

Ultra-Thin Solar PV Backsheet Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 – 2032

<https://marketpublishers.com/r/U6BAF9D23FDDEN.html>

Date: October 2024

Pages: 65

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

ID: U6BAF9D23FDDEN

Abstracts

The Global Ultra-Thin Solar PV Backsheet Market, valued at USD 548.9 million in 2023, is projected to expand at a CAGR of 1.7% from 2024 to 2032. Ultra-thin solar PV backsheets are protective layers placed on the backside of photovoltaic solar modules, typically measuring less than 100 micrometers in thickness. These backsheets provide essential functions, such as electrical insulation, environmental protection, and improving the durability and efficiency of solar panels. One of the key drivers of market growth is the increasing use of ultra-thin backsheets, which require fewer raw materials while maintaining performance. This not only reduces production costs for manufacturers but also contributes to lower overall module prices, making solar energy systems more affordable for end consumers.

Whether for residential, commercial, or utility-scale installations, the demand for cost-effective and high-performance solar products is contributing to the market expansion. Additionally, there is growing interest in backsheets with improved thermal management and electrical insulation properties, enhancing the overall efficiency of solar PV modules. When segmented by material, the fluoride-based backsheets are expected to generate over USD 300 million by 2032. These materials offer superior protection against UV radiation, moisture, and chemical exposure, helping solar modules endure harsh weather conditions without performance degradation. The adoption of long-lasting materials is crucial for the long-term reliability and efficiency of solar panels, particularly in ultra-thin designs, which further supports market growth.

By product type, the PEN segment is anticipated to grow at a CAGR of over 2% through 2032. PEN offers exceptional thermal stability, reducing the risk of thermal damage, making it ideal for use in high-temperature environments. The demand for products that

provide strong UV resistance, moisture, and gas barrier properties is increasing as they effectively protect solar cells from environmental exposure. Additionally, PEN's lightweight nature makes transportation and installation more efficient, further driving its adoption. In the Asia Pacific region, the ultra-thin solar PV backsheet market is set to exceed USD 250 million by 2032, driven by rising solar energy installations and advancements in technology. The U.S. market is also seeing growth due to the increasing number of solar installations and a focus on sustainability, with consumers and developers prioritizing high-performance, eco-friendly products.

Contents

Report Content

CHAPTER 1 METHODOLOGY & SCOPE

- 1.1 Market definitions
- 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 360° synopsis, 2021 – 2032

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 & technology landscape

CHAPTER 5 MARKET SIZE AND FORECAST, BY MATERIAL, 2021 – 2032 (USD MILLION & MILLION SQUARE FOOT)

- 5.1 Key trends
- 5.2 Fluoride
- 5.3 Non fluoride

CHAPTER 6 MARKET SIZE AND FORECAST, BY PRODUCT, 2021 – 2032 (USD MILLION & MILLION SQUARE FOOT)

- 6.1 Key trends
- 6.2 TPT-Primed
- 6.3 TPE
- 6.4 PET
- 6.5 PVDF
- 6.6 PEN
- 6.7 Others

CHAPTER 7 MARKET SIZE AND FORECAST, BY REGION, 2021 – 2032 (USD MILLION & MILLION SQUARE FOOT)

- 7.1 Key trends
- 7.2 North America
 - 7.2.1 U.S.
 - 7.2.2 Canada
 - 7.2.3 Mexico
- 7.3 Europe
 - 7.3.1 Germany
 - 7.3.2 Spain
 - 7.3.3 Netherlands
 - 7.3.4 Poland
 - 7.3.5 France
- 7.4 Asia Pacific
 - 7.4.1 China
 - 7.4.2 Australia
 - 7.4.3 India
 - 7.4.4 Japan
- 7.5 Middle East
 - 7.5.1 Israel

7.5.2 Saudi Arabia

7.5.3 UAE

7.5.4 Turkey

7.6 Africa

7.6.1 South Africa

7.6.2 Egypt

7.6.3 Algeria

7.7 Latin America

7.7.1 Brazil

7.7.2 Chile

7.7.3 Argentina

CHAPTER 8 COMPANY PROFILES

8.1 3M

8.2 Astenik Solar

8.3 Cybrid Technologies

8.4 Coveme

8.5 DUNMORE

8.6 Endurans Solar

8.7 Krempel GmbH

8.8 RenewSys India

8.9 SILFAB SOLAR

8.10 Targray

I would like to order

Product name: Ultra-Thin Solar PV Backsheet Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 – 2032

Product link: <https://marketpublishers.com/r/U6BAF9D23FDDEN.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/U6BAF9D23FDDEN.html>