



At Market Research Future (MRFR), we enable our customers to unravel the complexity of various industries through our Cooked Research Report (CRR), Half-Cooked Research Reports (HCRR), Raw Research Reports (3R), Continuous-Feed Research (CFR), and Market Research & Consulting Services.

MRFR team have supreme objective to provide the optimum quality market research and intelligence services to our clients. Our market research studies by products, services, technologies, applications, end users, and market players for global, regional, and country level market segments, enable our clients to see more, know more, and do more, which help to answer all their most important questions.

In order to stay updated with technology and work process of the industry, MRFR often plans & conducts meet with the industry experts and industrial visits for its research analyst members.

For more information kindly visit our website www.marketresearchfuture.com or contact us at info@marketresearchfuture.com

Copyright © 2021 Market Research Future

All Rights Reserved. This document contains highly confidential information and is the sole property of Market Research Future. No part of it may be circulated, copied, quoted, or otherwise reproduced without the written approval of Market Research Future.



ABOUT US



Report Information

More information from: <https://www.marketresearchfuture.com/reports/photovoltaic-market-1061>

Photovoltaic Market Research Report-Global Forecast till 2027

Report / Search Code: MRFR/SEM/0555-HCR

Publish Date: February, 2021

[Request Sample](#)

Price	1-user PDF : \$ 4950.0	Enterprise PDF : \$ 7250.0
-------	------------------------	----------------------------

Description:

Market Overview

Generally, photovoltaic systems are widely used in converting sunlight into electricity. It is eco-friendly as it can produce energy without increasing the carbon footprint from a renewable source. It has proven to offer low operating costs as it is different from the traditional systems. As the electricity demand increases daily, the demand for solar panels for power generation is going higher. The increasing requirement for alternative energy sources and rising concerns regarding climate change are the two major factors that contribute to solar photovoltaic (PV) market growth.

In 2017, the Photovoltaic (PV) Market registered to grow USD 225.6 Billion. Further, it has expectations to meet the growth of USD 547.15 Billion by the end of the year 2023, at a CAGR of 8.2% for the forecast period.

All over the world, governmental authorities are concentrating on solar energy-powered systems and investing more to produce energy through solar panels. Along with this, the government is spreading awareness among individuals regarding the benefits of solar energy. In the Asia-Pacific region, India has increased solar power utilization as the Indian government has implemented a subsidy to all Indian individuals.

The research report explains that the power generation cost using fossil fuels is much higher regularly, but the cost can be reduced by using solar energy. Thus, varying weather conditions and high technical complexity are expected to enhance the forecast period's PV market growth.

The present report has given more focus on the photovoltaic market Trends growth and development. It includes the market segments, market dynamics, COVID-19 analysis, comparative analysis, and other factors by studying various world regions. The global market size of the PV market was immense in the before forecast period.

Global Impact of COVID-19

The unpredicted COVID-19 has a global impact that showed a negative demand stock all over the countries. In 2020, the PV market value and size dropped due to lockdown all over the world. In the first half of 2020, the PV market was running down due to the workforce's restrictions and unavailability. The construction of the solar PV power plant was also delayed due to the COVID-19 outbreak. Furthermore, the global market experienced disruption in the supply chain due to several reasons.

Overall, the report says that the pandemic has a negative impact on the global market. But in the present scenario, the global market has taken up the speed now to increase the PV market's growth.

Market Dynamics

- Major Market Drivers

Now that the COVID breakdown has lost its weightage over the market production pace, the key players are exerting immense developments to drive the market growth. The prominent market driving assets for the Global Photovoltaic Market are the growing number of off-grid areas worldwide and increasing investment in solar energy.

Moreover, the PV market is meant to offer diverse applications to different firms. Therefore, the market is growing, and opportunities are being evolved for better work efficiency.

- **Opportunities for the PV Market**

The growth opportunities of the market are increasing at higher rates. The need for energy is highly essential within the industrial sector and other sectors too. The work operations that are being conducted with advanced machinery require high energy input for streamlined operations.

The photovoltaic market Analysis report explains the industries need to store energy to multiply the power supply aspects when there is a need for more energy. This is because more energy is required to make the machines work efficiently to enhance industry productivity.

- **Restraints of PV Market**

Generally, solar power projects require a wide area of land for the generation of power. The selection of land can be the major restraints of the global market. The key players attend to the PV market's primary concerns to find ideal remedies to deal with the restraint.

The power generation needs to be improved to ensure that the output can be enhanced for related industries. The global PV market size will boom in the current forecast years as the key players find the ideal ways to overcome the restraint.

- **Challenges Experienced by the market**

Like the restraints, the global PV market also faced challenges in the use of land and low energy problems. These challenges need to be eradicated to ensure higher productivity in terms of sales and revenue generation.

The key players are enhancing the efficiency of PV market share by technology within the market to improve sales and opportunities. The land issues and low energy problems are often recorded by the end-users, which will be attended by the key players in the present forecast years.

- **Cumulative Growth Analysis of Global PV Market**

The global PV market analysis is recorded to be at a CAGR of 16.7%, which is comparatively high. The market revenue prediction for the present forecast years is relatively higher than the previous 2017 report.

The report explains that the key players of different regions are putting in their collective efforts and strengths to ensure that the market thrives across various areas regarding increased demands and sales.

Technology Analysis of Global PV Market

Many sectors have successfully adapted to the global PV market, due to which the overall growth potential has enhanced. Some of the PV market's intended audiences are Raw material suppliers, Integrated device manufacturers (IDMs, Fabless vendors, fabrication players, Original device manufacturers (ODMs, Electronic design automation

(EDA) & design tool vendors, Fabrication, wafer, & foundry process equipment vendors, Power and Energy industry, Original equipment manufacturers (OEMs), Assembly, testing, & packaging vendors, Government and Research and development organizations, etc.

These sectors have understood the industry's demands for increasing the functionality of monocrystalline silicon, polycrystalline silicon, thin-film, and other technologies. So the key players are also enhancing the technology potential behind the service to increase sales and production opportunities.

Market Segment Overview

- **By Type**

The global PV market is segmented into organic PV and inorganic PV based on the type segmentation. The companies and consumers have adapted these product services for diverse needs.

The photovoltaic market Report explains that these two types have their significance and perks in end outcomes. Various end-users pick their selected type to meet their requirement and develop their product.

- **By Component**

The segmentation global PV market outlook is classified into modules, cells, and optics. Hence, the distribution service efficiency has preferred these components according to their requirement.

Diverse companies have their requirements and choices within the PV market, and these companies are trying to fulfill their best implementations to the global market.

- **By Application**

The PV market has been segmented into various applications, such as residential applications and non-residential applications.

The report explains that with the various photovoltaic applications, the global market demand increases and creates more industrialists' opportunities.

Regional Analysis

Based on the regional analysis, the PV market is widely spread across various global regions. Some of the top-performing regions worldwide are North America, Europe, Asia Pacific, Europe, and the rest of the world. Out of all the regions, the Asia-Pacific has domination in the PV market share due to vendors and various key players in this region.

North America is expected to generate the second largest market share as the global market has government and key players' support.

Competitive Landscape Analysis of the PV Market

The prominent key players of this PV market are:

- Risen Energy Co. Ltd (China),
- Shunfeng International Clean Energy Limited (China),
- Mitsubishi Electric Corporation (Japan),

- GCL System Integration (Hong Kong),
- JA Solar Holdings (China),
- Kaneka Corporation (Japan),
- Sharp Corporation (Japan),
- Suntech Power Co.,
- Trina Solar Limited (China),
- Canadian Solar Inc. (Canada),
- Jinko Solar Holding Co., Ltd. (China),
- Hanwha Q CELLS Co., Ltd. (South Korea)

The photovoltaic market Leaders or players have adopted various strategies to uplift the photovoltaic market size.

Recent Developments of PV Market

- In July 2020, India's prime minister inaugurated Asia's largest solar power plant in Rewa district, Madhya Pradesh. Every year, this plant will reduce emissions similar to approximately 15 lakh tonnes of carbon dioxide.
- In August 2020, Canadian Solar declared one of the largest commercial and industrial rooftop solar projects in Penang, Malaysia. This project coverage will be over 26,000 m2.

Report Overview

The report overview is as follows:

- Overview of the market
- COVID19 Analysis
- Market dynamic analysis
- Technology analysis of PV market
- Market segmentation overview
- Regional classification analysis
- Competitive landscape analysis
- Recent Developments of PV market

The report puts light on the global photovoltaic market size and its growth all over the regions.

Segmental Table

- **By Type**

- organic PV
- inorganic PV

- **By Component**

- modules,
- cells,
- optics

- **By Application**

- residential applications,
- non-residential applications

- **By Region**

- North America,
- Europe,
- Asia-Pacific
- rest of the world

PHOTOVOLTAIC (PV) MARKET

Photovoltaic (PV) Market expected to meet the growth of USD 547.15 Billion by the end of the year 2023, at a CAGR of 16.7% for the forecast period.

BY TYPE

- Organic PV
- Inorganic PV

BY COMPONENT

- Cells
- Modules
- Optics

BY APPLICATION

- Residential Applications
- Non-Residential Applications

BY REGION

- North America
- Europe
- Asia-Pacific
- Rest of the World

Global Photovoltaic (Pv) Market Share, By Region,



DRIVERS:

- Increasing investment in solar energy.
- Growing number of off-grid areas worldwide.
- Opportunities are being evolved for better work efficiency.



RESTRAINT:

- faced challenges in the use of land and low energy problems.



KEY PLAYERS:

- Canadian Solar
- Hanwha Q CELLS
- Trina Solar Limited
- Jinko Solar Holding
- GCL System Integration
- JA Solar Holdings
- Shunfeng International Clean Energy Limited
- Sharp Corporation
- Risen Energy
- Mitsubishi Electric Corporation
- Suntech Power



Table of Content:

Contents

TABLE OF CONTENTS

1	Executive Summary
2	Scope of the Report
2.1	Market Definition
2.2	Scope of the Study
2.2.1	Research Objectives
2.2.2	Assumptions & Limitations
2.3	Markets Structure
3	Market Research Methodology
3.1	Research Process
3.2	Secondary Research
3.3	Primary Research
3.4	Forecast Model
4	Market Landscape
4.1	Porter's Five Forces Analysis
4.1.1	Threat of New Entrants
4.1.2	Bargaining power of buyers
4.1.3	Threat of substitutes
4.1.4	Segment rivalry
4.1.5	Bargaining power of suppliers
4.2	Value Chain/Supply Chain of Photovoltaic Market
5	Industry Overview of Global Photovoltaic Market
5.1	Introduction
5.2	Growth Drivers
5.3	Impact analysis
5.4	Market Challenges
6	Market Trends
6.1	Introduction
6.2	Growth Trends
6.3	Impact analysis
7	Global Photovoltaic Market by Type
7.1	Introduction
7.2	Organic PV
7.2.1	Market Estimates & Forecast, 2020-2027
7.2.2	Market Estimates & Forecast by Region, 2020-2027
7.3	Inorganic PV
7.3.1	Market Estimates & Forecast, 2020-2027
7.3.2	Market Estimates & Forecast by Region, 2020-2027
8	Global Photovoltaic Market by Components
8.1	Introduction
8.2	Cells
8.2.1	Market Estimates & Forecast, 2020-2027
8.2.2	Market Estimates & Forecast, by Region, 2020-2027
8.2.3	Crystalline Silicon PV Cells
8.2.3.1	Market Estimates & Forecast, 2020-2027
8.2.3.2	Market Estimates & Forecast, by Region, 2020-2027
8.2.4	Crystalline Silicon PV Cells
8.2.4.1	Market Estimates & Forecast, 2020-2027
8.2.4.2	Market Estimates & Forecast, by Region, 2020-2027
8.3	Modules
8.3.1	Market Estimates & Forecast, 2020-2027
8.3.2	Market Estimates & Forecast, by Region, 2020-2027
8.4	Optics
8.4.1	Market Estimates & Forecast, 2020-2027
8.4.2	Market Estimates & Forecast, by Region, 2020-2027
9	Global Photovoltaic Market, by Application
9.1	Introduction
9.2	Residential Applications
9.2.1	Market Estimates & Forecast, 2020-2027
9.2.2	Market Estimates & Forecast, by Region, 2020-2027
9.3	Non-Residential Applications
9.3.1	Market Estimates & Forecast, 2020-2027
9.3.2	Market Estimates & Forecast, by Region, 2020-2027
10	Global Photovoltaic Market, by Region
10.1	Introduction
10.2	North America
10.2.1	Market Estimates & Forecast, by Country, 2020-2027
10.2.2	Market Estimates & Forecast, by Type, 2020-2027
10.2.3	Market Estimates & Forecast, by Components, 2020-2027
10.2.4	Market Estimates & Forecast, by Application, 2020-2027
10.2.5	US
10.2.5.1	Market Estimates & Forecast, by Type, 2020-2027
10.2.5.2	Market Estimates & Forecast, by Components, 2020-2027
10.2.5.3	Market Estimates & Forecast, by Application, 2020-2027
10.2.6	Canada
10.2.6.1	Market Estimates & Forecast, by Type, 2020-2027
10.2.6.2	Market Estimates & Forecast, by Components, 2020-2027
10.2.6.3	Market Estimates & Forecast, by Application, 2020-2027
10.2.7	Mexico
10.2.7.1	Market Estimates & Forecast, by Type, 2020-2027
10.2.7.2	Market Estimates & Forecast, by Components, 2020-2027
10.2.7.3	Market Estimates & Forecast, by Application, 2020-2027
10.3	Europe

- 10.3.1 Market Estimates & Forecast, Country, 2020-2027
- 10.3.2 Market Estimates & Forecast, by Type, 2020-2027
- 10.3.3 Market Estimates & Forecast, by Components, 2020-2027
- 10.3.4 Market Estimates & Forecast, by Application, 2020-2027
- 10.3.5 Germany
 - 10.3.5.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.3.5.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.3.5.3 Market Estimates & Forecast, by Application, 2020-2027
- 10.3.6 France
 - 10.3.6.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.3.6.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.3.6.3 Market Estimates & Forecast, by Application, 2020-2027
- 10.3.7 UK
 - 10.3.7.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.3.7.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.3.7.3 Market Estimates & Forecast, by Application, 2020-2027
- 10.3.8 Spain
 - 10.3.8.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.3.8.2 Market Estimates & Forecast, by Components 2020-2027
 - 10.3.8.3 Market Estimates & Forecast, by Application, 2020-2027
- 10.3.9 Italy
 - 10.3.9.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.3.9.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.3.9.3 Market Estimates & Forecast by Application, 2020-2027
- 10.3.10 Rest of Europe
 - 10.3.10.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.3.10.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.3.10.3 Market Estimates & Forecast by Application, 2020-2027
- 10.4 Asia-Pacific
 - 10.4.1 Market Estimates & Forecast, Country, 2020-2027
 - 10.4.2 Market Estimates & Forecast, by Type, 2020-2027
 - 10.4.3 Market Estimates & Forecast, by Components, 2020-2027
 - 10.4.4 Market Estimates & Forecast, by Application, 2020-2027
 - 10.4.5 China
 - 10.4.5.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.4.5.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.4.5.3 Market Estimates & Forecast, by Application, 2020-2027
 - 10.4.6 India
 - 10.4.6.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.4.6.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.4.6.3 Market Estimates & Forecast, by Application, 2020-2027
 - 10.4.7 Japan
 - 10.4.7.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.4.7.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.4.7.3 Market Estimates & Forecast, by Application, 2020-2027
 - 10.4.8 Rest of Asia-Pacific
 - 10.4.8.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.4.8.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.4.8.3 Market Estimates & Forecast, by Application, 2020-2027
- 10.5 Rest of the World
 - 10.5.1 Market Estimates & Forecast, Country, 2020-2027
 - 10.5.2 Market Estimates & Forecast, by Type, 2020-2027
 - 10.5.3 Market Estimates & Forecast, by Components, 2020-2027
 - 10.5.4 Market Estimates & Forecast, by Application, 2020-2027
 - 10.5.5 Middle East & Africa
 - 10.5.5.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.5.5.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.5.5.3 Market Estimates & Forecast, by Application, 2020-2027
 - 10.5.6 Latin America
 - 10.5.6.1 Market Estimates & Forecast, by Type, 2020-2027
 - 10.5.6.2 Market Estimates & Forecast, by Components, 2020-2027
 - 10.5.6.3 Market Estimates & Forecast, by Application, 2020-2027
- 11 Company Landscape
- 12 Company Profiles
 - 12.1 Trina Solar Limited
 - 12.1.1 Company Overview
 - 12.1.2 Product/Business Segment Overview
 - 12.1.3 Financial Updates
 - 12.1.4 Key Developments
 - 12.2 Canadian Solar Inc.
 - 12.2.1 Company Overview
 - 12.2.2 Product/Business Segment Overview
 - 12.2.3 Financial Updates
 - 12.2.4 Key Developments
 - 12.3 Jinko Solar Holding Co., Ltd.
 - 12.3.1 Company Overview
 - 12.3.2 Product/Business Segment Overview
 - 12.3.3 Financial Updates
 - 12.3.4 Key Developments
 - 12.4 Hanwha Q CELLS Co., Ltd.
 - 12.4.1 Company Overview
 - 12.4.2 Product/Business Segment Overview
 - 12.4.3 Financial Updates
 - 12.4.4 Key Developments
 - 12.5 JA Solar Holdings
 - 12.5.1 Company Overview
 - 12.5.2 Product/Business Segment Overview

12.5.3	Financial Updates
12.5.4	Key Developments
12.6	GCL System Integration.
12.6.1	Company Overview
12.6.2	Product/Business Segment Overview
12.6.3	Financial Updates
12.6.4	Key Developments
12.7	Kaneka Corporation
12.7.1	Company Overview
12.7.2	Product/Business Segment Overview
12.7.3	Financial Updates
12.7.4	Key Developments
12.8	Sharp Corporation
12.8.1	Company Overview
12.8.2	Product/Business Segment Overview
12.8.3	Financial Updates
12.8.4	Key Developments
12.9	Risen Energy Co. Ltd
12.9.1	Company Overview
12.9.2	Product/Business Segment Overview
12.9.3	Financial Updates
12.9.4	Key Developments
12.10	Shunfeng International Clean Energy Limited
12.10.1	Company Overview
12.10.2	Product/Business Segment Overview
12.10.3	Financial Updates
12.10.4	Key Developments
12.11	Suntech Power Co.
12.11.1	Company Overview
12.11.2	Product/Business Segment Overview
12.11.3	Financial Updates
12.11.4	Key Developments
13	Conclusion

LIST OF TABLES

Table 1	Global Photovoltaic Market, by Region, 2020–2027
Table 2	North America: Photovoltaic Market, by Country, 2020–2027
Table 3	Europe: Photovoltaic Market, by Country, 2020–2027
Table 4	Asia-Pacific: Photovoltaic Market, by Country, 2020–2027
Table 5	Middle East & Africa: Photovoltaic Market, by Country, 2020–2027
Table 6	Latin America: Photovoltaic Market, by Country, 2020–2027
Table 7	Global Photovoltaic Market, by Type Market, by Region 2020–2027
Table 8	North America: Photovoltaic Market, by Type Market, Country, 2020–2027
Table 9	Europe: Photovoltaic Market, by Type Market, Country, 2020–2027
Table10	Asia-Pacific: Photovoltaic Market, by Type Market, Country, 2020–2027
Table11	Middle East & Africa: Photovoltaic Market, by Type Market, by Country, 2020–2027
Table12	Latin America: Photovoltaic Market, by Type Market, by, Country, 2020–2027
Table13	Global Photovoltaic Market, by Components Market, by Region, 2020–2027
Table14	North America: Photovoltaic Market, by Components Market, by Country, 2020–2027
Table15	Europe: Photovoltaic Market, by Components Market, by Country, 2020–2027
Table16	Asia-Pacific: Photovoltaic Market, by Components Market, by Country, 2020–2027
Table17	The Middle East & Africa: Photovoltaic Market, by Components Market, by Country, 2020–2027
Table18	Latin America: Photovoltaic Market by, Components Market, by Country, 2020–2027
Table19	Global Photovoltaic Market, by Application Market, by Region, 2020–2027
Table20	North America: Photovoltaic Market, by Application Market, by Country, 2020–2027
Table21	Europe: Photovoltaic Market, by Application Market, by Country, 2020–2027
Table22	Asia-Pacific: Photovoltaic Market, by Application Market, by Country, 2020–2027
Table23	The Middle East & Africa: Photovoltaic Market, by Application Market by Country, 2020–2027
Table24	Latin America: Photovoltaic Market, by Application Market by Country, 2020–2027
Table25	Global Photovoltaic Market, by Type Market, by Region, 2020–2027
Table26	Global Photovoltaic Market, by Components Market, by Region, 2020–2027
Table27	Global Photovoltaic Market, by Application Market, by Region, 2020–2027
Table28	North America: Photovoltaic Market, by Country
Table29	North America: Photovoltaic Market, by Type
Table30	North America: Photovoltaic Market, by Components
Table31	North America: Photovoltaic Market, by Application
Table32	Europe: Photovoltaic Market, by Country
Table33	Europe: Photovoltaic Market, by Type
Table34	Europe: Photovoltaic Market, by Components
Table35	Europe: Photovoltaic Market, by Application
Table36	Asia-Pacific: Photovoltaic Market, by Country
Table37	Asia-Pacific: Photovoltaic Market, by Type
Table38	Asia-Pacific: Photovoltaic Market, by Components
Table39	Asia-Pacific: Photovoltaic Market, by Application
Table40	The Middle East & Africa: Photovoltaic Market, by Country
Table41	The Middle East & Africa: Photovoltaic Market, by Type
Table42	The Middle East & Africa: Photovoltaic Market, by Components
Table43	The Middle East & Africa: Photovoltaic Market, by Application
Table44	Latin America: Photovoltaic Market, by Country
Table45	Latin America: Photovoltaic Market, by Type
Table46	Latin America: Photovoltaic Market, by Components
Table47	Latin America: Photovoltaic Market, by Application

LIST OF FIGURES

FIGURE 1 Global Photovoltaic Market Segmentation
FIGURE 2 Forecast Methodology
FIGURE 3 Porter's Five Forces Analysis of Global Photovoltaic Market
FIGURE 4 Value Chain of Global Photovoltaic Market
FIGURE 5 Share of Global Photovoltaic Market in 2017, by Country (in %)
FIGURE 6 Global Photovoltaic Market, 2020-2027
FIGURE 7 Sub-segments of Type
FIGURE 8 Global Photovoltaic Market Size, by Type, 2017
FIGURE 9 Share of Global Photovoltaic Market, by Type, 2020 to 2027
FIGURE 10 Global Photovoltaic Market, by Components, 2017
FIGURE 11 Share of Global Photovoltaic Market, by Components, 2020to 2027
FIGURE 12 Global Photovoltaic Market, by Application, 2020 to 2027
FIGURE 13 Share of Global Photovoltaic Market, by Application, 2020 to 2027