

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

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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

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