

Smart Grid Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 – 2034

<https://marketpublishers.com/r/S10C0E92ED8CEN.html>

Date: January 2025

Pages: 120

Price: US\$ 4,850.00 (Single User License)

ID: S10C0E92ED8CEN

Abstracts

The Global Smart Grid Market valued at USD 66.1 billion in 2024, is projected to register a robust CAGR of 10.6% between 2025 and 2034., driven by the increasing demand for electricity, rapid urbanization, and the urgent need for modern energy infrastructure. As the world transitions toward renewable energy sources, smart grid technologies are becoming essential to ensure efficient energy distribution, minimize transmission losses, and enhance grid reliability. Governments and utility providers worldwide are making substantial investments in modernizing power grids, implementing automation, and integrating digital communication tools to optimize energy flow. With the rising adoption of electric vehicles and smart home solutions, the demand for real-time monitoring and intelligent grid management is at an all-time high. As climate change concerns and regulatory mandates push the industry toward sustainable energy solutions, smart grid innovations are proving to be a critical enabler of a resilient and future-ready energy ecosystem. The integration of artificial intelligence, IoT, and machine learning is further revolutionizing the market, allowing for predictive maintenance, demand forecasting, and enhanced grid security. Utility companies are leveraging these advancements to improve operational efficiency and reduce costs, while consumers benefit from greater energy transparency and cost-effective power consumption.

The market has seen steady expansion over the years, with its value increasing from USD 55.2 billion in 2022 to USD 60.2 billion in 2023 and USD 66.1 billion in 2024. The industry is categorized based on technology into consumer interface, distribution and network automation, smart transmission and distribution equipment, advanced metering infrastructure, and communication and wireless infrastructure. Among these, distribution and network automation technologies are expected to surpass USD 50 billion by 2034, as utilities focus on implementing automated controls and real-time monitoring to

strengthen grid resilience and optimize energy distribution.

Deployment and integration services held a dominant position in 2024, accounting for over 44% of the market share, with expectations for sustained growth. The increasing adoption of sophisticated IT systems and advanced smart technologies is driving the demand for seamless integration and large-scale implementation of intelligent grid solutions. The rising penetration of electric vehicle charging stations is also playing a crucial role in accelerating the adoption of smart grid technology. Energy providers are actively investing in advanced systems to efficiently manage power distribution and balance electricity supply with fluctuating demand.

North America smart grid market accounted for 25% of the global share in 2024, with strong growth projections through 2034. The U.S. market alone was valued at USD 11.8 billion in 2022, growing to USD 12.7 billion in 2023 and USD 13.7 billion in 2024. The modernization of aging energy infrastructure, coupled with increasing regulatory support for smart energy solutions, is fueling this growth. Meanwhile, the Asia Pacific region is on track to generate USD 75 billion by 2034, driven by rising electricity consumption, rapid urban expansion, and government-led initiatives to upgrade grid technology. As investments in advanced energy management solutions continue to rise, the smart grid market is set to witness substantial expansion across key global regions.

Contents

CHAPTER 1 METHODOLOGY & SCOPE

- 1.1 Market definitions
- 1.2 Base estimates & calculations
- 1.3 Forecast calculation
- 1.4 Data sources
 - 1.4.1 Primary
 - 1.4.2 Secondary
 - 1.4.2.1 Paid
 - 1.4.2.2 Public

CHAPTER 2 EXECUTIVE SUMMARY

- 2.1 Industry synopsis, 2021 - 2034

CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem analysis
- 3.2 Regulatory landscape
- 3.3 Industry impact forces
 - 3.3.1 Growth drivers
 - 3.3.2 Industry pitfalls & challenges
- 3.4 Growth potential analysis
- 3.5 Porter's analysis
 - 3.5.1 Bargaining power of suppliers
 - 3.5.2 Bargaining power of buyers
 - 3.5.3 Threat of new entrants
 - 3.5.4 Threat of substitutes
- 3.6 PESTEL analysis

CHAPTER 4 COMPETITIVE LANDSCAPE, 2024

- 4.1 Strategic dashboard
- 4.2 Innovation & sustainability landscape

CHAPTER 5 MARKET SIZE AND FORECAST, BY TECHNOLOGY, 2021 – 2034 (USD MILLION)

- 5.1 Key trends
- 5.2 Smart T&D equipment
- 5.3 Distribution & network automation
- 5.4 Advanced metering infrastructure
- 5.5 Consumer interface
- 5.6 Communication & wireless infrastructure

CHAPTER 6 MARKET SIZE AND FORECAST, BY SERVICE, 2021 – 2034 (USD MILLION)

- 6.1 Key trends
- 6.2 Consulting
- 6.3 Deployment & integration
- 6.4 Support & maintenance

CHAPTER 7 MARKET SIZE AND FORECAST, BY DEPLOYMENT, 2021 – 2034 (USD MILLION)

- 7.1 Key trends
- 7.2 Generation
- 7.3 Transmission
- 7.4 Distribution
- 7.5 End use

CHAPTER 8 MARKET SIZE AND FORECAST, BY REGION, 2021 – 2034 (USD MILLION)

- 8.1 Key trends
- 8.2 North America
 - 8.2.1 U.S.
 - 8.2.2 Canada
 - 8.2.3 Mexico
- 8.3 Europe
 - 8.3.1 UK
 - 8.3.2 France
 - 8.3.3 Germany
 - 8.3.4 Spain
 - 8.3.5 Italy

8.4 Asia Pacific

8.4.1 China

8.4.2 Australia

8.4.3 Japan

8.4.4 South Korea

8.4.5 India

8.5 Middle East & Africa

8.5.1 Saudi Arabia

8.5.2 UAE

8.5.3 South Africa

8.6 Latin America

8.6.1 Brazil

8.6.2 Chile

CHAPTER 9 COMPANY PROFILES

9.1 ABB

9.2 Belden

9.3 Cisco Systems

9.4 Fujitsu

9.5 General Electric

9.6 Honeywell International

9.7 Hubbell

9.8 IBM

9.9 Itron

9.10 Landis+Gyr

9.11 Oracle

9.12 Schneider Electric

9.13 Siemens

9.14 Wipro

I would like to order

Product name: Smart Grid Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 – 2034

Product link: <https://marketpublishers.com/r/S10C0E92ED8CEN.html>

Price: US\$ 4,850.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/S10C0E92ED8CEN.html>