+357 96 030922
info@marketpublishers.com

Ground-Mount PV Utility Market Forecasts to 2030 – Global Analysis By Solar Panel Type (Monocrystalline, Polycrystalline, Thin Film and Other Solar Panel Types), Component, Installation, Mounting System, Application, End User and By Geography

https://marketpublishers.com/r/G8961C81C89DEN.html
Date: January 2025
Pages: 150
Price: US$ 4,150.00 (Single User License)
ID: G8961C81C89DEN

Abstracts

According to Stratistics MRC, the Global Ground-Mount PV Utility Market is accounted for $22.53 billion in 2024 and is expected to reach $41.61 billion by 2030 growing at a CAGR of 9.4% during the forecast period. Ground-mount PV utility refers to large-scale photovoltaic solar energy systems installed directly on the ground, typically for utility-scale power generation. These systems use robust support structures to secure solar panels at optimal tilt angles, maximizing solar energy capture. Designed to feed electricity into the grid, they play a critical role in renewable energy production, supporting sustainable energy goals and reducing carbon footprints.

According to SolarPower Europe Union, in 2018, around 8GW of solar systems are installed in Europe.

Market Dynamics:

Driver:

Rising global emphasis on clean and sustainable energy

Governments and industries are increasingly prioritizing renewable energy sources to combat climate change, reduce carbon emissions, and meet sustainability targets. Solar energy, particularly ground-mounted systems, offers a scalable solution for large-scale electricity generation. With favourable policies, subsidies, and incentives, utility-scale

+357 96 030922
info@marketpublishers.com

solar projects are gaining momentum. Additionally, falling costs of solar panels and advancements in technology make ground-mounted PV systems more economically viable. This shift toward renewable energy sources accelerates the adoption of ground-mount PV utilities worldwide, fostering significant market expansion.

Restraint:

Grid integration challenges

Grid integration challenges in ground-mount PV utility arise from the difficulty of connecting large-scale solar power systems to existing grid infrastructure. These systems often produce variable energy, requiring advanced grid management technologies to maintain stability. The need for significant upgrades to transmission lines, storage solutions, and substations can lead to delays and increased costs. These challenges hamper market growth by increasing the complexity, cost, and time required for project completion, potentially deterring investment and slowing the adoption of large-scale solar projects.

Opportunity:

Rising corporate sustainability initiatives

Companies are investing in large-scale solar projects to reduce their carbon footprints, secure clean energy sources, and enhance their sustainability credentials. This growing demand for solar energy solutions boosts the need for utility-scale ground-mounted PV systems, which provide efficient, large-scale energy production. Furthermore, corporate commitments to net-zero emissions, coupled with government incentives and green energy policies, drive continued investment in renewable energy infrastructure, accelerating market growth globally.

Threat:

Substantial upfront capital costs

Substantial upfront capital costs in ground-mount PV utility systems arise from expenses related to land acquisition, system installation, and equipment, including high-quality solar panels, inverters, and mounting structures. Additionally, site preparation, permitting, and grid connection add to the financial burden. These initial costs can hamper market growth, particularly for smaller investors or in regions with limited

+357 96 030922
info@marketpublishers.com

financial incentives.

Covid-19 Impact

The covid-19 pandemic significantly impacted the ground-mount PV utility market, causing delays in project timelines due to disrupted supply chains, labor shortages, and restrictions on construction activities. However, the crisis also emphasized the importance of energy independence and clean energy, driving renewed interest in utility-scale solar projects post-pandemic. Recovery efforts, coupled with stimulus packages and green energy policies in many regions, accelerated the adoption of solar PV systems, making the market resilient and poised for long-term growth despite temporary setbacks.

The monocrystalline segment is expected to be the largest during the forecast period

The monocrystalline segment is predicted to secure the largest market share throughout the forecast period due to their high efficiency and long lifespan. Made from a single continuous crystal structure, these panels offer superior performance by capturing more sunlight and converting it into electricity compared to other types, such as polycrystalline. Their sleek design and higher power output make them ideal for large-scale utility projects, especially in areas with limited space.

The renewable energy projects segment is expected to have the highest CAGR during the forecast period

The renewable energy projects segment is anticipated to witness the highest CAGR during the forecast period. Ground-mount PV utility systems are a key component in large-scale renewable energy projects, providing efficient solar power generation for utility grids. Ground-mounted solar power projects contribute to reducing greenhouse gas emissions and increasing renewable energy capacity, aligning with global sustainability goals. These systems are widely deployed in regions with abundant sunlight, offering a reliable and scalable solution for clean energy production.

Region with largest share:

Asia Pacific is expected to register the largest market share during the forecast period driven by rapid urbanization, favorable government policies, and growing energy demand. Key regions include China, India, Japan, South Korea, and Southeast Asia, where solar adoption is supported by declining PV costs and sustainability goals. Major

+357 96 030922
info@marketpublishers.com

players include LONGi Green Energy Technology, JinkoSolar, Trina Solar, and Sungrow Power Supply, contributing to technological advancements and large-scale projects. The region is witnessing robust expansion, emerging as a global leader in utility-scale solar energy deployment.

Region with highest CAGR:

North America is expected to witness the highest CAGR over the forecast period fuelled by strong government incentives, such as tax credits and renewable energy mandates. Key players in the region include First Solar, NextEra Energy, SunPower Corporation, and Canadian Solar, contributing to large-scale projects and technological advancements. The push for energy independence and sustainability, combined with declining solar installation costs, further boosts market growth. North America is experiencing significant expansion, with the market set to grow steadily as more utilities shift towards renewable energy sources.

Key players in the market

Some of the key players profiled in the Ground-Mount PV Utility Market include ABB Limited, SunPower Corporation, Sharp Corporation, Mitsubishi Electric Corporation, Panasonic Corporation, SolarEdge Technologies, Kyocera Corporation, Schneider Electric, SMA Solar Technology AG, First Solar, Trina Solar, Canadian Solar, JinkoSolar, Enphase Energy, Array Technologies and Adani Green Energy Limited.

Key Developments:

In September 2024, Adani Green Energy Ltd (AGEL) has finalised a 50:50 joint venture (JV) with TotalEnergies. It supports India’s commitment to achieving net-zero emissions by 2070 and its intermediate target of 500 GW of non-fossil fuel energy capacity by 2030. The JV will prioritize projects that are already operational or in advanced stages of development.

In February 2024, SolarEdge Technologies Inc. announced that it’s new high-power DC-optimized SolarEdge 330kW Inverter system for community and ground mount solar has received UL1741-SB certification and is now deployed with its first customer in the United States. The project is expected to produce approximately 1,575,000 kWh of solar energy annually and reduces carbon emissions by around 1,018 tons per year.

Solar Panel Types Covered:

+357 96 030922
info@marketpublishers.com

- Monocrystalline
- Polycrystalline
- Thin Film
- Other Solar Panel Types

Components Covered:

- Photovoltaic (PV) Modules
- Inverters
- Mounting Structures
- Monitoring & Control Systems
- Balance of System (BoS) Components
- Other Components

Installations Covered:

- Standard Ground-Mount Systems
- Ballasted Ground-Mount Systems

Mounting Systems Covered:

- Fixed-Tilt Mounting Systems
- Single-Axis Tracking Systems
- Dual-Axis Tracking Systems

+357 96 030922
info@marketpublishers.com

- Other Mounting Systems

Applications Covered:

- Renewable Energy Projects
- Solar Farms
- Grid-Connected Systems
- Off-Grid Systems
- Other Applications

End Users Covered:

- Power Utilities
- Independent Power Producers (IPPs)
- Industrial & Commercial Entities
- Other End Users

Regions Covered:

- North America
  - US
  - Canada
  - Mexico
- Europe

+357 96 030922
info@marketpublishers.com

- Germany
- UK
- Italy
- France
- Spain
- Rest of Europe

Asia Pacific

- Japan
- China
- India
- Australia
- New Zealand
- South Korea
- Rest of Asia Pacific

South America

- Argentina
- Brazil
- Chile
- Rest of South America

Middle East & Africa

+357 96 030922
info@marketpublishers.com

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:
- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2022, 2023, 2024, 2026, and 2030
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

+357 96 030922
info@marketpublishers.com

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Ground-Mount PV Utility Market Forecasts to 2030 – Global Analysis By Solar Panel Type (Monocrystalline, Polycrystalline, Thin Film and Other Solar Panel Types), Component, Installation, Mounting System, Application, End User and By Geography

Product link: https://marketpublishers.com/r/G8961C81C89DEN.html

Price: US$ 4,150.00 (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/G8961C81C89DEN.html