

# **Global AI in Energy Market Size study & Forecast, by Component Type (Solutions, Services), By Application (Robotics, Renewables Management, Demand Forecasting, Safety and Security, Infrastructure, Others), By End user (Energy Transmission, Energy Generation, Energy Distribution, Utilities), By Deployment Type (On-premise, Cloud) and Regional Analysis, 2022-2029**

<https://marketpublishers.com/r/G1AE7CC72E13EN.html>

Date: February 2023

Pages: 200

Price: US\$ 4,950.00 (Single User License)

ID: G1AE7CC72E13EN

## **Abstracts**

Global AI in Energy Market is valued approximately USD 4 billion in 2021 and is anticipated to grow with a healthy growth rate of more than 17.4% over the forecast period 2022-2029. AI based solution and services are used across the power and energy sector to assist better control and management of energy consumption, and for anticipating network malfunctions & optimization. Moreover, AI is utilized towards the optimization of energy grids by managing energy flows between homes, businesses, storage batteries, renewable energy sources, microgrids, and the power grid. Additionally, based on the Predictive analytics, energy companies can access the future energy demand and can also detect energy theft and illegal tapping of energy from the grid. The increasing energy demand worldwide and growing adoption of smart meters and smart home solutions are key factors accelerating the market growth.

The global energy demand is rapidly increasing due to growing expansion of urban areas & industrial activity in developing regions, which in turn contributing towards the growth of the Global AI in Energy Market. For instance, as per Statista – in 2019, the global renewable energy consumption was estimated at 74 exajoules, and the renewable energy consumption is projected to grow to 247 exajoules in 2050.

Moreover, another factor accelerating the market growth is increasing investment in smart grids. For instance, according to International Energy Agency (IEA) estimates – in 2019, the United States spent around USD 71 billion in modernization of grids, and this amount further increased to USD 84 billion in 2021. Additionally, in Feb 2022, India Renewable Energy Agency (IRENA) and State Grid Corporation of China (SGCC) announced investment of USD 350 billion between 2021 & 2025 to upgrade power grid & build new power systems. Also, increasing investment towards modernization of the energy sector and rising advancements in AI & ML technologies would create lucrative growth prospectus for the market over the forecast period. However, the high cost associated with AI based services & solutions stifles market growth throughout the forecast period of 2022-2029.

The key regions considered for the Global AI in Energy Market study includes Asia Pacific, North America, Europe, Latin America, and Rest of the World. North America dominated the market in terms of revenue, owing to the dominance of leading market players and increasing investment towards modernization of energy distribution equipment in the region. Whereas Asia Pacific is expected to grow with a highest CAGR during the forecast period, owing to factors such as rising energy demand from industrial sector & favorable initiatives from government authorities towards advancements in energy sector in the region.

Major market player included in this report are:

Alpiq AG

SmartCloud Inc.

General Electric

Siemens AG

Hazama Ando Corporation

ATOS SE

AppOrchid Inc

Zen Robotics Ltd

Schneider Electric

ABB Group

Recent Developments in the Market:

In October 2021, Tata Power, one the largest integrated power utility company signed a three-year commercial agreement with BluWave-ai. Under this partnership, BluWave-ai would deploy a cloud platform to generate intra-day and day-ahead dispatches for use in Tata Power's power scheduling operations.

Global AI in Energy Market Report Scope:

Historical Data 2019-2020-2021

Base Year for Estimation 2021

Forecast period 2022-2029

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

Segments Covered Component Type, Application, End User, Deployment Type, Region

Regional Scope North America; Europe; Asia Pacific; Latin America; Rest of the World

Customization Scope Free report customization (equivalent up to 8 analyst's 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 to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Component Type

Solutions

Services

By Application

Robotics

Renewables Management

Demand Forecasting

Safety and Security

Infrastructure

Others

By End user

Energy Transmission

Energy Generation

Energy Distribution

Utilities

By Deployment Type

On-premises

Cloud

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

ROE

Asia Pacific

China

India

Japan

Australia

South Korea

RoAPAC

Latin America

Brazil

Mexico

RoLA

Rest of the World

## Contents

### CHAPTER 1. EXECUTIVE SUMMARY

- 1.1. Market Snapshot
- 1.2. Global & Segmental Market Estimates & Forecasts, 2019-2029 (USD Billion)
  - 1.2.1. AI in Energy Market, by Region, 2019-2029 (USD Billion)
  - 1.2.2. AI in Energy Market, by Component Type, 2019-2029 (USD Billion)
  - 1.2.3. AI in Energy Market, by Application, 2019-2029 (USD Billion)
  - 1.2.4. AI in Energy Market, by End User, 2019-2029 (USD Billion)
  - 1.2.5. AI in Energy Market, by Deployment Type, 2019-2029 (USD Billion)
- 1.3. Key Trends
- 1.4. Estimation Methodology
- 1.5. Research Assumption

### CHAPTER 2. GLOBAL AI IN ENERGY MARKET DEFINITION AND SCOPE

- 2.1. Objective of the Study
- 2.2. Market Definition & Scope
  - 2.2.1. Scope of the Study
  - 2.2.2. Industry Evolution
- 2.3. Years Considered for the Study
- 2.4. Currency Conversion Rates

### CHAPTER 3. GLOBAL AI IN ENERGY MARKET DYNAMICS

- 3.1. AI in Energy Market Impact Analysis (2019-2029)
  - 3.1.1. Market Drivers
    - 3.1.1.1. Increasing energy demand worldwide
    - 3.1.1.2. Growing adoption of smart meters and smart home solutions
  - 3.1.2. Market Challenges
    - 3.1.2.1. High deployment cost associated with AI solutions
  - 3.1.3. Market Opportunities
    - 3.1.3.1. Increasing investment towards modernization of the energy sector
    - 3.1.3.2. Rising advancements in AI & ML technologies

### CHAPTER 4. GLOBAL AI IN ENERGY MARKET INDUSTRY ANALYSIS

- 4.1. Porter's 5 Force Model

- 4.1.1. Bargaining Power of Suppliers
- 4.1.2. Bargaining Power of Buyers
- 4.1.3. Threat of New Entrants
- 4.1.4. Threat of Substitutes
- 4.1.5. Competitive Rivalry
- 4.2. Futuristic Approach to Porter's 5 Force Model (2019-2029)
- 4.3. PEST Analysis
  - 4.3.1. Political
  - 4.3.2. Economical
  - 4.3.3. Social
  - 4.3.4. Technological
- 4.4. Top investment opportunity
- 4.5. Top winning strategies
- 4.6. Industry Experts Prospective
- 4.7. Analyst Recommendation & Conclusion

## **CHAPTER 5. RISK ASSESSMENT: COVID-19 IMPACT**

- 5.1. Assessment of the overall impact of COVID-19 on the industry
- 5.2. Pre COVID-19 and post COVID-19 Market scenario

## **CHAPTER 6. GLOBAL AI IN ENERGY MARKET, BY COMPONENT TYPE**

- 6.1. Market Snapshot
- 6.2. Global AI in Energy Market by Component Type, Performance - Potential Analysis
- 6.3. Global AI in Energy Market Estimates & Forecasts by Component Type 2019-2029 (USD Billion)
- 6.4. AI in Energy Market, Sub Segment Analysis
  - 6.4.1. Solution
  - 6.4.2. Services

## **CHAPTER 7. GLOBAL AI IN ENERGY MARKET, BY APPLICATION**

- 7.1. Market Snapshot
- 7.2. Global AI in Energy Market by Application, Performance - Potential Analysis
- 7.3. Global AI in Energy Market Estimates & Forecasts by Application 2019-2029 (USD Billion)
- 7.4. AI in Energy Market, Sub Segment Analysis
  - 7.4.1. Robotics

- 7.4.2. Renewables Management
- 7.4.3. Demand Forecasting
- 7.4.4. Safety and Security
- 7.4.5. Infrastructure
- 7.4.6. Others

## **CHAPTER 8. GLOBAL AI IN ENERGY MARKET, BY END USER**

- 8.1. Market Snapshot
- 8.2. Global AI in Energy Market by End User, Performance - Potential Analysis
- 8.3. Global AI in Energy Market Estimates & Forecasts by End User 2019-2029 (USD Billion)
- 8.4. AI in Energy Market, Sub Segment Analysis
  - 8.4.1. Energy Transmission
  - 8.4.2. Energy Generation
  - 8.4.3. Energy Distribution
  - 8.4.4. Utilities

## **CHAPTER 9. GLOBAL AI IN ENERGY MARKET, BY DEPLOYMENT TYPE**

- 9.1. Market Snapshot
- 9.2. Global AI in Energy Market by Deployment Type, Performance - Potential Analysis
- 9.3. Global AI in Energy Market Estimates & Forecasts by Deployment Type 2019-2029 (USD Billion)
- 9.4. AI in Energy Market, Sub Segment Analysis
  - 9.4.1. On premise
  - 9.4.2. Cloud

## **CHAPTER 10. GLOBAL AI IN ENERGY MARKET, REGIONAL ANALYSIS**

- 10.1. AI in Energy Market, Regional Market Snapshot
- 10.2. North America AI in Energy Market
  - 10.2.1. U.S. AI in Energy Market
    - 10.2.1.1. Component Type breakdown estimates & forecasts, 2019-2029
    - 10.2.1.2. Application breakdown estimates & forecasts, 2019-2029
    - 10.2.1.3. End User breakdown estimates & forecasts, 2019-2029
    - 10.2.1.4. Deployment Type breakdown estimates & forecasts, 2019-2029
  - 10.2.2. Canada AI in Energy Market
- 10.3. Europe AI in Energy Market Snapshot

- 10.3.1. U.K. AI in Energy Market
- 10.3.2. Germany AI in Energy Market
- 10.3.3. France AI in Energy Market
- 10.3.4. Spain AI in Energy Market
- 10.3.5. Italy AI in Energy Market
- 10.3.6. Rest of Europe AI in Energy Market
- 10.4. Asia-Pacific AI in Energy Market Snapshot
  - 10.4.1. China AI in Energy Market
  - 10.4.2. India AI in Energy Market
  - 10.4.3. Japan AI in Energy Market
  - 10.4.4. Australia AI in Energy Market
  - 10.4.5. South Korea AI in Energy Market
  - 10.4.6. Rest of Asia Pacific AI in Energy Market
- 10.5. Latin America AI in Energy Market Snapshot
  - 10.5.1. Brazil AI in Energy Market
  - 10.5.2. Mexico AI in Energy Market
  - 10.5.3. Rest of Latin America AI in Energy Market
- 10.6. Rest of The World AI in Energy Market

## **CHAPTER 11. COMPETITIVE INTELLIGENCE**

- 11.1. Top Market Strategies
- 11.2. Company Profiles
  - 11.2.1. Alpiq AG
    - 11.2.1.1. Key Information
    - 11.2.1.2. Overview
    - 11.2.1.3. Financial (Subject to Data Availability)
    - 11.2.1.4. Product Summary
    - 11.2.1.5. Recent Developments
  - 11.2.2. SmartCloud Inc.
  - 11.2.3. General Electric
  - 11.2.4. Siemens AG
  - 11.2.5. Hazama Ando Corporation
  - 11.2.6. ATOS SE
  - 11.2.7. AppOrchid Inc
  - 11.2.8. Zen Robotics Ltd
  - 11.2.9. Schneider Electric
  - 11.2.10. ABB Group



## **CHAPTER 12. RESEARCH PROCESS**

### **12.1. Research Process**

#### **12.1.1. Data Mining**

#### **12.1.2. Analysis**

#### **12.1.3. Market Estimation**

#### **12.1.4. Validation**

#### **12.1.5. Publishing**

### **12.2. Research Attributes**

### **12.3. Research Assumption**

## 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 2019-2029 (USD Billion)

TABLE 3. Global AI in Energy Market estimates & forecasts by Component Type 2019-2029 (USD Billion)

TABLE 4. Global AI in Energy Market estimates & forecasts by Application 2019-2029 (USD Billion)

TABLE 5. Global AI in Energy Market estimates & forecasts by End User 2019-2029 (USD Billion)

TABLE 6. Global AI in Energy Market estimates & forecasts by Deployment Type 2019-2029 (USD Billion)

TABLE 7. Global AI in Energy Market by segment, estimates & forecasts, 2019-2029 (USD Billion)

TABLE 8. Global AI in Energy Market by region, estimates & forecasts, 2019-2029 (USD Billion)

TABLE 9. Global AI in Energy Market by segment, estimates & forecasts, 2019-2029 (USD Billion)

TABLE 10. Global AI in Energy Market by region, estimates & forecasts, 2019-2029 (USD Billion)

TABLE 11. Global AI in Energy Market by segment, estimates & forecasts, 2019-2029 (USD Billion)

TABLE 12. Global AI in Energy Market by region, estimates & forecasts, 2019-2029 (USD Billion)

TABLE 13. Global AI in Energy Market by segment, estimates & forecasts, 2019-2029 (USD Billion)

TABLE 14. Global AI in Energy Market by region, estimates & forecasts, 2019-2029 (USD Billion)

TABLE 15. Global AI in Energy Market by segment, estimates & forecasts, 2019-2029 (USD Billion)

TABLE 16. Global AI in Energy Market by region, estimates & forecasts, 2019-2029 (USD Billion)

TABLE 17. U.S. AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 18. U.S. AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 19. U.S. AI in Energy Market estimates & forecasts by segment 2019-2029

(USD Billion)

TABLE 20. Canada AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 21. Canada AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 22. Canada AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 23. UK AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 24. UK AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 25. UK AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 26. Germany AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 27. Germany AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 28. Germany AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 29. France AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 30. France AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 31. France AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 32. Italy AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 33. Italy AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 34. Italy AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 35. Spain AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 36. Spain AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 37. Spain AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 38. RoE AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 39. RoE AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 40. RoE AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 41. China AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 42. China AI in Energy Market estimates & forecasts by segment 2019-2029

(USD Billion)

TABLE 43. China AI in Energy Market estimates & forecasts by segment 2019-2029

(USD Billion)

TABLE 44. India AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 45. India AI in Energy Market estimates & forecasts by segment 2019-2029

(USD Billion)

TABLE 46. India AI in Energy Market estimates & forecasts by segment 2019-2029

(USD Billion)

TABLE 47. Japan AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 48. Japan AI in Energy Market estimates & forecasts by segment 2019-2029

(USD Billion)

TABLE 49. Japan AI in Energy Market estimates & forecasts by segment 2019-2029

(USD Billion)

TABLE 50. South Korea AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 51. South Korea AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 52. South Korea AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 53. Australia AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 54. Australia AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 55. Australia AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 56. RoAPAC AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 57. RoAPAC AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 58. RoAPAC AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 59. Brazil AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 60. Brazil AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 61. Brazil AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 62. Mexico AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 63. Mexico AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 64. Mexico AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 65. RoLA AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 66. RoLA AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 67. RoLA AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 68. Row AI in Energy Market estimates & forecasts, 2019-2029 (USD Billion)

TABLE 69. Row AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 70. Row AI in Energy Market estimates & forecasts by segment 2019-2029 (USD Billion)

TABLE 71. List of secondary sources, used in the study of global AI in Energy Market

TABLE 72. List of primary sources, used in the study of global AI in Energy Market

TABLE 73. Years considered for the study

TABLE 74. Exchange rates considered

List of tables and figures and dummy in nature, final lists may vary in the final deliverable

## 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 Market size estimates & forecast methods
  - FIG 4. Global AI in Energy Market, key trends 2021
  - FIG 5. Global AI in Energy Market, growth prospects 2022-2029
  - FIG 6. Global AI in Energy Market, porters 5 force model
  - FIG 7. Global AI in Energy Market, pest analysis
  - FIG 8. Global AI in Energy Market, value chain analysis
  - FIG 9. Global AI in Energy Market by segment, 2019 & 2029 (USD Billion)
  - FIG 10. Global AI in Energy Market by segment, 2019 & 2029 (USD Billion)
  - FIG 11. Global AI in Energy Market by segment, 2019 & 2029 (USD Billion)
  - FIG 12. Global AI in Energy Market by segment, 2019 & 2029 (USD Billion)
  - FIG 13. Global AI in Energy Market by segment, 2019 & 2029 (USD Billion)
  - FIG 14. Global AI in Energy Market, regional snapshot 2019 & 2029
  - FIG 15. North America AI in Energy Market 2019 & 2029 (USD Billion)
  - FIG 16. Europe AI in Energy Market 2019 & 2029 (USD Billion)
  - FIG 17. Asia pacific AI in Energy Market 2019 & 2029 (USD Billion)
  - FIG 18. Latin America AI in Energy Market 2019 & 2029 (USD Billion)
  - FIG 19. Global AI in Energy Market, company Market share analysis (2021)
- List of tables and figures and dummy in nature, final lists may vary in the final deliverable

## I would like to order

Product name: Global AI in Energy Market Size study & Forecast, by Component Type (Solutions, Services), By Application (Robotics, Renewables Management, Demand Forecasting, Safety and Security, Infrastructure, Others), By End user (Energy Transmission, Energy Generation, Energy Distribution, Utilities), By Deployment Type (On-premise, Cloud) and Regional Analysis, 2022-2029

Product link: <https://marketpublishers.com/r/G1AE7CC72E13EN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G1AE7CC72E13EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:

Last name:

Email:

Company:

Address:

City:

Zip code:

Country:

Tel:

Fax:

Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below  
and fax the completed form to +44 20 7900 3970