

Global Virtual Power Plant (VPP) Market 2024 by Company, Regions, Type and Application, Forecast to 2030

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Abstracts

According to our (Global Info Research) latest study, the global Virtual Power Plant (VPP) market size was valued at USD 886.5 million in 2023 and is forecast to a readjusted size of USD 3801.9 million by 2030 with a CAGR of 23.1% during review period.

A virtual power plant (VPP) is a cloud-based distributed power plant that aggregates the capacities of heterogeneous distributed energy resources (DER) for the purposes of enhancing power generation, as well as trading or selling power on the electricity market.

A Virtual Power Plant (VPP) is an aggregated portfolio of Distributed Energy Resources and Controllable Loads into energy blocks which can be used to participate in Energy Markets and offer Services to the System Operator.

In this report, what is included in our statistics is the market size of virtual power plant technology service providers.

Global core virtual power plant (VPP) manufacturers include Schneider Electric (AutoGrid), Siemens, Generac (Enbala), GE Digital Energy and ABB. The top 5 companies hold a share about 85%. Europe is the largest market, with a share over 50%, followed by Asia Pacific and North America with the share about 25% and 20%.

Based on the product type, the Virtual Power Plant (VPP) is primarily split into OC Model and FM Model. FM model is the largest segment, with a share over 50%.

Based on the Virtual Power Plant (VPP) application, the Virtual Power Plant (VPP) market is segmented into several major parts, like Commercial, Industrial and Residential. The largest application is commercial, followed by residential.

The Global Info Research report includes an overview of the development of the Virtual Power Plant (VPP) industry chain, the market status of Commercial (OC Model, FM Model), Industrial (OC Model, FM Model), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of Virtual Power Plant (VPP).

Regionally, the report analyzes the Virtual Power Plant (VPP) markets in key regions. North America and Europe are experiencing steady growth, driven by government initiatives and increasing consumer awareness. Asia-Pacific, particularly China, leads the global Virtual Power Plant (VPP) market, with robust domestic demand, supportive policies, and a strong manufacturing base.

Key Features:

The report presents comprehensive understanding of the Virtual Power Plant (VPP) market. It provides a holistic view of the industry, as well as detailed insights into individual components and stakeholders. The report analysis market dynamics, trends, challenges, and opportunities within the Virtual Power Plant (VPP) industry.

The report involves analyzing the market at a macro level:

Market Sizing and Segmentation: Report collect data on the overall market size, including the revenue generated, and market share of different by Type (e.g., OC Model, FM Model).

Industry Analysis: Report analyse the broader industry trends, such as government policies and regulations, technological advancements, consumer preferences, and market dynamics. This analysis helps in understanding the key drivers and challenges influencing the Virtual Power Plant (VPP) market.

Regional Analysis: The report involves examining the Virtual Power Plant (VPP) market at a regional or national level. Report analyses regional factors such as government incentives, infrastructure development, economic conditions, and consumer behaviour to identify variations and opportunities within different markets.

Market Projections: Report covers the gathered data and analysis to make future projections and forecasts for the Virtual Power Plant (VPP) market. This may include estimating market growth rates, predicting market demand, and identifying emerging trends.

The report also involves a more granular approach to Virtual Power Plant (VPP):

Company Analysis: Report covers individual Virtual Power Plant (VPP) players, suppliers, and other relevant industry players. This analysis includes studying their financial performance, market positioning, product portfolios, partnerships, and strategies.

Consumer Analysis: Report covers data on consumer behaviour, preferences, and attitudes towards Virtual Power Plant (VPP). This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Commercial, Industrial).

Technology Analysis: Report covers specific technologies relevant to Virtual Power Plant (VPP). It assesses the current state, advancements, and potential future developments in Virtual Power Plant (VPP) areas.

Competitive Landscape: By analyzing individual companies, suppliers, and consumers, the report presents insights into the competitive landscape of the Virtual Power Plant (VPP) market. This analysis helps understand market share, competitive advantages, and potential areas for differentiation among industry players.

Market Validation: The report involves validating findings and projections through primary research, such as surveys, interviews, and focus groups.

Market Segmentation

Virtual Power Plant (VPP) market is split by Type and by Application. For the period 2019-2030, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of value.

Market segment by Type

OC Model

FM Model

Market segment by Application

Commercial

Industrial

Residential

Market segment by players, this report covers

Trst

Duke Energy

RWE

Generac (Enbala)

Bosch

GE Digital Energy

Enel X

Schneider Electric?AutoGrid?

Siemens

Viridity Energy

ABB

Market segment by regions, regional analysis covers

North America (United States, Canada, and Mexico)

Europe (Germany, France, UK, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, South Korea, India, Southeast Asia, Australia and Rest of Asia-Pacific)

South America (Brazil, Argentina and Rest of South America)

Middle East & Africa (Turkey, Saudi Arabia, UAE, Rest of Middle East & Africa)

The content of the study subjects, includes a total of 13 chapters:

Chapter 1, to describe Virtual Power Plant (VPP) product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top players of Virtual Power Plant (VPP), with revenue, gross margin and global market share of Virtual Power Plant (VPP) from 2019 to 2024.

Chapter 3, the Virtual Power Plant (VPP) competitive situation, revenue and global market share of top players are analyzed emphatically by landscape contrast.

Chapter 4 and 5, to segment the market size by Type and application, with consumption value and growth rate by Type, application, from 2019 to 2030.

Chapter 6, 7, 8, 9, and 10, to break the market size data at the country level, with revenue and market share for key countries in the world, from 2019 to 2024. and Virtual Power Plant (VPP) market forecast, by regions, type and application, with consumption value, from 2025 to 2030.

Chapter 11, market dynamics, drivers, restraints, trends and Porters Five Forces analysis.

Chapter 12, the key raw materials and key suppliers, and industry chain of Virtual Power Plant (VPP).

Chapter 13, to describe Virtual Power Plant (VPP) research findings and conclusion.

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