

# Global Thin-film Solar Cell Market Analysis and Forecast 2024-2030

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# **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.

The US & Canada 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.

In terms of production side, this report researches the Thin-film Solar Cell production, growth rate, market share by manufacturers and by region (region level and country level), from 2019 to 2024, and forecast to 2030.

In terms of consumption side, this report focuses on the sales of Thin-film Solar Cell by region (region level and country level), by Company, by Type and by Application. from 2019 to 2024 and forecast to 2030.

This report presents an overview of global market for Thin-film Solar Cell, capacity, output, 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 consumption 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 end-



user industry.

Thin-film Solar Cell segment by Company	Th	in-film	Solar	Cell	seament	bν	Company
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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** 

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 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
	Thailand
	Malaysia
Latin A	America
	Mexico
	Brazil
	Argentina
Middle	East & Africa
	Turkey
	Saudi Arabia
	UAE
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# Study Objectives

- 1. To analyze and research the global status and future forecast, involving, production, value, consumption, growth rate (CAGR), market share, historical and forecast.
- 2. To present the key manufacturers, capacity, production, 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 market potential and advantage, opportunity and challenge, restraints, and risks.
- 5. To identify significant trends, drivers, influence factors in global and regions.
- 6. To analyze competitive developments such as expansions, 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 volume 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: Introduces the report scope of the report, executive summary of different market segments (by type and by application, etc), including the market size of each market segment, future development potential, and so on. It offers a high-level view of the current state of the market and its likely evolution in the short to mid-term, and long term.

Chapter 2: Introduces the market dynamics, latest developments of the market, the driving factors and restrictive factors of the market, the challenges and risks faced by manufacturers in the industry, and the analysis of relevant policies in the industry.

Chapter 3: Thin-film Solar Cell production/output of global and key producers (regions/countries). It provides a quantitative analysis of the production, and development potential of each producer in the next six years.

Chapter 4: Sales (consumption), revenue of Thin-film Solar Cell in global, regional level and country level. It provides a quantitative analysis of the market size and development potential of each region and its main countries and introduces the market development, future development prospects, market space of each country in the world.

Chapter 5: Detailed analysis of Thin-film Solar Cell manufacturers competitive landscape, price, sales, revenue, market share and industry ranking, latest development plan, merger, and acquisition information, etc.

Chapter 6: Provides the analysis of various market segments by type, covering the sales, revenue, average price, and development potential of each market segment, to help readers find the blue ocean market in different market segments.

Chapter 7: Provides the analysis of various market segments by application, covering the sales, revenue, average price, and development potential of each market segment, to help readers find the blue ocean market in different downstream markets.

Chapter 8: Provides profiles of key manufacturers, introducing the basic situation of the main companies in the market in detail, including product descriptions and specifications, Thin-film Solar Cell sales, revenue, price, gross margin, and recent development, etc.

Chapter 9: North America (US & Canada) by type, by application and by country, sales,



and revenue for each segment.

Chapter 10: Europe by type, by application and by country, sales, and revenue for each segment.

Chapter 11: China by type, by application, sales, and revenue for each segment.

Chapter 12: Asia (Excluding China) by type, by application and by region, sales, and revenue for each segment.

Chapter 13: Middle East, Africa, Latin America by type, by application and by country, sales, and revenue for each segment.

Chapter 14: Analysis of industrial chain, sales channel, key raw materials, distributors and customers.

Chapter 15: The main concluding insights of the report.



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