

Global Thin-film Solar Cell Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

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Abstracts

According to our (Global Info Research) latest study, the global Thin-film Solar Cell market size was valued at USD 10280 million in 2023 and is forecast to a readjusted size of USD 19730 million by 2030 with a CAGR of 9.8% during review period.

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)

Now, the leading manufacturers of Thin-film Solar Cells located in the USA, Japan and China, such as First Solar (USA), occupied 50% market share, followed by Solar Frontier (Japan), Sharp Thin Film (Japan) and Hanergy (China), they occupied 18%, 4%, 6% market share, thus the four leading companies hold above 80% market share in the world market. There is a big gap between domestic companies and abroad companies, the major companies include Hanergy, ENN Energy Holdings and Topray Solar in China.

The Global Info Research report includes an overview of the development of the Thin-film Solar Cell industry chain, the market status of Residential Application (CdTe Thin-Film Solar Cells, CIS/CIGS Thin-Film Solar Cells), Commercial Application (CdTe Thin-Film Solar Cells, CIS/CIGS Thin-Film Solar Cells), and key enterprises in developed and developing market, and analysed the cutting-edge technology, patent, hot applications and market trends of Thin-film Solar Cell.

Regionally, the report analyzes the Thin-film Solar Cell markets in key regions. North America and Europe are experiencing steady growth, driven by government initiatives and increasing consumer awareness. Asia-Pacific, particularly China, leads the global Thin-film Solar Cell market, with robust domestic demand, supportive policies, and a strong manufacturing base.

Key Features:

The report presents comprehensive understanding of the Thin-film Solar Cell market. It provides a holistic view of the industry, as well as detailed insights into individual components and stakeholders. The report analysis market dynamics, trends, challenges, and opportunities within the Thin-film Solar Cell industry.

The report involves analyzing the market at a macro level:

Market Sizing and Segmentation: Report collect data on the overall market size, including the sales quantity (K Units), revenue generated, and market share of different by Type (e.g., CdTe Thin-Film Solar Cells, CIS/CIGS Thin-Film Solar Cells).

Industry Analysis: Report analyse the broader industry trends, such as government policies and regulations, technological advancements, consumer preferences, and market dynamics. This analysis helps in understanding the key drivers and challenges influencing the Thin-film Solar Cell market.

Regional Analysis: The report involves examining the Thin-film Solar Cell market at a regional or national level. Report analyses regional factors such as government incentives, infrastructure development, economic conditions, and consumer behaviour to identify variations and opportunities within different markets.

Market Projections: Report covers the gathered data and analysis to make future projections and forecasts for the Thin-film Solar Cell market. This may include estimating market growth rates, predicting market demand, and identifying emerging trends.

The report also involves a more granular approach to Thin-film Solar Cell:

Company Analysis: Report covers individual Thin-film Solar Cell manufacturers, suppliers, and other relevant industry players. This analysis includes studying their

financial performance, market positioning, product portfolios, partnerships, and strategies.

Consumer Analysis: Report covers data on consumer behaviour, preferences, and attitudes towards Thin-film Solar Cell. This may involve surveys, interviews, and analysis of consumer reviews and feedback from different by Application (Residential Application, Commercial Application).

Technology Analysis: Report covers specific technologies relevant to Thin-film Solar Cell. It assesses the current state, advancements, and potential future developments in Thin-film Solar Cell areas.

Competitive Landscape: By analyzing individual companies, suppliers, and consumers, the report presents insights into the competitive landscape of the Thin-film Solar Cell market. This analysis helps understand market share, competitive advantages, and potential areas for differentiation among industry players.

Market Validation: The report involves validating findings and projections through primary research, such as surveys, interviews, and focus groups.

Market Segmentation

Thin-film Solar Cell market is split by Type and by Application. For the period 2019-2030, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value.

Market segment by Type

CdTe Thin-Film Solar Cells

CIS/CIGS Thin-Film Solar Cells

A-Si Thin-Film Solar Cells

Market segment by Application

Residential Application

Commercial Application

Utility Application

Major players covered

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

Market segment by region, regional analysis covers

North America (United States, Canada and Mexico)

Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)

South America (Brazil, Argentina, Colombia, and Rest of South America)

Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe Thin-film Solar Cell product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Thin-film Solar Cell, with price, sales, revenue and global market share of Thin-film Solar Cell from 2019 to 2024.

Chapter 3, the Thin-film Solar Cell competitive situation, sales quantity, revenue and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Thin-film Solar Cell breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2019 to 2030.

Chapter 5 and 6, to segment the sales by Type and application, with sales market share and growth rate by type, application, from 2019 to 2030.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value and market share for key countries in the world, from 2017 to 2023. and Thin-film Solar Cell market forecast, by regions, type and application, with sales and revenue, from 2025 to 2030.

Chapter 12, market dynamics, drivers, restraints, trends and Porters Five Forces analysis.

Chapter 13, the key raw materials and key suppliers, and industry chain of Thin-film Solar Cell.

Chapter 14 and 15, to describe Thin-film Solar Cell sales channel, distributors, customers, research findings and conclusion.

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