

Global Solar Energy Market Size study & Forecast, by Technology (Photovoltaic Systems, Concentrated Solar Power Systems), by Solar Module (Cadmium Telluride, Amorphous Silicon Cells, Monocrystalline, Polycrystalline, Others), by Application (Residential, Commercial, Industrial), by End-Use (Electricity Generation, Lighting, Heating, Charging) and Regional Analysis, 2023-2030

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# **Abstracts**

Global Solar Energy Market is valued at approximately USD XX billion in 2022 and is anticipated to grow with a healthy growth rate of more than XX% during the forecast period 2023-2030. Solar energy is the radiant energy emitted by the sun, which can be harnessed and converted into various forms of usable power. This energy is abundant and sustainable, making it a popular choice for clean and renewable energy solutions. There are two primary ways to harness solar energy: photovoltaic (PV) technology and solar thermal technology. The key factors driving the market growth are the growing demand for renewable energy sources, the rise in concerns over climate change and environmental issues, and cohesive government incentives & regulations that are anticipated to support the market growth during the forecast period 2023-2030.

Additionally, the supportive government initiatives for the development of renewable energy infrastructure are anticipated to create a lucrative demand for the market. For instance, In Sept. 2021, the U.S. Department of Agriculture revealed that the Department is planning to invest USD 464 million to build or improve renewable energy infrastructure and to assist rural communities, agricultural producers and companies' lower energy costs in 48 states and Puerto Rico. USD 129 million of these projects have



been funded by the USDA under the Rural Electricity for America Program. This programme offers assistance to support the purchase and installation of renewable energy systems as well as improvements to energy efficiency for rural small enterprises and agricultural producers. By improving their energy efficiency, rural America anticipated to generate and save more than 379 million kilowatt-hours (kWh), or 35,677 homes' worth of electricity annually. Also, USD 335 million of these projects are being funded by the USDA under the Electric Loan Program. To increase reliability in rural regions, 1,432 miles of line anticipated to be built or improved due to the funding. The loans come with USD 102 million for investments in smart grid technology, which makes use of digital communications to track and respond to local variations in electricity consumption. Moreover, the growing popularity of solar-powered homes and the increase in demand for solar-powered desalination systems are anticipated to create lucrative opportunities for the market over the projected years. However, the high initial installation costs stifle market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Solar Energy Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market in 2022 owing to supportive government incentives and policies, growing public awareness of environmental issues and the need for sustainable energy sources, and ongoing advancements in solar technology, energy storage, and grid integration. Whereas, the Asia Pacific is expected to grow with the fastest growth rate over the forecast period, owing to factors such as the supportive regulatory frameworks and policies, advances in solar technology, particularly the manufacturing of photovoltaic (PV) cells and panels, and increasing awareness of environmental issues that anticipated to support the regional market growth.

Major market player included in this report are:

Hanwha Q Cells Co., Ltd.

Trina solar

Canadian Solar Inc

SolarEdge Technologies

JA Solar Holdings Co. Ltd.

First Solar, Inc.



JinkoSolar Holding Co., Ltd.

Yingli Green Energy Holding Company Limited

Enphase Energy, Inc.

SunPower Corporation

Recent Developments in the Market:

In March 2023, BELECTRIC Solar Ltd UK and NextEnergy Solar Fund have solidified their collaboration by entering into a framework agreement exceeding 150 MWp in operations and maintenance (O&M). This significant milestone follows a rigorous competitive tendering process overseen by WiseEnergy. Over the next three years, BELECTRIC is poised to integrate a minimum of ten solar farms, totaling 150 MWp, into its O&M portfolio across various counties in England. These solar power installations, with capacities ranging from 5 MW to 34 MW, are strategically situated in locations such as Dorset, Lincolnshire, and East Sussex.

Global Solar Energy Market Report Scope:

Historical Data - 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

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

Segments Covered – Technology, Solar Module, Application, End-Use, Region

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

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 Technology:
Photovoltaic Systems
Concentrated Solar Power Systems
By Solar Module:
Cadmium Telluride
Amorphous Silicon Cells
Monocrystalline
Polycrystalline
Others
By Application:
Residential

Commercial



India

Industrial
By End-Use:
Electricity Generation
Lighting
Heating
Charging
By Region:
North America
U.S.
Canada
Europe
UK
Germany
France
Spain
Italy
ROE
Asia Pacific
China

Global Solar Energy Market Size study & Forecast, by Technology (Photovoltaic Systems, Concentrated Solar Powe...



Japan	
Australia	
South Korea	
RoAPAC	
Latin America	
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