

Global Artificial Intelligence in Energy Market Size Study & Forecast, by Type (Solutions, Services), Application and Regional Forecasts 2025-2035

<https://marketpublishers.com/r/GEDA4BBACF9FEN.html>

Date: June 2025

Pages: 285

Price: US\$ 3,218.00 (Single User License)

ID: GEDA4BBACF9FEN

Abstracts

The Global Artificial Intelligence in Energy Market is estimated to be valued at around USD 11.3 billion in 2024 and is projected to expand at a robust CAGR of 30.20% over the forecast period 2025 to 2035. As the world accelerates its transition to smart grids and low-carbon economies, AI is steadily transforming how energy is produced, distributed, and consumed. From predictive analytics to intelligent automation, artificial intelligence has entrenched itself as a catalyst for operational efficiency and cost reduction across the global energy value chain. The ability of AI to synthesize vast datasets, identify patterns, and act on real-time anomalies allows stakeholders to not only forecast demand with higher accuracy but also pre-empt equipment failures and optimize energy sourcing strategies.

Increasing adoption of renewable energy sources, volatility in energy markets, and the imperative to meet sustainability targets are amplifying the role of AI in modernizing the energy landscape. AI-driven robotics and automation are being deployed to inspect offshore wind farms, monitor solar panel output, and manage the logistics of distributed energy resources. Moreover, energy companies are leveraging AI to drive smarter infrastructure planning, enhance grid resiliency, and mitigate cybersecurity risks. Applications like demand forecasting, energy storage management, and safety monitoring are becoming more prevalent as digital twins and machine learning algorithms help utilities simulate scenarios and streamline responses. Nevertheless, implementation costs, data privacy concerns, and lack of standardized protocols remain key challenges.

From a regional standpoint, North America currently leads the AI in Energy market, owing to its aggressive technology adoption, strong funding ecosystem, and pioneering

efforts by both government and private sector stakeholders in digital energy transformation. The presence of major tech companies, utility providers, and energy start-ups further fosters innovation. Europe follows closely, supported by green energy mandates, EU digital strategies, and a mature renewable infrastructure base. Meanwhile, Asia Pacific is anticipated to witness the highest growth rate during the forecast timeline. Rapid industrialization, surging urban energy demand, and ambitious government initiatives in nations like China, India, South Korea, and Japan are accelerating the integration of AI solutions across energy grids, power plants, and distribution networks.

Major market player included in this report are:

IBM Corporation

Microsoft Corporation

General Electric

Siemens AG

Schneider Electric

ABB Ltd.

Google LLC

Oracle Corporation

SAP SE

Rockwell Automation

Amazon Web Services, Inc.

Accenture PLC

Intel Corporation

Infosys Limited

C3.ai, Inc.

Global Artificial Intelligence in Energy Market Report Scope:

Historical Data – 2023, 2024

Base Year for Estimation – 2024

Forecast period – 2025–2035

Report Coverage – Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Regional Scope – North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope – Free report customization (equivalent up to 8 analysts' working hours) with purchase. Addition or alteration to country, regional & segment scope*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values for the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within the countries involved in the study. The report also provides detailed information about crucial aspects, such as driving factors and challenges, which will define the future growth of the market. Additionally, it incorporates potential opportunities in micro-markets for stakeholders to invest, along with a detailed analysis of the competitive landscape and product offerings of key players. The detailed segments and sub-segments of the market are explained below:

By Type:

Solutions

Services

By Application:

Robotics

Renewable Energy Management

Demand Forecasting

Safety, Security & Infrastructure

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

Rest of Europe

Asia Pacific

China

India

Japan

Australia

South Korea

Rest of Asia Pacific

Latin America

Brazil

Mexico

Middle East & Africa

UAE

Saudi Arabia

South Africa

Rest of Middle East & Africa

Key Takeaways:

Market Estimates & Forecast for 10 years from 2025 to 2035.

Annualized revenues and regional level analysis for each market segment.

Detailed analysis of geographical landscape with Country level analysis of major regions.

Competitive landscape with information on major players in the market.

Analysis of key business strategies and recommendations on future market approach.

Analysis of competitive structure of the market.

Demand side and supply side analysis of the market.

Contents

CHAPTER 1. GLOBAL ARTIFICIAL INTELLIGENCE IN ENERGY MARKET REPORT SCOPE & METHODOLOGY

- 1.1. Research Objective
- 1.2. Research Methodology
 - 1.2.1. Forecast Model
 - 1.2.2. Desk Research
 - 1.2.3. Top-Down and Bottom-Up Approach
- 1.3. Research Attributes
- 1.4. Scope of the Study
 - 1.4.1. Market Definition
 - 1.4.2. Market Segmentation
- 1.5. Research Assumption
 - 1.5.1. Inclusion & Exclusion
 - 1.5.2. Limitations
 - 1.5.3. Years Considered for the Study

CHAPTER 2. EXECUTIVE SUMMARY

- 2.1. CEO/CXO Standpoint
- 2.2. Strategic Insights
- 2.3. ESG Analysis
- 2.4. Key Findings

CHAPTER 3. GLOBAL AI IN ENERGY MARKET FORCES ANALYSIS

- 3.1. Market Forces Shaping the AI in Energy Market (2024–2035)
- 3.2. Drivers
 - 3.2.1. Demand for Predictive Asset Maintenance
 - 3.2.2. Integration of Renewables and Grid Modernization
- 3.3. Restraints
 - 3.3.1. High Implementation Costs
 - 3.3.2. Data Privacy and Regulatory Challenges
- 3.4. Opportunities
 - 3.4.1. Expansion of Smart Grid Initiatives
 - 3.4.2. Growth in Energy Storage and Microgrid Applications

CHAPTER 4. GLOBAL AI IN ENERGY INDUSTRY ANALYSIS

- 4.1. Porter's Five Forces Model
 - 4.1.1. Bargaining Power of Buyers
 - 4.1.2. Bargaining Power of Suppliers
 - 4.1.3. Threat of New Entrants
 - 4.1.4. Threat of Substitutes
 - 4.1.5. Competitive Rivalry
- 4.2. Porter's Five Forces Forecast Model (2024–2035)
- 4.3. PESTEL Analysis
 - 4.3.1. Political
 - 4.3.2. Economic
 - 4.3.3. Social
 - 4.3.4. Technological
 - 4.3.5. Environmental
 - 4.3.6. Legal
- 4.4. Top Investment Opportunities
- 4.5. Top Winning Strategies (2025)
- 4.6. Market Share Analysis (2024–2025)
- 4.7. Global Pricing Analysis and Trends 2025
- 4.8. Analyst Recommendation & Conclusion

CHAPTER 5. GLOBAL AI IN ENERGY MARKET SIZE & FORECASTS BY TYPE 2025–2035

- 5.1. Market Overview
- 5.2. Solutions
 - 5.2.1. Top Countries Breakdown Estimates & Forecasts, 2024–2035
 - 5.2.2. Market Size Analysis by Region, 2025–2035
- 5.3. Services
 - 5.3.1. Top Countries Breakdown Estimates & Forecasts, 2024–2035
 - 5.3.2. Market Size Analysis by Region, 2025–2035

CHAPTER 6. GLOBAL AI IN ENERGY MARKET SIZE & FORECASTS BY APPLICATION 2025–2035

- 6.1. Market Overview
- 6.2. Robotics
 - 6.2.1. Top Countries Breakdown Estimates & Forecasts, 2024–2035

- 6.2.2. Market Size Analysis by Region, 2025–2035
- 6.3. Renewable Energy Management
 - 6.3.1. Top Countries Breakdown Estimates & Forecasts, 2024–2035
 - 6.3.2. Market Size Analysis by Region, 2025–2035
- 6.4. Demand Forecasting
 - 6.4.1. Top Countries Breakdown Estimates & Forecasts, 2024–2035
 - 6.4.2. Market Size Analysis by Region, 2025–2035
- 6.5. Safety, Security & Infrastructure
 - 6.5.1. Top Countries Breakdown Estimates & Forecasts, 2024–2035
 - 6.5.2. Market Size Analysis by Region, 2025–2035

CHAPTER 7. GLOBAL AI IN ENERGY MARKET SIZE & FORECASTS BY REGION 2025–2035

- 7.1. Regional Market Snapshot
- 7.2. Top Leading & Emerging Countries
- 7.3. North America AI in Energy Market
 - 7.3.1. U.S. AI in Energy Market
 - 7.3.1.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.3.1.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.3.2. Canada AI in Energy Market
 - 7.3.2.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.3.2.2. Application Breakdown Size & Forecasts, 2025–2035
- 7.4. Europe AI in Energy Market
 - 7.4.1. UK AI in Energy Market
 - 7.4.1.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.4.1.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.4.2. Germany AI in Energy Market
 - 7.4.2.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.4.2.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.4.3. France AI in Energy Market
 - 7.4.3.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.4.3.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.4.4. Spain AI in Energy Market
 - 7.4.4.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.4.4.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.4.5. Italy AI in Energy Market
 - 7.4.5.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.4.5.2. Application Breakdown Size & Forecasts, 2025–2035

- 7.4.6. Rest of Europe AI in Energy Market
 - 7.4.6.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.4.6.2. Application Breakdown Size & Forecasts, 2025–2035
- 7.5. Asia Pacific AI in Energy Market
 - 7.5.1. China AI in Energy Market
 - 7.5.1.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.5.1.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.5.2. India AI in Energy Market
 - 7.5.2.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.5.2.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.5.3. Japan AI in Energy Market
 - 7.5.3.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.5.3.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.5.4. Australia AI in Energy Market
 - 7.5.4.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.5.4.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.5.5. South Korea AI in Energy Market
 - 7.5.5.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.5.5.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.5.6. Rest of Asia Pacific AI in Energy Market
 - 7.5.6.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.5.6.2. Application Breakdown Size & Forecasts, 2025–2035
- 7.6. Latin America AI in Energy Market
 - 7.6.1. Brazil AI in Energy Market
 - 7.6.1.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.6.1.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.6.2. Mexico AI in Energy Market
 - 7.6.2.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.6.2.2. Application Breakdown Size & Forecasts, 2025–2035
- 7.7. Middle East & Africa AI in Energy Market
 - 7.7.1. UAE AI in Energy Market
 - 7.7.1.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.7.1.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.7.2. Saudi Arabia AI in Energy Market
 - 7.7.2.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.7.2.2. Application Breakdown Size & Forecasts, 2025–2035
 - 7.7.3. South Africa AI in Energy Market
 - 7.7.3.1. Type Breakdown Size & Forecasts, 2025–2035
 - 7.7.3.2. Application Breakdown Size & Forecasts, 2025–2035

CHAPTER 10. COMPETITIVE INTELLIGENCE

- 10.1. Top Market Strategies
- 10.2. IBM Corporation
 - 10.2.1. Company Overview
 - 10.2.2. Key Executives
 - 10.2.3. Company Snapshot
 - 10.2.4. Financial Performance (Subject to Data Availability)
 - 10.2.5. Product/Services Portfolio
 - 10.2.6. Recent Development
 - 10.2.7. Market Strategies
 - 10.2.8. SWOT Analysis
- 10.3. Microsoft Corporation
- 10.4. General Electric
- 10.5. Siemens AG
- 10.6. Schneider Electric
- 10.7. ABB Ltd.
- 10.8. Google LLC
- 10.9. Oracle Corporation
- 10.10. SAP SE
- 10.11. Rockwell Automation
- 10.12. Amazon Web Services, Inc.
- 10.13. Accenture PLC
- 10.14. Intel Corporation
- 10.15. Infosys Limited
- 10.16. C3.ai, Inc.

List Of Tables

LIST OF TABLES

- Table 1. Global AI in Energy Market, Report Scope
- Table 2. Global AI in Energy Market Estimates & Forecasts By Region 2024–2035
- Table 3. Global AI in Energy Market Estimates & Forecasts By Type 2024–2035
- Table 4. Global AI in Energy Market Estimates & Forecasts By Application 2024–2035
- Table 5. U.S. AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 6. Canada AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 7. UK AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 8. Germany AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 9. France AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 10. Spain AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 11. Italy AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 12. Rest of Europe AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 13. China AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 14. India AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 15. Japan AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 16. Australia AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 17. South Korea AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 18. Brazil & Mexico AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 19. UAE, Saudi Arabia & South Africa AI in Energy Market Estimates & Forecasts, 2024–2035
- Table 20. Regional AI in Energy Demand Drivers by Country, 2025–2035

List Of Figures

LIST OF FIGURES

- Fig 1. Global AI in Energy Market, Research Methodology
- Fig 2. Global AI in Energy Market, Market Estimation Techniques
- Fig 3. Global AI in Energy Market, Market Size Estimates & Forecast Methods
- Fig 4. Global AI in Energy Market, Key Trends 2025
- Fig 5. Global AI in Energy Market, Growth Prospects 2024–2035
- Fig 6. Global AI in Energy Market, Porter's Five Forces Model
- Fig 7. Global AI in Energy Market, PESTEL Analysis
- Fig 8. Global AI in Energy Market, Value Chain Analysis
- Fig 9. AI in Energy Market By Type, 2025 & 2035
- Fig 10. AI in Energy Market By Application, 2025 & 2035
- Fig 11. North America AI in Energy Market, 2025 & 2035
- Fig 12. Europe AI in Energy Market, 2025 & 2035
- Fig 13. Asia Pacific AI in Energy Market, 2025 & 2035
- Fig 14. Latin America AI in Energy Market, 2025 & 2035
- Fig 15. Middle East & Africa AI in Energy Market, 2025 & 2035
- Fig 16. AI in Energy Market, Technology Adoption Curve
- Fig 17. AI in Energy Market, Vendor Market Share Analysis (2025)
- Fig 18. AI in Energy Market, Forecast Scenario Comparison
- Fig 19. AI in Energy Market, Regional Growth Drivers
- Fig 20. AI in Energy Market, Application Impact Matrix

I would like to order

Product name: Global Artificial Intelligence in Energy Market Size Study & Forecast, by Type (Solutions, Services), Application and Regional Forecasts 2025-2035

Product link: <https://marketpublishers.com/r/GEDA4BBACF9FEN.html>

Price: US\$ 3,218.00 (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/GEDA4BBACF9FEN.html>