

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

https://marketpublishers.com/r/FF8F85E34AF0EN.html

Date: February 2025

Pages: 120

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

ID: FF8F85E34AF0EN

Abstracts

The Global Floating Solar PV Market was valued at USD 7.7 billion in 2024 and is set to grow at a CAGR of 1.5% from 2025 to 2034. The increasing deployment of solar PV systems on reservoirs linked to hydropower plants, along with innovations in materials, design, and mooring technology, is driving broader adoption. These advancements enhance the durability and stability of floating structures, making them more efficient and cost-effective. The ability to minimize water evaporation and improve panel efficiency through cooling is a key driver, particularly in high-temperature and water-scarce regions such as the Middle East and Africa.

Additionally, expanding installations in island nations and coastal areas with limited land resources are strengthening market growth. The establishment of regulatory frameworks, pilot projects, and government policies supporting floating PV adoption is further accelerating the industry's expansion. The lower environmental impact, reduced greenhouse gas emissions, and higher energy yield per panel make floating solar an attractive renewable energy solution. These systems are primarily deployed on underutilized water bodies, including reservoirs, dams, and lakes, which enhances their viability as a sustainable power source.

By capacity, the market is categorized into 5 MW, 5-15 MW, and >15 MW. It was valued at USD 5.4 billion in 2022, USD 7.6 billion in 2023, and USD 7.7 billion in 2024. The >15 MW segment is forecast to surpass USD 4 billion by 2034, supported by technological advancements, large-scale project investments, and favorable policies. Countries such as China, India, and South Korea are expanding their electricity generation capacity, increasing demand for extensive floating PV installations. The 5 MW segment is expected to experience steady growth, driven by the rising need for decentralized energy generation, shifting focus toward renewables, and land constraints. These



smaller-scale projects appeal to municipalities, local utilities, and private developers due to their lower capital requirements. Additionally, the adoption of projects in the >5 MW to 15 MW range is expanding as technology improves, particularly in regions with abundant water resources but limited land availability.

The market is further segmented by product into tracking and stationary floating solar PV systems. The stationary segment accounted for over 82% of revenue in 2024, bolstered by a favorable regulatory environment that supports its adoption. Meanwhile, the tracking segment is projected to grow at a CAGR of 5.5% through 2032, as the integration of tracking technology enhances energy generation efficiency. The rising adoption of tracking systems, particularly in regions with high solar demand and land limitations, is boosting market expansion. Hybrid floating PV systems incorporating solar tracking are being developed, improving performance by automatically adjusting panel angles for optimal sunlight exposure.

In the United States, the floating solar PV market recorded USD 10 million in 2022, USD 14 million in 2023, and USD 16 million in 2024. North America accounted for 0.3% of the global market share in 2024, as increasing interest in onshore floating technology, land conservation, and higher energy efficiency contributes to market growth.



Contents

CHAPTER 1 METHODOLOGY & SCOPE

- 1.1 Research Design
- 1.2 Base estimates & calculations
- 1.3 Forecast model
- 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 360° synopsis, 2021 – 2034

CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem
- 3.2 Regulatory landscape
- 3.3 Major floating solar PV projects
 - 3.3.1 Operational
 - 3.3.2 Upcoming
- 3.4 Industry impact forces
 - 3.4.1 Growth drivers
 - 3.4.2 Industry pitfalls & challenges
- 3.5 Growth potential analysis
- 3.6 Price trend analysis
- 3.7 Porter's analysis
 - 3.7.1 Bargaining power of suppliers
 - 3.7.2 Bargaining power of buyers
 - 3.7.3 Threat of new entrants
 - 3.7.4 Threat of substitutes
- 3.8 PESTEL analysis

CHAPTER 4 COMPETITIVE LANDSCAPE, 2024

- 4.1 Introduction
- 4.2 Strategic dashboard



4.3 Innovation & technology landscape

CHAPTER 5 MARKET SIZE AND FORECAST, BY CAPACITY, 2021 – 2034 (USD MILLION & MW)

5.1 Key trends

5.2 15 MW

CHAPTER 6 MARKET SIZE AND FORECAST, BY PRODUCT, 2021 – 2034 (USD MILLION & MW)

- 6.1 Key trends
- 6.2 Stationary
- 6.3 Tracking

CHAPTER 7 MARKET SIZE AND FORECAST, BY REGION, 2021 – 2034 (USD MILLION & MW)

- 7.1 Key trends
- 7.2 North America
 - 7.2.1 U.S.
 - 7.2.2 Canada
- 7.3 Europe
 - 7.3.1 Germany
 - 7.3.2 France
 - 7.3.3 Netherlands
 - 7.3.4 Italy
 - **7.3.5** Norway
- 7.4 Asia Pacific
 - 7.4.1 China
 - 7.4.2 Japan
 - 7.4.3 South Korea
 - 7.4.4 India
- 7.4.5 Indonesia
- 7.5 Middle East & Africa
 - 7.5.1 Morocco
 - 7.5.2 UAE
- 7.6 Latin America
 - 7.6.1 Brazil



7.6.2 Laos

CHAPTER 8 COMPANY PROFILES

- 8.1 China Three Gorges New Energy
- 8.2 Ciel & Terre International
- 8.3 Eni Energy Solutions
- 8.4 FOST
- 8.5 Isifloating
- 8.6 Kyocera Corporation
- 8.7 Longi Solar
- 8.8 Ocean Sun AS
- 8.9 SolarDuck
- 8.10 SolarisFloat
- 8.11 Sungrow Group
- 8.12 Swimsol
- 8.13 Yingli Solar
- 8.14 ZIMMERMANN PV-Floating B.V.



I would like to order

Product name: Floating Solar PV Market Opportunity, Growth Drivers, Industry Trend Analysis, and

Forecast 2025-2034

Product link: https://marketpublishers.com/r/FF8F85E34AF0EN.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

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/FF8F85E34AF0EN.html