

Global Thin-film Solar Cell Market Size, Manufacturers, Growth Analysis Industry Forecast to 2030

https://marketpublishers.com/r/GFA7EE1270E0EN.html

Date: April 2024

Pages: 193

Price: US\$ 4,250.00 (Single User License)

ID: GFA7EE1270E0EN

Abstracts

Summary

Thin film solar cells refer to the fact that these types of solar cells use a much thinner level of photovoltaic material than mono-crystalline or multi-crystalline solar cells. The thin-film solar cells are made by depositing one or more thin layers, or thin film (TF) of photovoltaic material on a substrate, such as glass, plastic or metal. Thin-film solar cells are commercially used in several technologies, including cadmium telluride (CdTe), copper indium gallium diselenide (CIGS), and amorphous thin-film silicon (a-Si, TF-Si)

According to APO Research, The global Thin-film Solar Cell market is projected to grow from US\$ million in 2024 to US\$ million by 2030, at a Compound Annual Growth Rate (CAGR) of % during the forecast period.

North American market for Thin-film Solar Cell is estimated to increase from \$ million in 2024 to reach \$ million by 2030, at a CAGR of % during the forecast period of 2025 through 2030.

Asia-Pacific market for Thin-film Solar Cell is estimated to increase from \$ million in 2024 to reach \$ million by 2030, at a CAGR of % during the forecast period of 2025 through 2030.

The China market for Thin-film Solar Cell is estimated to increase from \$ million in 2024 to reach \$ million by 2030, at a CAGR of % during the forecast period of 2025 through 2030.



Europe market for Thin-film Solar Cell is estimated to increase from \$ million in 2024 to reach \$ million by 2030, at a CAGR of % during the forecast period of 2025 through 2030.

The major global manufacturers of Thin-film Solar Cell include First Solar, Solar Frontier, Sharp Thin Film, MiaSole, NexPower, Stion, Calyxo, Kaneka Solartech and Bangkok Solar, etc. In 2023, the world's top three vendors accounted for approximately % of the revenue.

This report presents an overview of global market for Thin-film Solar Cell, sales, revenue and price. Analyses of the global market trends, with historic market revenue or sales data for 2019 - 2023, estimates for 2024, and projections of CAGR through 2030.

This report researches the key producers of Thin-film Solar Cell, also provides the sales of main regions and countries. Of the upcoming market potential for Thin-film Solar Cell, and key regions or countries of focus to forecast this market into various segments and sub-segments. Country specific data and market value analysis for the U.S., Canada, Mexico, Brazil, China, Japan, South Korea, Southeast Asia, India, Germany, the U.K., Italy, Middle East, Africa, and Other Countries.

This report focuses on the Thin-film Solar Cell sales, revenue, market share and industry ranking of main manufacturers, data from 2019 to 2024. Identification of the major stakeholders in the global Thin-film Solar Cell market, and analysis of their competitive landscape and market positioning based on recent developments and segmental revenues. This report will help stakeholders to understand the competitive landscape and gain more insights and position their businesses and market strategies in a better way.

This report analyzes the segments data by Type and by Application, sales, revenue, and price, from 2019 to 2030. Evaluation and forecast the market size for Thin-film Solar Cell sales, projected growth trends, production technology, application and enduser industry.

Thin-film Solar Cell segment by Company

First Solar

Solar Frontier



Sharp Thin Film

MiaSole		
NexPower		
Stion		
Calyxo		
Kaneka Solartech		
Bangkok Solar		
Wurth Solar		
Global Solar Energy		
Hanergy		
ENN Energy Holdings		
Topray Solar		
This Charles Calles are said a Trans		
Thin-film Solar Cell segment by Type		
CdTe Thin-Film Solar Cells		
CIS/CIGS Thin-Film Solar Cells		
A-Si Thin-Film Solar Cells		
Thin-film Solar Cell segment by Application		

Residential Application

Commercial Application



Utility Application

Thin-film	Solar Cel	I segment by	/ Region

, ,,
nin-film Solar Cell segment by Region
North America
U.S.
Canada
Europe
Germany
France
U.K.
Italy
Russia
Asia-Pacific
China
Japan
South Korea
India
Australia
China Taiwan

Indonesia



and regions.

Thailand	
Malaysia	
Latin America	
Mexico	
Brazil	
Argentina	
Middle East & Africa	
Turkey	
Saudi Arabia	
UAE	
Study Objectives	
1. To analyze and research the global Thin-film Solar Cell status and future forecast involving, sales, revenue, growth rate (CAGR), market share, historical and forecast	
2. To present the key manufacturers, sales, revenue, market share, and Recent Developments.	
3. To split the breakdown data by regions, type, manufacturers, and Application.	
4. To analyze the global and key regions Thin-film Solar Cell market potential and	

5. To identify Thin-film Solar Cell significant trends, drivers, influence factors in global

6. To analyze Thin-film Solar Cell competitive developments such as expansions,

advantage, opportunity and challenge, restraints, and risks.



agreements, new product launches, and acquisitions in the market.

Reasons to Buy This Report

- 1. This report will help the readers to understand the competition within the industries and strategies for the competitive environment to enhance the potential profit. The report also focuses on the competitive landscape of the global Thin-film Solar Cell market, and introduces in detail the market share, industry ranking, competitor ecosystem, market performance, new product development, operation situation, expansion, and acquisition. etc. of the main players, which helps the readers to identify the main competitors and deeply understand the competition pattern of the market.
- 2. This report will help stakeholders to understand the global industry status and trends of Thin-film Solar Cell and provides them with information on key market drivers, restraints, challenges, and opportunities.
- 3. This report will help stakeholders to understand competitors better and gain more insights to strengthen their position in their businesses. The competitive landscape section includes the market share and rank (in sales and value), competitor ecosystem, new product development, expansion, and acquisition.
- 4. This report stays updated with novel technology integration, features, and the latest developments in the market.
- 5. This report helps stakeholders to gain insights into which regions to target globally.
- 6. This report helps stakeholders to gain insights into the end-user perception concerning the adoption of Thin-film Solar Cell.
- 7. This report helps stakeholders to identify some of the key players in the market and understand their valuable contribution.

Chapter Outline

Chapter 1: Provides an overview of the Thin-film Solar Cell market, including product definition, global market growth prospects, sales value, sales volume, and average price forecasts (2019-2030).

Chapter 2: Analysis key trends, drivers, challenges, and opportunities within the global



Thin-film Solar Cell industry.

Chapter 3: Detailed analysis of Thin-film Solar Cell manufacturers competitive landscape, price, sales and revenue market share, latest development plan, merger, and acquisition information, etc.

Chapter 4: Provides the analysis of various market segments by type, covering the market size and development potential of each market segment, to help readers find the blue ocean market in different market segments.

Chapter 5: Provides the analysis of various market segments by application, covering the market size and development potential of each market segment, to help readers find the blue ocean market in different downstream markets.

Chapter 6: Sales and value of Thin-film Solar Cell in regional level. It provides a quantitative analysis of the market size and development potential of each region and introduces the market development, future development prospects, market space, and market size of each country in the world.

Chapter 7: Sales and value of Thin-film Solar Cell in country level. It provides sigmate data by type, and by application for each country/region.

Chapter 8: Provides profiles of key players, introducing the basic situation of the main companies in the market in detail, including product sales, revenue, price, gross margin, product introduction, recent development, etc.

Chapter 9: Analysis of industrial chain, including the upstream and downstream of the industry.

Chapter 10: Concluding Insights.



Contents

1 MARKET OVERVIEW

- 1.1 Product Definition
- 1.2 Global Market Growth Prospects
 - 1.2.1 Global Thin-film Solar Cell Sales Value (2019-2030)
 - 1.2.2 Global Thin-film Solar Cell Sales Volume (2019-2030)
- 1.2.3 Global Thin-film Solar Cell Sales Average Price (2019-2030)
- 1.3 Assumptions and Limitations
- 1.4 Study Goals and Objectives

2 THIN-FILM SOLAR CELL MARKET DYNAMICS

- 2.1 Thin-film Solar Cell Industry Trends
- 2.2 Thin-film Solar Cell Industry Drivers
- 2.3 Thin-film Solar Cell Industry Opportunities and Challenges
- 2.4 Thin-film Solar Cell Industry Restraints

3 THIN-FILM SOLAR CELL MARKET BY COMPANY

- 3.1 Global Thin-film Solar Cell Company Revenue Ranking in 2023
- 3.2 Global Thin-film Solar Cell Revenue by Company (2019-2024)
- 3.3 Global Thin-film Solar Cell Sales Volume by Company (2019-2024)
- 3.4 Global Thin-film Solar Cell Average Price by Company (2019-2024)
- 3.5 Global Thin-film Solar Cell Company Ranking, 2022 VS 2023 VS 2024
- 3.6 Global Thin-film Solar Cell Company Manufacturing Base & Headquarters
- 3.7 Global Thin-film Solar Cell Company, Product Type & Application
- 3.8 Global Thin-film Solar Cell Company Commercialization Time
- 3.9 Market Competitive Analysis
 - 3.9.1 Global Thin-film Solar Cell Market CR5 and HHI
 - 3.9.2 Global Top 5 and 10 Company Market Share by Revenue in 2023
 - 3.9.3 2023 Thin-film Solar Cell Tier 1, Tier 2, and Tier
- 3.10 Mergers & Acquisitions, Expansion

4 THIN-FILM SOLAR CELL MARKET BY TYPE

- 4.1 Thin-film Solar Cell Type Introduction
 - 4.1.1 CdTe Thin-Film Solar Cells



- 4.1.2 CIS/CIGS Thin-Film Solar Cells
- 4.1.3 A-Si Thin-Film Solar Cells
- 4.2 Global Thin-film Solar Cell Sales Volume by Type
 - 4.2.1 Global Thin-film Solar Cell Sales Volume by Type (2019 VS 2023 VS 2030)
 - 4.2.2 Global Thin-film Solar Cell Sales Volume by Type (2019-2030)
 - 4.2.3 Global Thin-film Solar Cell Sales Volume Share by Type (2019-2030)
- 4.3 Global Thin-film Solar Cell Sales Value by Type
 - 4.3.1 Global Thin-film Solar Cell Sales Value by Type (2019 VS 2023 VS 2030)
 - 4.3.2 Global Thin-film Solar Cell Sales Value by Type (2019-2030)
 - 4.3.3 Global Thin-film Solar Cell Sales Value Share by Type (2019-2030)

5 THIN-FILM SOLAR CELL MARKET BY APPLICATION

- 5.1 Thin-film Solar Cell Application Introduction
 - 5.1.1 Residential Application
 - 5.1.2 Commercial Application
 - 5.1.3 Utility Application
- 5.2 Global Thin-film Solar Cell Sales Volume by Application
- 5.2.1 Global Thin-film Solar Cell Sales Volume by Application (2019 VS 2023 VS 2030)
 - 5.2.2 Global Thin-film Solar Cell Sales Volume by Application (2019-2030)
 - 5.2.3 Global Thin-film Solar Cell Sales Volume Share by Application (2019-2030)
- 5.3 Global Thin-film Solar Cell Sales Value by Application
 - 5.3.1 Global Thin-film Solar Cell Sales Value by Application (2019 VS 2023 VS 2030)
 - 5.3.2 Global Thin-film Solar Cell Sales Value by Application (2019-2030)
 - 5.3.3 Global Thin-film Solar Cell Sales Value Share by Application (2019-2030)

6 THIN-FILM SOLAR CELL MARKET BY REGION

- 6.1 Global Thin-film Solar Cell Sales by Region: 2019 VS 2023 VS 2030
- 6.2 Global Thin-film Solar Cell Sales by Region (2019-2030)
- 6.2.1 Global Thin-film Solar Cell Sales by Region: 2019-2024
- 6.2.2 Global Thin-film Solar Cell Sales by Region (2025-2030)
- 6.3 Global Thin-film Solar Cell Sales Value by Region: 2019 VS 2023 VS 2030
- 6.4 Global Thin-film Solar Cell Sales Value by Region (2019-2030)
 - 6.4.1 Global Thin-film Solar Cell Sales Value by Region: 2019-2024
 - 6.4.2 Global Thin-film Solar Cell Sales Value by Region (2025-2030)
- 6.5 Global Thin-film Solar Cell Market Price Analysis by Region (2019-2024)
- 6.6 North America



- 6.6.1 North America Thin-film Solar Cell Sales Value (2019-2030)
- 6.6.2 North America Thin-film Solar Cell Sales Value Share by Country, 2023 VS 20306.7 Europe
 - 6.7.1 Europe Thin-film Solar Cell Sales Value (2019-2030)
 - 6.7.2 Europe Thin-film Solar Cell Sales Value Share by Country, 2023 VS 2030
- 6.8 Asia-Pacific
 - 6.8.1 Asia-Pacific Thin-film Solar Cell Sales Value (2019-2030)
- 6.8.2 Asia-Pacific Thin-film Solar Cell Sales Value Share by Country, 2023 VS 2030
- 6.9 Latin America
 - 6.9.1 Latin America Thin-film Solar Cell Sales Value (2019-2030)
- 6.9.2 Latin America Thin-film Solar Cell Sales Value Share by Country, 2023 VS 2030
- 6.10 Middle East & Africa
 - 6.10.1 Middle East & Africa Thin-film Solar Cell Sales Value (2019-2030)
- 6.10.2 Middle East & Africa Thin-film Solar Cell Sales Value Share by Country, 2023 VS 2030

7 THIN-FILM SOLAR CELL MARKET BY COUNTRY

- 7.1 Global Thin-film Solar Cell Sales by Country: 2019 VS 2023 VS 2030
- 7.2 Global Thin-film Solar Cell Sales Value by Country: 2019 VS 2023 VS 2030
- 7.3 Global Thin-film Solar Cell Sales by Country (2019-2030)
 - 7.3.1 Global Thin-film Solar Cell Sales by Country (2019-2024)
 - 7.3.2 Global Thin-film Solar Cell Sales by Country (2025-2030)
- 7.4 Global Thin-film Solar Cell Sales Value by Country (2019-2030)
 - 7.4.1 Global Thin-film Solar Cell Sales Value by Country (2019-2024)
 - 7.4.2 Global Thin-film Solar Cell Sales Value by Country (2025-2030)

7.5 USA

- 7.5.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.5.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.5.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

7.6 Canada

- 7.6.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.6.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.6.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

7.7 Germany

- 7.7.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.7.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.7.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

7.8 France



- 7.8.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.8.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.8.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 7.9 U.K.
- 7.9.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.9.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.9.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 7.10 Italy
 - 7.10.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
 - 7.10.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
 - 7.10.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

7.11 Netherlands

- 7.11.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.11.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.11.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

7.12 Nordic Countries

- 7.12.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.12.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.12.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 7.13 China
 - 7.13.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
 - 7.13.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.13.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 7.14 Japan
 - 7.14.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
 - 7.14.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.14.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

7.15 South Korea

- 7.15.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.15.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.15.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

7.16 Southeast Asia

- 7.16.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.16.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.16.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 7.17 India
 - 7.17.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
 - 7.17.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.17.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030



7.18 Australia

- 7.18.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.18.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.18.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

7.19 Mexico

- 7.19.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.19.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.19.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 7.20 Brazil
 - 7.20.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
 - 7.20.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.20.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

7.21 Turkey

- 7.21.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.21.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.21.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

7.22 Saudi Arabia

- 7.22.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
- 7.22.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.22.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 7.23 UAE
 - 7.23.1 Global Thin-film Solar Cell Sales Value Growth Rate (2019-2030)
 - 7.23.2 Global Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030
- 7.23.3 Global Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030

8 COMPANY PROFILES

8.1 First Solar

- 8.1.1 First Solar Comapny Information
- 8.1.2 First Solar Business Overview
- 8.1.3 First Solar Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
- 8.1.4 First Solar Thin-film Solar Cell Product Portfolio
- 8.1.5 First Solar Recent Developments

8.2 Solar Frontier

- 8.2.1 Solar Frontier Comapny Information
- 8.2.2 Solar Frontier Business Overview
- 8.2.3 Solar Frontier Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
- 8.2.4 Solar Frontier Thin-film Solar Cell Product Portfolio
- 8.2.5 Solar Frontier Recent Developments



- 8.3 Sharp Thin Film
 - 8.3.1 Sharp Thin Film Comapny Information
 - 8.3.2 Sharp Thin Film Business Overview
 - 8.3.3 Sharp Thin Film Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
 - 8.3.4 Sharp Thin Film Thin-film Solar Cell Product Portfolio
 - 8.3.5 Sharp Thin Film Recent Developments
- 8.4 MiaSole
 - 8.4.1 MiaSole Comapny Information
 - 8.4.2 MiaSole Business Overview
 - 8.4.3 MiaSole Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
 - 8.4.4 MiaSole Thin-film Solar Cell Product Portfolio
 - 8.4.5 MiaSole Recent Developments
- 8.5 NexPower
 - 8.5.1 NexPower Comapny Information
 - 8.5.2 NexPower Business Overview
 - 8.5.3 NexPower Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
 - 8.5.4 NexPower Thin-film Solar Cell Product Portfolio
 - 8.5.5 NexPower Recent Developments
- 8.6 Stion
 - 8.6.1 Stion Comapny Information
 - 8.6.2 Stion Business Overview
 - 8.6.3 Stion Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
 - 8.6.4 Stion Thin-film Solar Cell Product Portfolio
 - 8.6.5 Stion Recent Developments
- 8.7 Calyxo
 - 8.7.1 Calyxo Comapny Information
 - 8.7.2 Calyxo Business Overview
 - 8.7.3 Calyxo Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
 - 8.7.4 Calyxo Thin-film Solar Cell Product Portfolio
 - 8.7.5 Calyxo Recent Developments
- 8.8 Kaneka Solartech
 - 8.8.1 Kaneka Solartech Comapny Information
 - 8.8.2 Kaneka Solartech Business Overview
- 8.8.3 Kaneka Solartech Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
- 8.8.4 Kaneka Solartech Thin-film Solar Cell Product Portfolio
- 8.8.5 Kaneka Solartech Recent Developments
- 8.9 Bangkok Solar
- 8.9.1 Bangkok Solar Comapny Information



- 8.9.2 Bangkok Solar Business Overview
- 8.9.3 Bangkok Solar Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
- 8.9.4 Bangkok Solar Thin-film Solar Cell Product Portfolio
- 8.9.5 Bangkok Solar Recent Developments
- 8.10 Wurth Solar
 - 8.10.1 Wurth Solar Comapny Information
 - 8.10.2 Wurth Solar Business Overview
 - 8.10.3 Wurth Solar Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
 - 8.10.4 Wurth Solar Thin-film Solar Cell Product Portfolio
 - 8.10.5 Wurth Solar Recent Developments
- 8.11 Global Solar Energy
 - 8.11.1 Global Solar Energy Comapny Information
 - 8.11.2 Global Solar Energy Business Overview
- 8.11.3 Global Solar Energy Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
 - 8.11.4 Global Solar Energy Thin-film Solar Cell Product Portfolio
- 8.11.5 Global Solar Energy Recent Developments
- 8.12 Hanergy
 - 8.12.1 Hanergy Comapny Information
 - 8.12.2 Hanergy Business Overview
 - 8.12.3 Hanergy Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
 - 8.12.4 Hanergy Thin-film Solar Cell Product Portfolio
 - 8.12.5 Hanergy Recent Developments
- 8.13 ENN Energy Holdings
 - 8.13.1 ENN Energy Holdings Comapny Information
 - 8.13.2 ENN Energy Holdings Business Overview
- 8.13.3 ENN Energy Holdings Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
 - 8.13.4 ENN Energy Holdings Thin-film Solar Cell Product Portfolio
 - 8.13.5 ENN Energy Holdings Recent Developments
- 8.14 Topray Solar
 - 8.14.1 Topray Solar Comapny Information
 - 8.14.2 Topray Solar Business Overview
 - 8.14.3 Topray Solar Thin-film Solar Cell Sales, Value and Gross Margin (2019-2024)
 - 8.14.4 Topray Solar Thin-film Solar Cell Product Portfolio
 - 8.14.5 Topray Solar Recent Developments

9 VALUE CHAIN AND SALES CHANNELS ANALYSIS



- 9.1 Thin-film Solar Cell Value Chain Analysis
 - 9.1.1 Thin-film Solar Cell Key Raw Materials
 - 9.1.2 Raw Materials Key Suppliers
 - 9.1.3 Manufacturing Cost Structure
 - 9.1.4 Thin-film Solar Cell Sales Mode & Process
- 9.2 Thin-film Solar Cell Sales Channels Analysis
 - 9.2.1 Direct Comparison with Distribution Share
 - 9.2.2 Thin-film Solar Cell Distributors
 - 9.2.3 Thin-film Solar Cell Customers

10 CONCLUDING INSIGHTS

11 APPENDIX

- 11.1 Reasons for Doing This Study
- 11.2 Research Methodology
- 11.3 Research Process
- 11.4 Authors List of This Report
- 11.5 Data Source
 - 11.5.1 Secondary Sources
 - 11.5.2 Primary Sources



List Of Tables

LIST OF TABLES

- Table 1. Thin-film Solar Cell Industry Trends
- Table 2. Thin-film Solar Cell Industry Drivers
- Table 3. Thin-film Solar Cell Industry Opportunities and Challenges
- Table 4. Thin-film Solar Cell Industry Restraints
- Table 5. Global Thin-film Solar Cell Revenue by Company (US\$ Million) & (2019-2024)
- Table 6. Global Thin-film Solar Cell Revenue Share by Company (2019-2024)
- Table 7. Global Thin-film Solar Cell Sales Volume by Company (MW) & (2019-2024)
- Table 8. Global Thin-film Solar Cell Sales Volume Share by Company (2019-2024)
- Table 9. Global Thin-film Solar Cell Average Price (USD/W) of Company (2019-2024)
- Table 10. Global Thin-film Solar Cell Company Ranking, 2022 VS 2023 VS 2024 & (US\$ Million)
- Table 11. Global Thin-film Solar Cell Key Company Manufacturing Base & Headquarters
- Table 12. Global Thin-film Solar Cell Company, Product Type & Application
- Table 13. Global Thin-film Solar Cell Company Commercialization Time
- Table 14. Global Company Market Concentration Ratio (CR5 and HHI)
- Table 15. Global Thin-film Solar Cell by Company Type (Tier 1, Tier 2, and Tier 3) & (Based on Revenue of 2023)
- Table 16. Mergers & Acquisitions, Expansion
- Table 17. Major Companies of CdTe Thin-Film Solar Cells
- Table 18. Major Companies of CIS/CIGS Thin-Film Solar Cells
- Table 19. Major Companies of A-Si Thin-Film Solar Cells
- Table 20. Global Thin-film Solar Cell Sales Volume by Type 2019 VS 2023 VS 2030 (MW)
- Table 21. Global Thin-film Solar Cell Sales Volume by Type (2019-2024) & (MW)
- Table 22. Global Thin-film Solar Cell Sales Volume by Type (2025-2030) & (MW)
- Table 23. Global Thin-film Solar Cell Sales Volume Share by Type (2019-2024)
- Table 24. Global Thin-film Solar Cell Sales Volume Share by Type (2025-2030)
- Table 25. Global Thin-film Solar Cell Sales Value by Type 2019 VS 2023 VS 2030 (US\$ Million)
- Table 26. Global Thin-film Solar Cell Sales Value by Type (2019-2024) & (US\$ Million)
- Table 27. Global Thin-film Solar Cell Sales Value by Type (2025-2030) & (US\$ Million)
- Table 28. Global Thin-film Solar Cell Sales Value Share by Type (2019-2024)
- Table 29. Global Thin-film Solar Cell Sales Value Share by Type (2025-2030)
- Table 30. Major Companies of Residential Application



- Table 31. Major Companies of Commercial Application
- Table 32. Major Companies of Utility Application
- Table 33. Global Thin-film Solar Cell Sales Volume by Application 2019 VS 2023 VS 2030 (MW)
- Table 34. Global Thin-film Solar Cell Sales Volume by Application (2019-2024) & (MW)
- Table 35. Global Thin-film Solar Cell Sales Volume by Application (2025-2030) & (MW)
- Table 36. Global Thin-film Solar Cell Sales Volume Share by Application (2019-2024)
- Table 37. Global Thin-film Solar Cell Sales Volume Share by Application (2025-2030)
- Table 38. Global Thin-film Solar Cell Sales Value by Application 2019 VS 2023 VS 2030 (US\$ Million)
- Table 39. Global Thin-film Solar Cell Sales Value by Application (2019-2024) & (US\$ Million)
- Table 40. Global Thin-film Solar Cell Sales Value by Application (2025-2030) & (US\$ Million)
- Table 41. Global Thin-film Solar Cell Sales Value Share by Application (2019-2024)
- Table 42. Global Thin-film Solar Cell Sales Value Share by Application (2025-2030)
- Table 43. Global Thin-film Solar Cell Sales by Region: 2019 VS 2023 VS 2030 (MW)
- Table 44. Global Thin-film Solar Cell Sales by Region (2019-2024) & (MW)
- Table 45. Global Thin-film Solar Cell Sales Market Share by Region (2019-2024)
- Table 46. Global Thin-film Solar Cell Sales by Region (2025-2030) & (MW)
- Table 47. Global Thin-film Solar Cell Sales Market Share by Region (2025-2030)
- Table 48. Global Thin-film Solar Cell Sales Value Comparison by Region: 2019 VS 2023 VS 2030 (US\$ Million)
- Table 49. Global Thin-film Solar Cell Sales Value by Region (2019-2024) & (US\$ Million)
- Table 50. Global Thin-film Solar Cell Sales Value Share by Region (2019-2024)
- Table 51. Global Thin-film Solar Cell Sales Value by Region (2025-2030) & (US\$ Million)
- Table 52. Global Thin-film Solar Cell Sales Value Share by Region (2025-2030)
- Table 53. Global Thin-film Solar Cell Market Average Price (USD/W) by Region (2019-2024)
- Table 54. Global Thin-film Solar Cell Market Average Price (USD/W) by Region (2025-2030)
- Table 55. Global Thin-film Solar Cell Sales by Country: 2019 VS 2023 VS 2030 (MW)
- Table 56. Global Thin-film Solar Cell Sales Value by Country: 2019 VS 2023 VS 2030 (US\$ Million)
- Table 57. Global Thin-film Solar Cell Sales by Country (2019-2024) & (MW)
- Table 58. Global Thin-film Solar Cell Sales Market Share by Country (2019-2024)
- Table 59. Global Thin-film Solar Cell Sales by Country (2025-2030) & (MW)



- Table 60. Global Thin-film Solar Cell Sales Market Share by Country (2025-2030)
- Table 61. Global Thin-film Solar Cell Sales Value by Country (2019-2024) & (US\$ Million)
- Table 62. Global Thin-film Solar Cell Sales Value Market Share by Country (2019-2024)
- Table 63. Global Thin-film Solar Cell Sales Value by Country (2025-2030) & (US\$ Million)
- Table 64. Global Thin-film Solar Cell Sales Value Market Share by Country (2025-2030)
- Table 65. First Solar Company Information
- Table 66. First Solar Business Overview
- Table 67. First Solar Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price
- (USD/W) and Gross Margin (2019-2024)
- Table 68. First Solar Thin-film Solar Cell Product Portfolio
- Table 69. First Solar Recent Development
- Table 70. Solar Frontier Company Information
- Table 71. Solar Frontier Business Overview
- Table 72. Solar Frontier Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price
- (USD/W) and Gross Margin (2019-2024)
- Table 73. Solar Frontier Thin-film Solar Cell Product Portfolio
- Table 74. Solar Frontier Recent Development
- Table 75. Sharp Thin Film Company Information
- Table 76. Sharp Thin Film Business Overview
- Table 77. Sharp Thin Film Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price
- (USD/W) and Gross Margin (2019-2024)
- Table 78. Sharp Thin Film Thin-film Solar Cell Product Portfolio
- Table 79. Sharp Thin Film Recent Development
- Table 80. MiaSole Company Information
- Table 81. MiaSole Business Overview
- Table 82. MiaSole Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price (USD/W)
- and Gross Margin (2019-2024)
- Table 83. MiaSole Thin-film Solar Cell Product Portfolio
- Table 84. MiaSole Recent Development
- Table 85. NexPower Company Information
- Table 86. NexPower Business Overview
- Table 87. NexPower Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price
- (USD/W) and Gross Margin (2019-2024)
- Table 88. NexPower Thin-film Solar Cell Product Portfolio
- Table 89. NexPower Recent Development
- Table 90. Stion Company Information
- Table 91. Stion Business Overview



Table 92. Stion Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price (USD/W) and Gross Margin (2019-2024)

Table 93. Stion Thin-film Solar Cell Product Portfolio

Table 94. Stion Recent Development

Table 95. Calyxo Company Information

Table 96. Calyxo Business Overview

Table 97. Calyxo Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price (USD/W) and Gross Margin (2019-2024)

Table 98. Calyxo Thin-film Solar Cell Product Portfolio

Table 99. Calyxo Recent Development

Table 100. Kaneka Solartech Company Information

Table 101. Kaneka Solartech Business Overview

Table 102. Kaneka Solartech Thin-film Solar Cell Sales (MW), Value (US\$ Million),

Price (USD/W) and Gross Margin (2019-2024)

Table 103. Kaneka Solartech Thin-film Solar Cell Product Portfolio

Table 104. Kaneka Solartech Recent Development

Table 105. Bangkok Solar Company Information

Table 106. Bangkok Solar Business Overview

Table 107. Bangkok Solar Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price (USD/W) and Gross Margin (2019-2024)

Table 108. Bangkok Solar Thin-film Solar Cell Product Portfolio

Table 109. Bangkok Solar Recent Development

Table 110. Wurth Solar Company Information

Table 111. Wurth Solar Business Overview

Table 112. Wurth Solar Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price (USD/W) and Gross Margin (2019-2024)

Table 113. Wurth Solar Thin-film Solar Cell Product Portfolio

Table 114. Wurth Solar Recent Development

Table 115. Global Solar Energy Company Information

Table 116. Global Solar Energy Business Overview

Table 117. Global Solar Energy Thin-film Solar Cell Sales (MW), Value (US\$ Million),

Price (USD/W) and Gross Margin (2019-2024)

Table 118. Global Solar Energy Thin-film Solar Cell Product Portfolio

Table 119. Global Solar Energy Recent Development

Table 120. Hanergy Company Information

Table 121. Hanergy Business Overview

Table 122. Hanergy Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price

(USD/W) and Gross Margin (2019-2024)

Table 123. Hanergy Thin-film Solar Cell Product Portfolio



- Table 124. Hanergy Recent Development
- Table 125. ENN Energy Holdings Company Information
- Table 126. ENN Energy Holdings Business Overview
- Table 127. ENN Energy Holdings Thin-film Solar Cell Sales (MW), Value (US\$ Million),
- Price (USD/W) and Gross Margin (2019-2024)
- Table 128. ENN Energy Holdings Thin-film Solar Cell Product Portfolio
- Table 129. ENN Energy Holdings Recent Development
- Table 130. Topray Solar Company Information
- Table 131. Topray Solar Business Overview
- Table 132. Topray Solar Thin-film Solar Cell Sales (MW), Value (US\$ Million), Price
- (USD/W) and Gross Margin (2019-2024)
- Table 133. Topray Solar Thin-film Solar Cell Product Portfolio
- Table 134. Topray Solar Recent Development
- Table 135. Key Raw Materials
- Table 136. Raw Materials Key Suppliers
- Table 137. Thin-film Solar Cell Distributors List
- Table 138. Thin-film Solar Cell Customers List
- Table 139. Research Programs/Design for This Report
- Table 140. Authors List of This Report
- Table 141. Secondary Sources
- Table 142. Primary Sources



List Of Figures

LIST OF FIGURES

- Figure 1. Thin-film Solar Cell Product Picture
- Figure 2. Global Thin-film Solar Cell Sales Value (US\$ Million), 2019 VS 2023 VS 2030
- Figure 3. Global Thin-film Solar Cell Sales Value (2019-2030) & (US\$ Million)
- Figure 4. Global Thin-film Solar Cell Sales (2019-2030) & (MW)
- Figure 5. Global Thin-film Solar Cell Sales Average Price (USD/W) & (2019-2030)
- Figure 6. Global Thin-film Solar Cell Company Revenue Ranking in 2023 (US\$ Million)
- Figure 7. Global Top 5 and 10 Company Market Share by Revenue in 2023 (US\$ Million)
- Figure 8. Company Type (Tier 1, Tier 2, and Tier 3): 2019 VS 2023
- Figure 9. CdTe Thin-Film Solar Cells Picture
- Figure 10. CIS/CIGS Thin-Film Solar Cells Picture
- Figure 11. A-Si Thin-Film Solar Cells Picture
- Figure 12. Global Thin-film Solar Cell Sales Volume by Type (2019 VS 2023 VS 2030) & (MW)
- Figure 13. Global Thin-film Solar Cell Sales Volume Share 2019 VS 2023 VS 2030
- Figure 14. Global Thin-film Solar Cell Sales Volume Share by Type (2019-2030)
- Figure 15. Global Thin-film Solar Cell Sales Value by Type (2019 VS 2023 VS 2030) & (US\$ Million)
- Figure 16. Global Thin-film Solar Cell Sales Value Share 2019 VS 2023 VS 2030
- Figure 17. Global Thin-film Solar Cell Sales Value Share by Type (2019-2030)
- Figure 18. Residential Application Picture
- Figure 19. Commercial Application Picture
- Figure 20. Utility Application Picture
- Figure 21. Global Thin-film Solar Cell Sales Volume by Application (2019 VS 2023 VS 2030) & (MW)
- Figure 22. Global Thin-film Solar Cell Sales Volume Share 2019 VS 2023 VS 2030
- Figure 23. Global Thin-film Solar Cell Sales Volume Share by Application (2019-2030)
- Figure 24. Global Thin-film Solar Cell Sales Value by Application (2019 VS 2023 VS 2030) & (US\$ Million)
- Figure 25. Global Thin-film Solar Cell Sales Value Share 2019 VS 2023 VS 2030
- Figure 26. Global Thin-film Solar Cell Sales Value Share by Application (2019-2030)
- Figure 27. Global Thin-film Solar Cell Sales by Region: 2019 VS 2023 VS 2030 (MW)
- Figure 28. Global Thin-film Solar Cell Sales Market Share by Region: 2019 VS 2023 VS 2030
- Figure 29. Global Thin-film Solar Cell Sales Value Comparison by Region: 2019 VS



- 2023 VS 2030 (US\$ Million)
- Figure 30. Global Thin-film Solar Cell Sales Value Share by Region: 2019 VS 2023 VS 2030
- Figure 31. North America Thin-film Solar Cell Sales Value (2019-2030) & (US\$ Million)
- Figure 32. North America Thin-film Solar Cell Sales Value Share by Country (%), 2023 VS 2030
- Figure 33. Europe Thin-film Solar Cell Sales Value (2019-2030) & (US\$ Million)
- Figure 34. Europe Thin-film Solar Cell Sales Value Share by Country (%), 2023 VS 2030
- Figure 35. Asia-Pacific Thin-film Solar Cell Sales Value (2019-2030) & (US\$ Million)
- Figure 36. Asia-Pacific Thin-film Solar Cell Sales Value Share by Country (%), 2023 VS 2030
- Figure 37. Latin America Thin-film Solar Cell Sales Value (2019-2030) & (US\$ Million)
- Figure 38. Latin America Thin-film Solar Cell Sales Value Share by Country (%), 2023 VS 2030
- Figure 39. Middle East & Africa Thin-film Solar Cell Sales Value (2019-2030) & (US\$ Million)
- Figure 40. Middle East & Africa Thin-film Solar Cell Sales Value Share by Country (%), 2023 VS 2030
- Figure 41. USA Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 42. USA Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)
- Figure 43. USA Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 & (%)
- Figure 44. Canada Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 45. Canada Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)
- Figure 46. Canada Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 & (%)
- Figure 47. Germany Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 48. Germany Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)
- Figure 49. Germany Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 & (%)
- Figure 50. France Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 51. France Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)



- Figure 52. France Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 & (%)
- Figure 53. U.K. Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 54. U.K. Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)
- Figure 55. U.K. Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 & (%)
- Figure 56. Italy Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 57. Italy Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)
- Figure 58. Italy Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 & (%)
- Figure 59. Netherlands Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 60. Netherlands Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)
- Figure 61. Netherlands Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 & (%)
- Figure 62. Nordic Countries Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 63. Nordic Countries Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)
- Figure 64. Nordic Countries Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 & (%)
- Figure 65. China Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 66. China Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)
- Figure 67. China Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 & (%)
- Figure 68. Japan Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 69. Japan Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)
- Figure 70. Japan Thin-film Solar Cell Sales Value Share by Application, 2023 VS 2030 & (%)
- Figure 71. South Korea Thin-film Solar Cell Sales Value Growth Rate (2019-2030) & (US\$ Million)
- Figure 72. South Korea Thin-film Solar Cell Sales Value Share by Type, 2023 VS 2030 & (%)
- Figure 73. South Korea Thin-film Solar Cell Sales Value Share by Application, 2023 VS



2030 & (%)

Figure 74. Southeast Asia Thin-film Solar Cell Sales



I would like to order

Product name: Global Thin-film Solar Cell Market Size, Manufacturers, Growth Analysis Industry

Forecast to 2030

Product link: https://marketpublishers.com/r/GFA7EE1270E0EN.html

Price: US\$ 4,250.00 (Single User License / Electronic Delivery)

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

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/GFA7EE1270E0EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970



