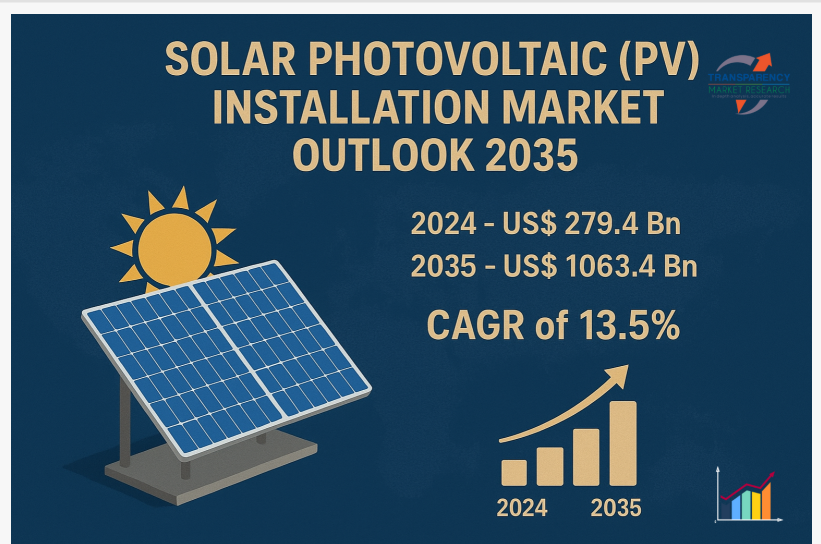


Global Solar PV Installation Market Size Forecast to US\$ 1063.4 Billion by 2035, Accelerating at 13.5% CAGR – TMR Report

Solar Photovoltaic Installation Market Expansion: From US\$ 279.4 Billion in 2024 to Over US\$ 1063.4 Billion by 2035 – Transparency Market Research

WILMINGTON, DE, UNITED STATES, September 4, 2025 /EINPresswire.com/ -- [Solar Photovoltaic \(PV\) Installation Market](#) Outlook 2035

The global solar photovoltaic (PV) installation market is witnessing strong growth, driven by rising demand for clean and sustainable energy solutions. In 2024, the market was valued at US\$ 279.4 Bn and is projected to grow steadily at a CAGR of 13.5% from 2025 to 2035. Increasing investments in renewable energy, supportive government policies, and rapid adoption of solar technologies are fueling this expansion. By the end of 2035, the industry is expected to achieve a remarkable valuation of US\$ 1063.4 Billion, highlighting its critical role in the global energy transition.



Global Solar PV Installation Market to Reach US\$ 1063.4 Billion by 2035, Driven by Rising Renewable Energy Investments



Global Solar PV Installation Market to Reach US\$ 1063.4 Billion by 2035, Driven by Rising Renewable Energy Investments”

Latest Report by Transparency Market Research Inc

Don't miss out on the Latest Market Intelligence. Get your Sample Report Copy Today@

https://www.transparencymarketresearch.com/sample/sample.php?flag=S&rep_id=762

Industry Overview

Solar photovoltaic (PV) installations are among the fastest-growing renewable energy solutions worldwide, offering a

sustainable alternative to fossil fuels. PV systems convert sunlight directly into electricity using

semiconductors, making them a cornerstone of the global clean energy transition. Driven by declining installation costs, government incentives, and rising corporate sustainability goals, the solar PV installation industry has transformed from a niche segment into a mainstream power generation source. The market has also benefited from technological innovations in solar modules, inverters, and battery storage, making solar energy more efficient and reliable than ever before.

By 2035, solar PV installations are expected to play a central role in achieving net-zero carbon targets, with large-scale utility projects and decentralized rooftop systems leading adoption.

Solar Photovoltaic (PV) Installation Market: Major Players' Insights

The global solar photovoltaic (PV) installation market is being shaped by leading manufacturers through innovation, strategic expansion, and large-scale project execution.

Companies Profiled (Potential Manufacturers)

- JA SOLAR Technology Co., Ltd.
- Solareff (Pty) Ltd
- SunPower Corporation
- Recurrent Energy
- Sharp Corporation
- Suntech Power Holding Co. Ltd
- Acciona SA
- Tata Power Solar Systems Ltd
- TrueSun Energy Solutions Private Limited
- Agni Solar
- Natura Eco Energy
- African Solar Generation
- Others

To improve performance and reduce costs, these companies are investing heavily in next-generation technologies such as bifacial panels, smart inverters, and integrated energy storage. Strategic partnerships, diversified global project portfolios, and sustainability-driven initiatives further strengthen their competitive positioning in the worldwide solar PV market.

Global Solar Photovoltaic (PV) Installation Market: Key Developments

- 2025 – JA Solar secured 2.4 GW out of a 5.1 GW PV module tender from Yalong River Hydropower Development Co., Ltd. This includes an 808 MW contribution to the SuoRong project, part of China's Yalong River Integrated Hydro-Wind-Solar Base, which is among nine major national clean energy hubs with a planned capacity exceeding 80 GW.
- 2024 – Tata Power commenced commercial operations at its 4.3 GW solar cell and module

manufacturing facility in Tirunelveli, Tamil Nadu. Managed by TP Solar Ltd., a subsidiary of Tata Power Renewable Energy Ltd., this is India's largest integrated solar manufacturing site. The plant uses advanced TOPCon and Mono PERC technologies to boost solar cell efficiency, meeting growing domestic demand for high-quality, locally manufactured solar components while reducing reliance on imports.

Key Player Strategies include:

- Investments in high-efficiency solar cells and modules.
- Partnerships with utilities and governments for mega-projects.
- Vertical integration to control manufacturing and supply chains.
- Expansion into emerging economies with high renewable potential.

Discuss Implications for Your Industry Request Sample Research PDF@

https://www.transparencymarketresearch.com/sample/sample.php?flag=S&rep_id=762

Key Growth Drivers

1. Government Policies and Incentives

Tax credits, feed-in tariffs, subsidies, and renewable portfolio standards (RPS) are accelerating adoption of solar energy.

2. Falling Cost of Solar Technology

The average cost of PV modules has dropped dramatically over the past decade, making installations more affordable for businesses and households.

3. Corporate Sustainability Commitments

Enterprises are increasingly investing in on-site solar systems to meet ESG (Environmental, Social, and Governance) goals.

4. Global Shift Toward Net-Zero Energy

Nations across Europe, Asia, and North America are pushing for renewable adoption to reduce greenhouse gas emissions.

5. Rising Energy Demand & Grid Decentralization

Growing electricity needs, particularly in emerging economies, and the push for decentralized grids are boosting solar PV installations.

Market Restraints & Challenges

- High Initial Investment Costs – Despite falling prices, upfront installation expenses remain significant for some households and small businesses.
- Intermittency of Solar Energy – Solar output depends on weather and daylight, making storage solutions critical.
- Land Availability Issues – Large-scale solar farms require significant land, leading to conflicts in densely populated regions.
- Regulatory Uncertainty – Changes in government policies, tariffs, and subsidy programs can

hinder long-term investments.

- Grid Integration Challenges – Expanding solar capacity requires modernization of transmission and distribution systems.

Market Segmentation

By Installation Type

- Utility-Scale Solar PV – Large projects supplying power to the grid.
- Commercial & Industrial (C&I) Installations – On-site energy generation for enterprises.
- Residential Rooftop Solar – Household installations for energy savings and independence.

By Technology

- Monocrystalline Silicon PV Modules – High efficiency, widely used.
- Polycrystalline Silicon PV Modules – Cost-effective and durable.
- Thin-Film Solar Modules – Lightweight and flexible, gaining traction in niche applications.

By End User

- Utilities
- Commercial Enterprises
- Residential Consumers
- Industrial Facilities

Market Trends & Innovations

1. Energy Storage Integration

Solar-plus-storage solutions are gaining popularity, ensuring reliable power supply even during non-sunlight hours.

2. Floating Solar Farms

Installation of PV panels on lakes, reservoirs, and water bodies is emerging as an efficient solution to land constraints.

3. Digital Monitoring & Smart Grids

IoT-enabled monitoring systems improve performance and optimize maintenance of PV installations.

4. Bifacial Solar Panels

Panels that capture sunlight on both sides are improving efficiency rates significantly.

5. Hybrid Energy Systems

Integration of solar with wind, hydro, or diesel generators is rising in off-grid and remote locations.

Why Invest in This Report?

Key Benefits for Investors, Distributors, and Suppliers

- In-depth market sizing and forecasts up to 2035.

- Insights into policy frameworks driving adoption globally.
- Identification of emerging technologies such as bifacial panels and floating solar.
- Competitive analysis of top industry players and their strategies.
- Opportunities in emerging markets with high growth potential.

Future Outlook

The global solar PV installation market is set to quadruple in value from US\$ 279.4 Bn in 2024 to US\$ 1063.4 Bn by 2035. Growth will be led by utility-scale projects in Asia-Pacific, followed by strong adoption in Europe and North America.

By 2035, the industry will likely witness:

- Mainstream adoption of solar-plus-storage solutions.
- AI-driven predictive maintenance for PV installations.
- Green hydrogen production using solar power.
- Greater participation of oil & gas majors transitioning toward renewables.

To buy this comprehensive market research report, click here to inquire@

https://www.transparencymarketresearch.com/checkout.php?rep_id=762<ype=S

Important FAQs with Answers

Q1. What was the global solar PV installation market size in 2024?

A1. The market was valued at US\$ 279.4 Bn in 2024.

Q2. What is the projected market size by 2035?

A2. The industry is expected to reach US\$ 1063.4 Bn by 2035.

Q3. What is the forecasted CAGR for 2025–2035?

A3. The market is projected to grow at a CAGR of 13.5%.

Q4. Which installation type dominates the market?

A4. Utility-scale solar PV projects hold the largest share, driven by large renewable energy targets.

Q5. Who are the key players in the market?

A5. Major players include First Solar, Canadian Solar, JinkoSolar, Trina Solar, and LONGi Green Energy.

Q6. What trends will shape the future of solar PV installations?

A6. Key trends include floating solar farms, bifacial panels, hybrid systems, and solar-plus-storage integration.

More Trending Research Reports-

- Organic Solar Cell Market - <https://www.transparencymarketresearch.com/organic-solar-cells.html>
- Concentrated Solar Power Market - <https://www.transparencymarketresearch.com/concentrated-solar-power-market.html>
- Floating Solar Panels Market - <https://www.transparencymarketresearch.com/floating-solar-panels-market.html>
- Ultra Efficient Solar Power Market - <https://www.transparencymarketresearch.com/ultra-efficient-solar-power-market.html>
- Solar Photovoltaic Material Market - <https://www.transparencymarketresearch.com/solar-photovoltaic-material-market.html>
- MEA Solar Tracker (Single Axis and Dual Axis) Market - <https://www.transparencymarketresearch.com/mea-solar-tracker-market.html>
- Rooftop Solar PV Market - <https://www.transparencymarketresearch.com/rooftop-solar-pv-market.html>
- Off-Grid Solar Lighting Market - <https://www.transparencymarketresearch.com/off-grid-solar-lighting-market.html>
- Perovskite Solar Cell Market - <https://www.transparencymarketresearch.com/perovskite-solar-cell-market.html>
- Photovoltaics Market - <https://www.transparencymarketresearch.com/photovoltaics-market.html>
- Photovoltaic Noise Barrier Market - <https://www.transparencymarketresearch.com/photovoltaic-noise-barrier-market.html>
- Building-integrated Photovoltaics Market - <https://www.transparencymarketresearch.com/building-integrated-photovoltaics-market.html>
- Building Applied Photovoltaics (BAPV) Market - <https://www.transparencymarketresearch.com/building-applied-photovoltaics-market.html>
- Thermophotovoltaics Market - <https://www.transparencymarketresearch.com/thermophotovoltaics-market.html>

About Us Transparency Market Research

Transparency Market Research, a global market research company registered at Wilmington, Delaware, United States, provides custom research and consulting services. The firm scrutinizes factors shaping the dynamics of demand in various markets. The insights and perspectives on the markets evaluate opportunities in various segments. The opportunities in the segments based on source, application, demographics, sales channel, and end-use are analysed, which will determine growth in the markets over the next decade.

Our exclusive blend of quantitative forecasting and trends analysis provides forward-looking insights for thousands of decision-makers, made possible by experienced teams of Analysts, Researchers, and Consultants. The proprietary data sources and various tools & techniques we

use always reflect the latest trends and information. With a broad research and analysis capability, Transparency Market Research employs rigorous primary and secondary research techniques in all of its business reports.

Contact Us

Transparency Market Research Inc.
CORPORATE HEADQUARTER DOWNTOWN,
1000 N. West Street,
Suite 1200, Wilmington, Delaware 19801 USA
Tel: +1-518-618-1030
USA - Canada Toll Free: 866-552-3453

Atil Chaudhari
Transparency Market Research Inc.
+ +1 518-618-1030

[email us here](#)

Visit us on social media:

[LinkedIn](#)

[YouTube](#)

[X](#)

[Other](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/846074103>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.