

# **Blockchain in Energy Market by Component (Platform, Services), Type (Private, Public), Application (Peer-To-Peer Transaction, Grid Transactions, Energy Financing, Electric Vehicle, Sustainability Attribution, and Others), End User (Power, Oil and Gas), and Region 2023-2028**

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## **Abstracts**

The global blockchain in energy market size reached US\$ 897.5 Million in 2022. Looking forward, IMARC Group expects the market to reach US\$ 8,837.0 Million by 2028, exhibiting a growth rate (CAGR) of 41.70% during 2023-2028.

Blockchain in energy refers to a technology that enables energy distribution and facilitates transactions between generators and consumers. It includes distributed, replicated, and shared ledgers that securely store digital transactions and assets without using a central authority. Blockchain in energy is widely used for billing, automation, sharing resources, trading, smart contracts, and digital identity. It is also used to manage grids, government risk and compliance, supply chain, and energy certificates. Blockchain in energy improves visibility, increases operating efficiencies, and streamlines regulatory reporting. It also offers environmental sustainability, reduces costs, improves trust, increases transparency, and provides enhanced control and security.

### **Blockchain in Energy Market Trends:**

The rising adoption of smart grids for energy distribution is one of the primary factors driving the market growth. Blockchain is widely used in smart grids to improve functionality, prevent failure, protect privacy, and manage transactions through smart contracts due to its decentralization, transparency, fault tolerance, and strong security.

In addition, increasing demand for blockchain technology due to the rising installation of smart meters to manage data, offer traceability, enable automated billing, and prevent unauthorized access is acting as another growth-inducing factor. Furthermore, the rising adoption of renewable energy sources is facilitating the employment of blockchain to manage distribution and provide real-time validation of the energy source through certificates, which, in turn, is impelling the market growth. Apart from this, the widespread utilization of blockchain to enable peer-to-peer energy trading, allowing users to buy and sell power directly amongst each other through a secure ledger, is positively influencing the market growth. Moreover, the increasing adoption of blockchain in the oil and gas industry to provide privacy, reduce settlement delays, and protect trade secrets is propelling the market growth. Other factors, including the rising adoption of distributed energy systems, implementation of various government initiatives promoting electricity saving, and increasing adoption of blockchain for electric vehicle (EV) charging and energy sharing, are anticipated to drive market growth.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global blockchain in energy market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on component, type, application and end user.

#### Breakup by Component:

- Platform
- Services

#### Breakup by Type:

- Private
- Public

#### Breakup by Application:

- Peer-To-Peer Transaction
- Grid Transactions
- Energy Financing
- Electric Vehicle
- Sustainability Attribution
- Others

### Breakup by End User:

Power  
Oil and Gas

### Breakup by Region:

North America  
United States  
Canada  
Asia-Pacific  
China  
Japan  
India  
South Korea  
Australia  
Indonesia  
Others  
Europe  
Germany  
France  
United Kingdom  
Italy  
Spain  
Russia  
Others  
Latin America  
Brazil  
Mexico  
Others  
Middle East and Africa

### Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being ConsenSys, Energy Web, Greeneum, International Business Machines Corporation, Ondiflo and Power Ledger Pty Ltd. Kindly, note that this only represents a partial list of companies, and the complete list has been provided in the report.

### Key Questions Answered in This Report:

How has the global blockchain in energy market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global blockchain in energy market?

What are the key regional markets?

What is the breakup of the market based on the component?

What is the breakup of the market based on the type?

What is the breakup of the market based on the application?

What is the breakup of the market based on the end user?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global blockchain in energy market and who are the key players?

What is the degree of competition in the industry?

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