

# Solar PV Glass Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

<https://marketpublishers.com/r/SDBFDE8E829DEN.html>

Date: April 2025

Pages: 130

Price: US\$ 4,850.00 (Single User License)

ID: SDBFDE8E829DEN

## Abstracts

The Global Solar PV Glass Market was valued at USD 53.5 billion in 2024 and is estimated to grow at a CAGR of 7.9% to reach USD 112.2 billion by 2034. This upward trajectory reflects the rapidly evolving landscape of renewable energy, where governments and industries worldwide are aggressively shifting toward cleaner energy alternatives. As concerns over climate change deepen and fossil fuel dependence continues to face scrutiny, solar energy is emerging as one of the most viable solutions for long-term sustainability. Solar PV glass is a key enabler in this transition, serving as a critical component in solar panel construction and energy conversion efficiency. With nations implementing aggressive net-zero emission targets and offering financial incentives for clean energy installations, the demand for high-performance solar PV glass is gaining unprecedented momentum.

Moreover, the market is also benefiting from evolving building codes that promote energy efficiency and the integration of solar panels into modern infrastructure, from residential rooftops to commercial glass facades. The role of solar PV glass is becoming increasingly vital as innovation in solar cell technologies creates opportunities for more versatile, aesthetically pleasing, and efficient installations.

The increasing demand for renewable energy sources worldwide is driving the rise in solar panel installations, which, in turn, directly boosts the demand for solar PV glass. The market is primarily driven by advancements in solar technologies and the global commitment to reducing carbon emissions. As solar energy adoption accelerates, the demand for PV glass rises, particularly in regions seeking sustainable energy solutions.

The market is divided into two primary types of solar PV glass: float and patterned. The float solar PV glass market is expected to generate USD 62 billion by 2034. This growth

is fueled by the need for energy solutions in areas with limited space, as float glass is suited for both land-based and aquatic environments. Its ability to withstand harsh environmental conditions, especially water-related corrosion, and its durability in varying water bodies make it an appealing choice for sustainable energy projects.

The Solar PV Glass Market is also segmented by end-use into crystalline silicon, amorphous silicon, and thin film. The amorphous silicon segment held a 76.6% share in 2024. Its lightweight, flexible design and cost-effective manufacturing processes make it ideal for urban and architectural applications, such as building facades and rooftops. Amorphous silicon's ability to perform well in low-light conditions has also boosted its adoption, particularly in areas with limited sunlight or space.

U.S. Solar PV Glass Market generated USD 3.5 billion in 2024, driven by technological advancements, government incentives, and a growing focus on renewable energy. The decline in solar panel costs and the expansion of federal and state incentives further support this growth. Additionally, innovations in PV glass technologies, including anti-reflective coatings and low-iron glass, are expected to enhance performance and increase adoption.

Key players in the global solar PV glass market include Borosil, Asahi Glass, Flat Glass Group, Guangdong Golden Glass Technologies, Guardian Industries, Hecker Glastechnik, Jin Jing Group, Interfloat Corporation, Nippon Sheet Glass, Saint Gobain, Vidur Glass, Sisecam Group, Onyx Solar Energy, Sunarc Technology, and Xinyi Solar Holdings. To strengthen their market presence, companies in the solar PV glass sector are focusing on innovation and product differentiation. They are investing heavily in research and development to introduce advanced technologies like anti-reflective coatings, low-iron glass, and smart glass that can optimize energy collection or reduce heat absorption. Expanding partnerships and collaborations with solar panel manufacturers is another key strategy to enhance distribution channels.

## Contents

### **CHAPTER 1 METHODOLOGY & SCOPE**

- 1.1 Research Design
- 1.2 Base Estimates & Calculations
- 1.3 Forecast Calculation
- 1.4 Primary Research & Validation
  - 1.4.1 Primary Sources
  - 1.4.2 Data Mining Sources
- 1.5 Market definitions

### **CHAPTER 2 EXECUTIVE SUMMARY**

- 2.1 Industry synopsis, 2021 - 2034

### **CHAPTER 3 INDUSTRY INSIGHTS**

- 3.1 Industry ecosystem
- 3.2 Regulatory landscape
- 3.3 Industry impact forces
  - 3.3.1 Growth drivers
  - 3.3.2 Industry pitfalls & challenges
- 3.4 Growth potential analysis
- 3.5 Porter's analysis
  - 3.5.1 Bargaining power of suppliers
  - 3.5.2 Bargaining power of buyers
  - 3.5.3 Threat of new entrants
  - 3.5.4 Threat of substitutes
- 3.6 PESTEL analysis

### **CHAPTER 4 COMPETITIVE LANDSCAPE, 2024**

- 4.1 Introduction
- 4.2 Strategic dashboard
- 4.3 Innovation & sustainability landscape

### **CHAPTER 5 MARKET SIZE AND FORECAST, BY TECHNOLOGY, 2021 - 2034 (USD MILLION & MILLION METERS SQUARE)**

- 5.1 Key trends
- 5.2 Float
- 5.3 Pattern

## **CHAPTER 6 MARKET SIZE AND FORECAST, BY PRODUCT, 2021 - 2034 (USD MILLION & MILLION METERS SQUARE)**

- 6.1 Key trends
- 6.2 Annealed
- 6.3 Tempered/Toughened

## **CHAPTER 7 MARKET SIZE AND FORECAST, BY END USE, 2021 - 2034 (USD MILLION & MILLION METERS SQUARE)**

- 7.1 Key trends
- 7.2 Crystalline silicon module
- 7.3 Amorphous Silicon/CdTe module
- 7.4 Thin Film CIS/CIGS module

## **CHAPTER 8 MARKET SIZE AND FORECAST, BY REGION, 2021 - 2034 (USD MILLION & MILLION METERS SQUARE)**

- 8.1 Key trends
- 8.2 North America
  - 8.2.1 U.S.
  - 8.2.2 Canada
  - 8.2.3 Mexico
- 8.3 Europe
  - 8.3.1 UK
  - 8.3.2 France
  - 8.3.3 Netherland
  - 8.3.4 Italy
  - 8.3.5 Germany
  - 8.3.6 Sweden
- 8.4 Asia Pacific
  - 8.4.1 China
  - 8.4.2 Australia
  - 8.4.3 India

- 8.4.4 Japan
- 8.4.5 South Korea
- 8.5 Middle East
  - 8.5.1 Israel
  - 8.5.2 Saudi Arabia
  - 8.5.3 UAE
  - 8.5.4 Jordan
- 8.6 Africa
  - 8.6.1 South Africa
  - 8.6.2 Egypt
- 8.7 Latin America
  - 8.7.1 Brazil
  - 8.7.2 Chile

## **CHAPTER 9 COMPANY PROFILES**

- 9.1 Canadian Solar
- 9.2 EMMVEE SOLAR
- 9.3 Hanwha Group
- 9.4 Indosolar
- 9.5 JA Solar Technology
- 9.6 JinkoSolar
- 9.7 LONGi
- 9.8 Motech Industries
- 9.9 REC Solar Holdings
- 9.10 RENESOLA
- 9.11 Risen Energy
- 9.12 Shunfeng International Clean Energy
- 9.13 SunPower Corporation
- 9.14 Trina Solar
- 9.15 Vikram Solar
- 9.16 Yingli Solar

## I would like to order

Product name: Solar PV Glass Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

Product link: <https://marketpublishers.com/r/SDBFDE8E829DEN.html>

Price: US\$ 4,850.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/SDBFDE8E829DEN.html>