

## **Global Smart Grid Market Report and Forecast 2024-2032**

Market Report | 2024-05-01 | 150 pages | EMR Inc.

### **AVAILABLE LICENSES:**

- Single User License \$2999.00
- Five User License \$3999.00
- Corporate License \$4999.00

### **Report description:**

Global Smart Grid Market Report and Forecast 2024-2032

Market Outlook

According to the report by Expert Market Research (EMR), the global smart grid market size reached a value of USD 6,202.6 million in 2023. Aided by the integration of renewable energy sources and government incentives, the market is projected to further grow at a CAGR of 1.6% between 2024 and 2032 to reach a value of USD 7,183.29 million by 2032.

A smart grid incorporates digital technology that allows for two-way communication between the utility and its customers, and the sensing along the transmission lines. It is crucial for integrating renewable energy systems, enhancing grid reliability, and optimising electricity consumption patterns. The system includes various components such as smart meters, smart appliances, renewable energy resources, and energy-efficient resources.

The escalating integration of renewable energy sources like wind and solar into the grid is a significant driver for smart grid market growth. Smart grids facilitate the management of variable power outputs from renewable sources with enhanced grid stability, which is essential for reducing carbon footprints and promoting sustainable energy practices.

One of the significant trends reshaping the market is the move towards decentralised energy systems. These systems, which consist of smaller power generation and storage units located close to the point of use, reduce the strain on transmission and distribution networks and enhance energy efficiency. As per the smart grid market analysis, decentralised grids are particularly adaptive in integrating renewable energy sources like solar panels on residential and commercial buildings, contributing to a more resilient energy system.

Demand response programs are gaining traction as they play a critical role in shifting energy consumption from peak to off-peak periods. Smart grids enable these programs by allowing real-time communication between utility providers and consumers, enabling the latter to reduce or shift their electricity usage during peak periods in response to time-based rates or financial incentives, which propels the smart grid market expansion.

Blockchain technology is emerging as a transformative force in the smart grid sector, facilitating secure and transparent energy transactions. It enables peer-to-peer energy trading among consumers, allowing households with renewable energy sources to sell excess electricity directly to other consumers without the need for traditional intermediaries. As per the smart grid market outlook, this technology supports the decentralisation trend and could revolutionise how energy is bought and sold within the

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

smart grid.

Governments worldwide are implementing regulations and providing incentives to promote the adoption of smart grid technologies. These initiatives, aimed at modernising the aging power infrastructure and making energy systems more resilient and efficient, are potent catalysts for market growth. The incorporation of IoT and AI in smart grid market is transforming how energy utilities operate and manage grid systems. These technologies enhance predictive maintenance, demand response management, and real-time energy analytics, driving the market forward.

Smart grids are integral to the development of smart cities, providing the necessary infrastructure to support various smart technologies that require reliable and efficient energy distribution. As urban areas continue to grow and become more technologically integrated, the deployment of smart grids will be crucial in managing everything from traffic systems to public services, all dependent on stable and efficient energy use.

North America holds a significant smart grid market share, primarily due to early adoption and significant investments in grid modernisation. The U.S. and Canada are focusing on upgrading their grid infrastructure to incorporate more renewable energy sources and improve energy efficiency. Europe follows closely with substantial growth in the smart grid market, driven by stringent regulatory policies aimed at enhancing energy efficiency and reducing reliance on fossil fuels. Countries like Germany, the UK, and France are at the forefront, leveraging smart grid technologies to meet their energy and environmental goals.

#### Market Segmentation □

The market can be divided based on component, technology, solution, application, end-user, and region.

#### Market Breakup by Component

- Solution
- Services

#### Market Breakup by Technology

- Wired
- Wireless

#### Market Breakup by Solution

- Advance Metering Infrastructure
- Smart Grid Distribution Management
- Grid Asset Management
- Smart Grid Network Management
- Substation Automation
- Smart Grid Security
- Others

#### Market Breakup by Application

- Generation
- Transmission
- Distribution
- Consumption

#### Market Breakup by End-User

- Residential
- Commercial
- Industrial

#### Market Breakup by Region

- North America
- Europe
- Asia Pacific
- Latin America
- Middle East and Africa

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

## Competitive Landscape

The EMR report looks into the market shares, plant turnarounds, capacities, investments, and mergers and acquisitions, among other major developments, of the leading companies operating in the global smart grid market. Some of the major players explored in the report by Expert Market Research are as follows:

- Siemens AG
- ABB Ltd.
- Schneider Electric SE
- Honeywell International Inc.
- General Electric Company
- Cisco Systems, Inc.
- Eaton Corporation plc
- ORACLE Corporation
- Globema sp. z o.o.
- Trilliant Holdings Inc.
- Others

## About Us

Acquire unparalleled access to critical industry insights with our comprehensive market research reports, meticulously prepared by a team of seasoned experts. These reports are designed to equip decision-makers with an in-depth understanding of prevailing market trends, competitive landscapes, and growth opportunities.

Our high-quality, data-driven analysis provides the essential framework for organisations seeking to make informed and strategic decisions in an increasingly complex and rapidly evolving business environment. By investing in our market research reports, you can ensure your organisation remains agile, proactive, and poised for success in today's competitive market.

Don't miss the opportunity to elevate your business intelligence and strengthen your strategic planning. Secure your organisation's future success by acquiring one of our Expert Market Research reports today.

\*We at Expert Market Research always strive to provide you with the latest information. The numbers in the article are only indicative and may be different from the actual report.

## Table of Contents:

- 1 Preface
- 2 Report Coverage - Key Segmentation and Scope
- 3 Report Description
  - 3.1 Market Definition and Outlook
  - 3.2 Properties and Applications
  - 3.3 Market Analysis
  - 3.4 Key Players
- 4 Key Assumptions
- 5 Executive Summary
  - 5.1 Overview
  - 5.2 Key Drivers
  - 5.3 Key Developments
  - 5.4 Competitive Structure
  - 5.5 Key Industrial Trends
- 6 Market Snapshot
  - 6.1 Global
  - 6.2 Regional
- 7 Opportunities and Challenges in the Market

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

- 8 Global Smart Grid Market Analysis
  - 8.1 Key Industry Highlights
  - 8.2 Global Smart Grid Historical Market (2018-2023)
  - 8.3 Global Smart Grid Market Forecast (2024-2032)
  - 8.4 Global Smart Grid Market by Component
    - 8.4.1 Solution
      - 8.4.1.1 Historical Trend (2018-2023)
      - 8.4.1.2 Forecast Trend (2024-2032)
    - 8.4.2 Services
      - 8.4.2.1 Historical Trend (2018-2023)
      - 8.4.2.2 Forecast Trend (2024-2032)
  - 8.5 Global Smart Grid Market by Technology
    - 8.5.1 Wired
      - 8.5.1.1 Historical Trend (2018-2023)
      - 8.5.1.2 Forecast Trend (2024-2032)
    - 8.5.2 Wireless
      - 8.5.2.1 Historical Trend (2018-2023)
      - 8.5.2.2 Forecast Trend (2024-2032)
  - 8.6 Global Smart Grid Market by Solution
    - 8.6.1 Advance Metering Infrastructure
      - 8.6.1.1 Historical Trend (2018-2023)
      - 8.6.1.2 Forecast Trend (2024-2032)
    - 8.6.2 Smart Grid Distribution Management
      - 8.6.2.1 Historical Trend (2018-2023)
      - 8.6.2.2 Forecast Trend (2024-2032)
    - 8.6.3 Grid Asset Management
      - 8.6.3.1 Historical Trend (2018-2023)
      - 8.6.3.2 Forecast Trend (2024-2032)
    - 8.6.4 Smart Grid Network Management
      - 8.6.4.1 Historical Trend (2018-2023)
      - 8.6.4.2 Forecast Trend (2024-2032)
    - 8.6.5 Substation Automation
      - 8.6.5.1 Historical Trend (2018-2023)
      - 8.6.5.2 Forecast Trend (2024-2032)
    - 8.6.6 Smart Grid Security
      - 8.6.6.1 Historical Trend (2018-2023)
      - 8.6.6.2 Forecast Trend (2024-2032)
    - 8.6.7 Others
  - 8.7 Global Smart Grid Market by Application
    - 8.7.1 Generation
      - 8.7.1.1 Historical Trend (2018-2023)
      - 8.7.1.2 Forecast Trend (2024-2032)
    - 8.7.2 Transmission
      - 8.7.2.1 Historical Trend (2018-2023)
      - 8.7.2.2 Forecast Trend (2024-2032)
    - 8.7.3 Distribution
      - 8.7.3.1 Historical Trend (2018-2023)

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

- 8.7.3.2 Forecast Trend (2024-2032)
  - 8.7.4 Consumption
    - 8.7.4.1 Historical Trend (2018-2023)
    - 8.7.4.2 Forecast Trend (2024-2032)
- 8.8 Global Smart Grid Market by End-User
  - 8.8.1 Residential
    - 8.8.1.1 Historical Trend (2018-2023)
    - 8.8.1.2 Forecast Trend (2024-2032)
  - 8.8.2 Commercial
    - 8.8.2.1 Historical Trend (2018-2023)
    - 8.8.2.2 Forecast Trend (2024-2032)
  - 8.8.3 Industrial
    - 8.8.3.1 Historical Trend (2018-2023)
    - 8.8.3.2 Forecast Trend (2024-2032)
- 8.9 Global Smart Grid Market by Region
  - 8.9.1 North America
    - 8.9.1.1 Historical Trend (2018-2023)
    - 8.9.1.2 Forecast Trend (2024-2032)
  - 8.9.2 Europe
    - 8.9.2.1 Historical Trend (2018-2023)
    - 8.9.2.2 Forecast Trend (2024-2032)
  - 8.9.3 Asia Pacific
    - 8.9.3.1 Historical Trend (2018-2023)
    - 8.9.3.2 Forecast Trend (2024-2032)
  - 8.9.4 Latin America
    - 8.9.4.1 Historical Trend (2018-2023)
    - 8.9.4.2 Forecast Trend (2024-2032)
  - 8.9.5 Middle East and Africa
    - 8.9.5.1 Historical Trend (2018-2023)
    - 8.9.5.2 Forecast Trend (2024-2032)
- 9 North America Smart Grid Market Analysis
  - 9.1 United States of America
    - 9.1.1 Historical Trend (2018-2023)
    - 9.1.2 Forecast Trend (2024-2032)
  - 9.2 Canada
    - 9.2.1 Historical Trend (2018-2023)
    - 9.2.2 Forecast Trend (2024-2032)
- 10 Europe Smart Grid Market Analysis
  - 10.1 United Kingdom
    - 10.1.1 Historical Trend (2018-2023)
    - 10.1.2 Forecast Trend (2024-2032)
  - 10.2 Germany
    - 10.2.1 Historical Trend (2018-2023)
    - 10.2.2 Forecast Trend (2024-2032)
  - 10.3 France
    - 10.3.1 Historical Trend (2018-2023)
    - 10.3.2 Forecast Trend (2024-2032)

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

- 10.4 Italy
  - 10.4.1 Historical Trend (2018-2023)
  - 10.4.2 Forecast Trend (2024-2032)
- 10.5 Others
- 11 Asia Pacific Smart Grid Market Analysis
  - 11.1 China
    - 11.1.1 Historical Trend (2018-2023)
    - 11.1.2 Forecast Trend (2024-2032)
  - 11.2 Japan
    - 11.2.1 Historical Trend (2018-2023)
    - 11.2.2 Forecast Trend (2024-2032)
  - 11.3 India
    - 11.3.1 Historical Trend (2018-2023)
    - 11.3.2 Forecast Trend (2024-2032)
  - 11.4 ASEAN
    - 11.4.1 Historical Trend (2018-2023)
    - 11.4.2 Forecast Trend (2024-2032)
  - 11.5 Australia
    - 11.5.1 Historical Trend (2018-2023)
    - 11.5.2 Forecast Trend (2024-2032)
  - 11.6 Others
- 12 Latin America Smart Grid Market Analysis
  - 12.1 Brazil
    - 12.1.1 Historical Trend (2018-2023)
    - 12.1.2 Forecast Trend (2024-2032)
  - 12.2 Argentina
    - 12.2.1 Historical Trend (2018-2023)
    - 12.2.2 Forecast Trend (2024-2032)
  - 12.3 Mexico
    - 12.3.1 Historical Trend (2018-2023)
    - 12.3.2 Forecast Trend (2024-2032)
  - 12.4 Others
- 13 Middle East and Africa Smart Grid Market Analysis
  - 13.1 Saudi Arabia
    - 13.1.1 Historical Trend (2018-2023)
    - 13.1.2 Forecast Trend (2024-2032)
  - 13.2 United Arab Emirates
    - 13.2.1 Historical Trend (2018-2023)
    - 13.2.2 Forecast Trend (2024-2032)
  - 13.3 Nigeria
    - 13.3.1 Historical Trend (2018-2023)
    - 13.3.2 Forecast Trend (2024-2032)
  - 13.4 South Africa
    - 13.4.1 Historical Trend (2018-2023)
    - 13.4.2 Forecast Trend (2024-2032)
  - 13.5 Others
- 14 Market Dynamics

- 14.1 SWOT Analysis
  - 14.1.1 Strengths
  - 14.1.2 Weaknesses
  - 14.1.3 Opportunities
  - 14.1.4 Threats
- 14.2 Porter's Five Forces Analysis
  - 14.2.1 Supplier's Power
  - 14.2.2 Buyer's Power
  - 14.2.3 Threat of New Entrants
  - 14.2.4 Degree of Rivalry
  - 14.2.5 Threat of Substitutes
- 14.3 Key Indicators for Demand
- 14.4 Key Indicators for Price
- 15 Competitive Landscape
  - 15.1 Market Structure
  - 15.2 Company Profiles
    - 15.2.1 Siemens AG
      - 15.2.1.1 Company Overview
      - 15.2.1.2 Product Portfolio
      - 15.2.1.3 Demographic Reach and Achievements
      - 15.2.1.4 Certifications
    - 15.2.2 ABB Ltd.
      - 15.2.2.1 Company Overview
      - 15.2.2.2 Product Portfolio
      - 15.2.2.3 Demographic Reach and Achievements
      - 15.2.2.4 Certifications
    - 15.2.3 Schneider Electric SE
      - 15.2.3.1 Company Overview
      - 15.2.3.2 Product Portfolio
      - 15.2.3.3 Demographic Reach and Achievements
      - 15.2.3.4 Certifications
    - 15.2.4 Honeywell International Inc.
      - 15.2.4.1 Company Overview
      - 15.2.4.2 Product Portfolio
      - 15.2.4.3 Demographic Reach and Achievements
      - 15.2.4.4 Certifications
    - 15.2.5 General Electric Company
      - 15.2.5.1 Company Overview
      - 15.2.5.2 Product Portfolio
      - 15.2.5.3 Demographic Reach and Achievements
      - 15.2.5.4 Certifications
    - 15.2.6 Cisco Systems, Inc.
      - 15.2.6.1 Company Overview
      - 15.2.6.2 Product Portfolio
      - 15.2.6.3 Demographic Reach and Achievements
      - 15.2.6.4 Certifications
    - 15.2.7 Eaton Corporation plc

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

- 15.2.7.1 Company Overview
- 15.2.7.2 Product Portfolio
- 15.2.7.3 Demographic Reach and Achievements
- 15.2.7.4 Certifications
- 15.2.8 ORACLE Corporation
  - 15.2.8.1 Company Overview
  - 15.2.8.2 Product Portfolio
  - 15.2.8.3 Demographic Reach and Achievements
  - 15.2.8.4 Certifications
- 15.2.9 Globema sp. z o.o.
  - 15.2.9.1 Company Overview
  - 15.2.9.2 Product Portfolio
  - 15.2.9.3 Demographic Reach and Achievements
  - 15.2.9.4 Certifications
- 15.2.10 Trilliant Holdings Inc.
  - 15.2.10.1 Company Overview
  - 15.2.10.2 Product Portfolio
  - 15.2.10.3 Demographic Reach and Achievements
  - 15.2.10.4 Certifications
- 15.2.11 Others
- 16 Key Trends and Developments in the Market

#### List of Key Figures and Tables

1. Global Smart Grid Market: Key Industry Highlights, 2018 and 2032
2. Global Smart Grid Historical Market: Breakup by Component (USD Billion), 2018-2023
3. Global Smart Grid Market Forecast: Breakup by Component (USD Billion), 2024-2032
4. Global Smart Grid Historical Market: Breakup by Technology (USD Billion), 2018-2023
5. Global Smart Grid Market Forecast: Breakup by Technology (USD Billion), 2024-2032
6. Global Smart Grid Historical Market: Breakup by Solution (USD Billion), 2018-2023
7. Global Smart Grid Market Forecast: Breakup by Solution (USD Billion), 2024-2032
8. Global Smart Grid Historical Market: Breakup by Application (USD Billion), 2018-2023
9. Global Smart Grid Market Forecast: Breakup by Application (USD Billion), 2024-2032
10. Global Smart Grid Historical Market: Breakup by End-User (USD Billion), 2018-2023
11. Global Smart Grid Market Forecast: Breakup by End-User (USD Billion), 2024-2032
12. Global Smart Grid Historical Market: Breakup by Region (USD Billion), 2018-2023
13. Global Smart Grid Market Forecast: Breakup by Region (USD Billion), 2024-2032
14. North America Smart Grid Historical Market: Breakup by Country (USD Billion), 2018-2023
15. North America Smart Grid Market Forecast: Breakup by Country (USD Billion), 2024-2032
16. Europe Smart Grid Historical Market: Breakup by Country (USD Billion), 2018-2023
17. Europe Smart Grid Market Forecast: Breakup by Country (USD Billion), 2024-2032
18. Asia Pacific Smart Grid Historical Market: Breakup by Country (USD Billion), 2018-2023
19. Asia Pacific Smart Grid Market Forecast: Breakup by Country (USD Billion), 2024-2032
20. Latin America Smart Grid Historical Market: Breakup by Country (USD Billion), 2018-2023
21. Latin America Smart Grid Market Forecast: Breakup by Country (USD Billion), 2024-2032
22. Middle East and Africa Smart Grid Historical Market: Breakup by Country (USD Billion), 2018-2023
23. Middle East and Africa Smart Grid Market Forecast: Breakup by Country (USD Billion), 2024-2032
24. Global Smart Grid Market Structure

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)



## Global Smart Grid Market Report and Forecast 2024-2032

Market Report | 2024-05-01 | 150 pages | EMR Inc.

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

### ORDER FORM:

| Select license | License             | Price     |
|----------------|---------------------|-----------|
|                | Single User License | \$2999.00 |
|                | Five User License   | \$3999.00 |
|                | Corporate License   | \$4999.00 |
|                |                     | VAT       |
|                |                     | Total     |

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

☐ \*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

|               |                      |                               |   |
|---------------|----------------------|-------------------------------|---|
| Email*        | <input type="text"/> | Phone*                        | <input type="text"/>                    |
| First Name*   | <input type="text"/> | Last Name*                    | <input type="text"/>                    |
| Job title*    | <input type="text"/> |                               |   |
| Company Name* | <input type="text"/> | EU Vat / Tax ID / NIP number* | <input type="text"/>                    |
| Address*      | <input type="text"/> | City*                         | <input type="text"/>                    |
| Zip Code*     | <input type="text"/> | Country*                      | <input type="text"/>                    |
|               |                      | Date                          | <input type="text" value="2025-05-09"/> |
|               |                      | Signature                     | <input type="text"/>                    |

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com