very energy consuming depending on different technological factors.

Quality Control and Stress-Testing

mass adoption hinges on mass awareness, and currently blockchain solutions in energy and a myriad of other fields are still mostly unknown to energy citizens.

Application Integration

blockchains can only reach their full potential once able to easily accept external data from pre-existing programs.



Benefits of Blockchain-based Energy Retail Technologies



Freedom of choice

each consumer

selects their desired green energy producer from all over the world



Microgrids and Local Energy Self-

Sufficiency

by interlinking prosumers from a local area, typically a neighbourhood but sometimes larger, an energy grid can become independent of outside energy sources and even export energy to the surrounding areas.

Streamlining of Costs

no longer do multiple third parties need to be involved in every energy transaction.

microgrids reduce energy loss that would normally occur through long-distance transmission - depending on the distances involved, energy gains of over 7% could be achieved simply by bringing consumer and producer closer together on the same grid.

blockchain technology goes hand in hand with the bloom of renewable technologies

Peer to Peer Energy Systems and Tokenizing Energy

fully decentralized energy transfer platform, that allows users to send and receive energy worldwide - based on proprietary virtual balancing systems, by using A.I., Big Data, and IoT technologies.





Transparency and Immutable Ledger

as consensus builds on a blockchain it is written in a ledger that cannot be tampered with, without the accord of a majority on the system, therefore leading to what has been termed an 'immutable ledger'.

energy customers can, through specialised smart-meters, see, for example, their energy consumption, while also being able to easily access past records.

the use for the availability of a highly accurate source of energy information can only be a boon for both the industry at large as well as energy citizens, making it easier to make informed choices regarding their energy, for example, switching to a more beneficial energy supplier

Restart Energy intends to not only provide transaction transparency on our RED Platform, but also energy provenance transparency, enabling the ecosystem to accurately recognize and attribute the consumption of green energy, thus creating a new class of green energy tokens.