

Concentrator Photovoltaic Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Product (Reflector and Refractor), By Application (Utility and Commercial), By Concentration Level (High and Low), By Region, and By Competition, 2018-2028

https://marketpublishers.com/r/C363CD80AF60EN.html

Date: November 2023 Pages: 178 Price: US\$ 4,900.00 (Single User License) ID: C363CD80AF60EN

Abstracts

The Global Concentrator Photovoltaic (CPV) Market is experiencing dynamic growth, driven by technological advancements, increasing demand for efficient solar energy solutions, and supportive government policies. CPV systems, characterized by their ability to concentrate sunlight onto high-efficiency solar cells, offer enhanced energy conversion efficiency, making them increasingly attractive for utility-scale projects and sunbelt regions. High concentration CPV, in particular, dominates the market, leveraging superior efficiency and potential cost reductions. The Asia Pacific region emerges as a key player, with its commitment to renewable energy adoption and robust manufacturing capabilities. Reflectors, a crucial component of CPV technology, contribute significantly to its dominance, optimizing land use and reducing overall costs. As global renewable energy targets intensify, the CPV market continues to evolve as a competitive player in the broader solar energy landscape, offering innovative and scalable solutions to meet the world's growing energy needs sustainably.

Key Market Drivers

High Energy Conversion Efficiency

One of the primary drivers fueling the global concentrator photovoltaic (CPV) market is the technology's inherent ability to achieve higher energy conversion efficiency



compared to traditional flat-plate photovoltaic systems. CPV systems use optical components such as lenses or mirrors to concentrate sunlight onto small, highefficiency solar cells. This concentration enables CPV systems to achieve greater sunlight-to-electricity conversion, particularly in regions with high direct sunlight. As the demand for more efficient and productive solar energy solutions increases, the high energy conversion efficiency of CPV technology positions it as a key driver in the global solar market.

Cost Reduction Potential Through Small Solar Cells

Concentrator photovoltaic systems utilize smaller, more expensive solar cells compared to traditional flat-plate photovoltaics. This design choice has the potential to reduce overall system costs, as the cost of solar cells represents a significant portion of the total expense in a photovoltaic system. By leveraging smaller, higher-efficiency cells, CPV systems can achieve cost savings and enhance the economic viability of solar energy projects. As advancements continue in solar cell technologies and manufacturing processes, the cost reduction potential of concentrator photovoltaics becomes a compelling driver for its adoption globally.

Applicability in Sunbelt Regions

Concentrator photovoltaic systems thrive in sunbelt regions—areas characterized by high direct sunlight and solar irradiance. The technology's effectiveness in such environments positions it as a key driver for global adoption, especially in regions like the Middle East, North Africa, Southern Europe, and Southwestern United States. As these sunbelt regions experience increasing energy demands, the suitability of CPV systems for harnessing solar energy efficiently becomes a driving force behind their implementation. Governments and businesses in these areas are recognizing the value of concentrator photovoltaics in meeting their energy needs while optimizing land use.

Scalability for Utility-Scale Projects

Concentrator photovoltaic technology exhibits scalability, making it well-suited for utilityscale solar projects. Large-scale installations benefit from the concentration of sunlight, allowing for higher energy yields and optimized land use. The scalability of CPV systems aligns with the global trend toward developing utility-scale solar farms that contribute significantly to the renewable energy mix. As the demand for large-scale solar installations rises, concentrator photovoltaics emerge as a driver in the global renewable energy landscape, addressing the need for efficient and scalable solar



solutions.

Increasing Government Support and Policies

Government support and favorable policies play a pivotal role in driving the global concentrator photovoltaic market. Many governments around the world are recognizing the importance of renewable energy sources in mitigating climate change and ensuring energy security. Incentives, subsidies, and regulatory frameworks that encourage the deployment of solar technologies, including concentrator photovoltaics, provide a strong impetus for market growth. As countries strive to meet their renewable energy targets, concentrator photovoltaic systems benefit from supportive policies that enhance their competitiveness and attractiveness to investors.

Key Market Challenges

Cost Competitiveness and Initial Investment

Cost competitiveness remains a significant challenge for the global concentrator photovoltaic market. Although concentrator photovoltaic (CPV) systems offer high efficiency and potential cost savings due to their ability to use smaller, more expensive solar cells, the initial investment is often higher compared to traditional flat-plate photovoltaic systems. The need for precision optics, advanced tracking systems, and high-efficiency solar cells contributes to elevated upfront costs. Achieving cost parity and reducing the levelized cost of electricity (LCOE) are critical challenges for CPV technologies to gain widespread adoption and competitiveness in the solar energy market.

Land Use and Environmental Impact

Land use efficiency is a persistent challenge for concentrator photovoltaic systems. While CPV technology allows for the concentration of sunlight, reducing the required area for solar panels, the optics and tracking systems may require additional space. Balancing the need for efficient land use with environmental considerations is crucial. Large-scale concentrator photovoltaic installations may face opposition or regulatory hurdles due to concerns about habitat disruption, visual impact, and the potential for land use conflicts. Striking a balance between maximizing energy output and minimizing environmental impact remains a complex challenge for the industry.

Reliability and Durability

Concentrator Photovoltaic Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented B...



The reliability and durability of concentrator photovoltaic systems are critical challenges that must be addressed to ensure the long-term success of the technology. The optical components, such as lenses and mirrors, are exposed to environmental factors, including dust, humidity, and temperature variations, which can affect their performance over time. Additionally, the complex tracking systems and high temperatures associated with concentrated sunlight pose challenges in terms of system reliability. Ensuring the robustness and longevity of CPV installations is essential to build confidence among investors, project developers, and end-users.

Limited Applicability in Diverse Environments

Concentrator photovoltaic systems are optimized for regions with high direct sunlight, known as sunbelt regions. However, their effectiveness diminishes in cloudy or diffuse light conditions, limiting their applicability in certain geographic locations. This poses a challenge for the global adoption of CPV technology, as it may not be suitable for areas with frequent cloud cover or low solar irradiance. Adapting concentrator photovoltaics to diverse environmental conditions and expanding their use beyond sunbelt regions is a crucial challenge that requires ongoing research and development efforts.

Market Competition and Perceptions

The concentrator photovoltaic market faces stiff competition from other solar technologies, particularly traditional flat-plate photovoltaics and emerging technologies like perovskite solar cells. Overcoming market competition requires not only addressing cost challenges but also effectively communicating the unique advantages of concentrator photovoltaic systems, such as higher efficiency and potential for reduced land use. Perception challenges, including skepticism about the reliability and durability of CPV technology, further contribute to market competition. Building awareness, trust, and a positive perception among stakeholders are essential aspects of overcoming these challenges and establishing concentrator photovoltaics as a viable and competitive solar energy solution.

Key Market Trends

Technological Advancements and Efficiency Improvements

The global concentrator photovoltaic market is experiencing a significant trend toward continuous technological advancements and efficiency improvements. Researchers and



manufacturers are consistently pushing the boundaries of solar cell technology to enhance the efficiency of concentrator photovoltaic systems. Innovations include improvements in multi-junction solar cells, optical designs, and tracking systems, all aimed at maximizing the conversion of sunlight into electricity. This trend is crucial for making concentrator photovoltaics more competitive in the broader solar energy market, enabling higher energy yields and cost-effectiveness.

Growing Focus on High Concentration Photovoltaics (HCPV)

High Concentration Photovoltaics (HCPV) represent a notable trend within the concentrator photovoltaic market. HCPV systems use optical devices such as lenses or mirrors to focus sunlight onto small, highly efficient solar cells. This concentration allows for the use of more expensive, high-efficiency solar cells, making HCPV systems particularly attractive in regions with high direct sunlight. The growing interest in HCPV is driven by the potential for achieving higher energy yields and a more compact system footprint, addressing challenges related to land use efficiency and reducing the overall cost per watt of electricity generated.

Increased Deployment in Utility-Scale Projects

Concentrator photovoltaic technology is witnessing increased deployment in utility-scale solar projects. The scalability and efficiency of concentrator photovoltaics make them well-suited for large-scale installations, where maximizing energy output and optimizing land use are critical factors. As the technology matures and becomes more cost-competitive, utility-scale projects are adopting concentrator photovoltaics as a viable alternative to traditional flat-plate photovoltaic systems. This trend is reshaping the solar energy landscape, with concentrator photovoltaics contributing to the growth of utility-scale solar farms around the world.

Advancements in Dual-Axis Tracking Systems

Dual-axis tracking systems are integral components of concentrator photovoltaic installations, enabling solar panels to follow the sun's path throughout the day. A notable trend in the market involves advancements in dual-axis tracking technology. Improved tracking systems enhance the overall efficiency of concentrator photovoltaic systems by ensuring optimal alignment with sunlight, thereby maximizing energy capture. This trend addresses the need for precision in solar tracking, especially in regions with variable weather conditions, further optimizing the performance of concentrator photovoltaic installations.



Increasing Adoption in Sunbelt Regions

Concentrator photovoltaic technology is experiencing a growing trend of adoption in sunbelt regions—areas with high direct sunlight and solar irradiance. Sunbelt regions, including parts of the Middle East, North Africa, Southern Europe, and Southwestern United States, present ideal conditions for concentrator photovoltaic systems. The technology's ability to concentrate sunlight and generate electricity efficiently in high irradiance environments aligns with the energy needs of these regions. As governments and businesses in sunbelt areas seek sustainable energy solutions, the adoption of concentrator photovoltaics is expected to rise, contributing to the global expansion of this solar technology.

Segmental Insights

Product Insights

Reflector segment dominates in the global concentrator photovoltaic market in 2022. Reflectors function by redirecting and focusing sunlight onto the solar cells, maximizing the utilization of incoming solar radiation. These components are diverse in design, ranging from parabolic troughs to Fresnel lenses, each tailored to optimize sunlight concentration in different ways. The versatility and efficiency of reflectors contribute to their dominance in the CPV market, especially in large-scale solar installations where the focus is on achieving high energy yields and cost-effectiveness.

One of the key advantages of reflectors in CPV systems is their ability to concentrate sunlight over a large area, capturing solar energy more effectively than traditional flatplate photovoltaics. This scalability makes reflectors particularly suitable for utility-scale solar projects, addressing the increasing global demand for large, efficient solar farms. As the solar industry experiences a growing trend toward utility-scale installations, reflectors emerge as a driving force behind the expansion and adoption of CPV technology on a broader scale.

Moreover, reflectors contribute to the cost-effectiveness of CPV systems by allowing the use of smaller, high-efficiency solar cells. By concentrating sunlight, reflectors enable the deployment of more expensive, smaller solar cells, reducing the overall cost per watt of electricity generated. This cost-saving potential positions reflectors as a strategic choice for project developers and investors seeking economically viable solutions in the competitive renewable energy market.



The dominance of reflectors in the CPV market is also underscored by their role in maximizing energy output in sunbelt regions. In areas characterized by high direct sunlight and solar irradiance, such as the Asia Pacific and parts of North America, reflectors optimize the capture of solar energy, making CPV technology particularly attractive in these regions. The adaptability of reflectors to diverse environmental conditions enhances their global appeal, contributing to their dominance in the CPV market.

Application Insights

Utility segment dominates in the global concentrator photovoltaic market in 2022. One of the primary drivers of the utility-scale CPV dominance is the scalability and efficiency of the technology in large installations. CPV systems, particularly those designed for utility-scale projects, leverage optical components such as lenses or mirrors to concentrate sunlight onto small, high-efficiency solar cells. This concentration allows for the optimization of land use and the generation of higher energy yields, addressing the increasing global demand for large-scale, efficient solar farms. As countries strive to meet ambitious renewable energy targets, utility-scale CPV installations emerge as a preferred choice for developers and investors seeking to deploy solar energy solutions on a significant scale.

Cost-effectiveness is another crucial factor contributing to the dominance of utility-scale CPV. By concentrating sunlight onto smaller, high-efficiency solar cells, these systems can achieve higher energy conversion efficiency and reduce the overall cost per watt of electricity generated. This cost-saving potential enhances the economic viability of utility-scale CPV projects, making them attractive options for power utilities and project developers looking to optimize return on investment in the competitive renewable energy market.

Moreover, utility-scale CPV projects benefit from their ability to be deployed in sunbelt regions, characterized by high direct sunlight and solar irradiance. The technology's effectiveness in harnessing solar energy efficiently in these regions aligns with the global trend of increasing solar capacity in areas with optimal solar conditions. As a result, utility-scale CPV installations become essential contributors to the energy mix in regions such as the Middle East, North Africa, Southern Europe, and parts of the Asia Pacific.

Government support and policies further bolster the dominance of utility-scale CPV in



the global market. Many governments worldwide incentivize the development of largescale renewable energy projects, offering subsidies, feed-in tariffs, and other favorable regulatory frameworks for utility-scale installations. These supportive measures encourage the deployment of CPV technology in the utility segment, driving investments and fostering the growth of the market.

Regional Insights

Asia Pacific dominates the global concentrator photovoltaic market in 2022. The Asia Pacific region has emerged as a dominant force in the global concentrator photovoltaic (CPV) market, driven by several key factors that underscore the region's prominence in the renewable energy sector. One of the primary contributors to the Asia Pacific's dominance is the region's robust commitment to renewable energy adoption and sustainable development. As countries in the Asia Pacific, particularly China, India, and Japan, grapple with the challenges of rapid industrialization and urbanization, there is a heightened emphasis on clean and efficient energy solutions. Concentrator photovoltaic technology aligns well with this commitment, offering a high-efficiency solar energy solution suitable for the region's diverse environmental conditions.

Furthermore, the Asia Pacific region benefits from its position as a manufacturing hub for solar technologies. The presence of a well-established solar manufacturing supply chain, along with a skilled workforce, contributes to the efficient production and deployment of concentrator photovoltaic systems. This manufacturing advantage not only reduces the overall costs of CPV components but also enhances the competitiveness of the technology in the global market.

Government initiatives and supportive policies are another crucial factor driving the dominance of the Asia Pacific in the concentrator photovoltaic market. Many countries in the region have implemented ambitious renewable energy targets and incentive programs to promote the adoption of clean energy technologies. Subsidies, feed-in tariffs, and favorable regulatory frameworks create a conducive environment for the development and deployment of concentrator photovoltaic projects. Governments in the Asia Pacific recognize the potential of CPV technology in addressing energy demands sustainably, driving substantial investments and fostering a thriving market ecosystem.

Key Market Players

First Solar, Inc.



Azzurro Group

ArcelorMittal Solar

Envision Energy

Huaneng First Solar

eSolar

AREVA Solar

Abengoa Solar

BrightSource Energy

Solar Trust of America

Report Scope:

In this report, the Global Concentrator Photovoltaic Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Concentrator Photovoltaic Market, By Product:

Reflector

Refractor

Concentrator Photovoltaic Market, By Application:

Utility

Commercial

Concentrator Photovoltaic Market, By Concentration Level:

High

Concentrator Photovoltaic Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented B...



Low

Concentrator Photovoltaic Market, By Region:

North America

United States

Canada

Mexico

Europe

Germany

France

United Kingdom

Italy

Spain

South America

Brazil

Argentina

Colombia

Asia-Pacific

China

India



Japan

South Korea

Australia

Middle East & Africa

Saudi Arabia

UAE

South Africa

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Concentrator Photovoltaic Market.

Available Customizations:

Global Concentrator Photovoltaic Market report with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).



Contents

1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
- 1.2.1. Markets Covered
- 1.2.2. Years Considered for Study
- 1.2.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Baseline Methodology
- 2.2. Key Industry Partners
- 2.3. Major Association and Secondary Sources
- 2.4. Forecasting Methodology
- 2.5. Data Triangulation & Validation
- 2.6. Assumptions and Limitations

3. EXECUTIVE SUMMARY

4. IMPACT OF COVID-19 ON GLOBAL CONCENTRATOR PHOTOVOLTAIC MARKET

5. VOICE OF CUSTOMER

6. GLOBAL CONCENTRATOR PHOTOVOLTAIC MARKET OVERVIEW

7. GLOBAL CONCENTRATOR PHOTOVOLTAIC MARKET OUTLOOK

- 7.1. Market Size & Forecast
 - 7.1.1. By Value
- 7.2. Market Share & Forecast
- 7.2.1. By Product (Reflector and Refractor)
- 7.2.2. By Application (Utility and Commercial)



7.2.3. By Concentration Level (High and Low)

7.2.4. By Region (North America, Europe, South America, Middle East & Africa, Asia Pacific)

7.3. By Company (2022)

7.4. Market Map

8. NORTH AMERICA CONCENTRATOR PHOTOVOLTAIC MARKET OUTLOOK

- 8.1. Market Size & Forecast
- 8.1.1. By Value
- 8.2. Market Share & Forecast
- 8.2.1. By Product
- 8.2.2. By Application
- 8.2.3. By Concentration Level
- 8.2.4. By Country
- 8.2.4.1. United States Concentrator Photovoltaic Market Outlook
 - 8.2.4.1.1. Market Size & Forecast
 - 8.2.4.1.1.1. By Value
 - 8.2.4.1.2. Market Share & Forecast
 - 8.2.4.1.2.1. By Product
 - 8.2.4.1.2.2. By Application
 - 8.2.4.1.2.3. By Concentration Level
- 8.2.4.2. Canada Concentrator Photovoltaic Market Outlook
 - 8.2.4.2.1. Market Size & Forecast
 - 8.2.4.2.1.1. By Value
 - 8.2.4.2.2. Market Share & Forecast
 - 8.2.4.2.2.1. By Product
 - 8.2.4.2.2.2. By Application
 - 8.2.4.2.2.3. By Concentration Level
- 8.2.4.3. Mexico Concentrator Photovoltaic Market Outlook
- 8.2.4.3.1. Market Size & Forecast
 - 8.2.4.3.1.1. By Value
- 8.2.4.3.2. Market Share & Forecast
- 8.2.4.3.2.1. By Product
- 8.2.4.3.2.2. By Application
- 8.2.4.3.2.3. By Concentration Level

9. EUROPE CONCENTRATOR PHOTOVOLTAIC MARKET OUTLOOK



- 9.1. Market Size & Forecast
- 9.1.1. By Value
- 9.2. Market Share & Forecast
 - 9.2.1. By Product
 - 9.2.2. By Application
 - 9.2.3. By Concentration Level
 - 9.2.4. By Country
 - 9.2.4.1. Germany Concentrator Photovoltaic Market Outlook
 - 9.2.4.1.1. Market Size & Forecast
 - 9.2.4.1.1.1. By Value
 - 9.2.4.1.2. Market Share & Forecast
 - 9.2.4.1.2.1. By Product
 - 9.2.4.1.2.2. By Application
 - 9.2.4.1.2.3. By Concentration Level
 - 9.2.4.2. France Concentrator Photovoltaic Market Outlook
 - 9.2.4.2.1. Market Size & Forecast
 - 9.2.4.2.1.1. By Value
 - 9.2.4.2.2. Market Share & Forecast
 - 9.2.4.2.2.1. By Product
 - 9.2.4.2.2.2. By Application
 - 9.2.4.2.2.3. By Concentration Level
 - 9.2.4.3. United Kingdom Concentrator Photovoltaic Market Outlook
 - 9.2.4.3.1. Market Size & Forecast
 - 9.2.4.3.1.1. By Value
 - 9.2.4.3.2. Market Share & Forecast
 - 9.2.4.3.2.1. By Product
 - 9.2.4.3.2.2. By Application
 - 9.2.4.3.2.3. By Concentration Level
 - 9.2.4.4. Italy Concentrator Photovoltaic Market Outlook
 - 9.2.4.4.1. Market Size & Forecast
 - 9.2.4.4.1.1. By Value
 - 9.2.4.4.2. Market Share & Forecast
 - 9.2.4.4.2.1. By Product
 - 9.2.4.4.2.2. By Application
 - 9.2.4.4.2.3. By Concentration Level
 - 9.2.4.5. Spain Concentrator Photovoltaic Market Outlook
 - 9.2.4.5.1. Market Size & Forecast
 - 9.2.4.5.1.1. By Value
 - 9.2.4.5.2. Market Share & Forecast



9.2.4.5.2.1. By Product9.2.4.5.2.2. By Application9.2.4.5.2.3. By Concentration Level

10. SOUTH AMERICA CONCENTRATOR PHOTOVOLTAIC MARKET OUTLOOK

- 10.1. Market Size & Forecast
 - 10.1.1. By Value
- 10.2. Market Share & Forecast
- 10.2.1. By Product
- 10.2.2. By Application
- 10.2.3. By Concentration Level
- 10.2.4. By Country
 - 10.2.4.1. Brazil Concentrator Photovoltaic Market Outlook
 - 10.2.4.1.1. Market Size & Forecast
 - 10.2.4.1.1.1. By Value
 - 10.2.4.1.2. Market Share & Forecast
 - 10.2.4.1.2.1. By Product
 - 10.2.4.1.2.2. By Application
 - 10.2.4.1.2.3. By Concentration Level
 - 10.2.4.2. Colombia Concentrator Photovoltaic Market Outlook
 - 10.2.4.2.1. Market Size & Forecast
 - 10.2.4.2.1.1. By Value
 - 10.2.4.2.2. Market Share & Forecast
 - 10.2.4.2.2.1. By Product
 - 10.2.4.2.2.2. By Application
 - 10.2.4.2.2.3. By Concentration Level
 - 10.2.4.3. Argentina Concentrator Photovoltaic Market Outlook
 - 10.2.4.3.1. Market Size & Forecast
 - 10.2.4.3.1.1. By Value
 - 10.2.4.3.2. Market Share & Forecast
 - 10.2.4.3.2.1. By Product
 - 10.2.4.3.2.2. By Application
 - 10.2.4.3.2.3. By Concentration Level

11. MIDDLE EAST & AFRICA CONCENTRATOR PHOTOVOLTAIC MARKET OUTLOOK

11.1. Market Size & Forecast



- 11.1.1. By Value
- 11.2. Market Share & Forecast
- 11.2.1. By Product
- 11.2.2. By Application
- 11.2.3. By Concentration Level
- 11.2.4. By Country
 - 11.2.4.1. Saudi Arabia Concentrator Photovoltaic Market Outlook
 - 11.2.4.1.1. Market Size & Forecast
 - 11.2.4.1.1.1. By Value
 - 11.2.4.1.2. Market Share & Forecast
 - 11.2.4.1.2.1. By Product
 - 11.2.4.1.2.2. By Application
 - 11.2.4.1.2.3. By Concentration Level
- 11.2.4.2. UAE Concentrator Photovoltaic Market Outlook
 - 11.2.4.2.1. Market Size & Forecast
 - 11.2.4.2.1.1. By Value
 - 11.2.4.2.2. Market Share & Forecast
 - 11.2.4.2.2.1. By Product
 - 11.2.4.2.2.2. By Application
 - 11.2.4.2.2.3. By Concentration Level
- 11.2.4.3. South Africa Concentrator Photovoltaic Market Outlook
 - 11.2.4.3.1. Market Size & Forecast
 - 11.2.4.3.1.1. By Value
 - 11.2.4.3.2. Market Share & Forecast
 - 11.2.4.3.2.1. By Product
 - 11.2.4.3.2.2. By Application
 - 11.2.4.3.2.3. By Concentration Level

12. ASIA PACIFIC CONCENTRATOR PHOTOVOLTAIC MARKET OUTLOOK

- 12.1. Market Size & Forecast
- 12.1.1. By Value
- 12.2. Market Size & Forecast
- 12.2.1. By Product
- 12.2.2. By Application
- 12.2.3. By Concentration Level
- 12.2.4. By Country
- 12.2.4.1. China Concentrator Photovoltaic Market Outlook
 - 12.2.4.1.1. Market Size & Forecast



12.2.4.1.1.1. By Value 12.2.4.1.2. Market Share & Forecast 12.2.4.1.2.1. By Product 12.2.4.1.2.2. By Application 12.2.4.1.2.3. By Concentration Level 12.2.4.2. India Concentrator Photovoltaic Market Outlook 12.2.4.2.1. Market Size & Forecast 12.2.4.2.1.1. By Value 12.2.4.2.2. Market Share & Forecast 12.2.4.2.2.1. By Product 12.2.4.2.2.2. By Application 12.2.4.2.2.3. By Concentration Level 12.2.4.3. Japan Concentrator Photovoltaic Market Outlook 12.2.4.3.1. Market Size & Forecast 12.2.4.3.1.1. By Value 12.2.4.3.2. Market Share & Forecast 12.2.4.3.2.1. By Product 12.2.4.3.2.2. By Application 12.2.4.3.2.3. By Concentration Level 12.2.4.3.2.4. 12.2.4.4. South Korea Concentrator Photovoltaic Market Outlook 12.2.4.4.1. Market Size & Forecast 12.2.4.4.1.1. By Value 12.2.4.4.2. Market Share & Forecast 12.2.4.4.2.1. By Product 12.2.4.4.2.2. By Application 12.2.4.4.2.3. By Concentration Level 12.2.4.5. Australia Concentrator Photovoltaic Market Outlook 12.2.4.5.1. Market Size & Forecast 12.2.4.5.1.1. By Value 12.2.4.5.2. Market Share & Forecast 12.2.4.5.2.1. By Product 12.2.4.5.2.2. By Application 12.2.4.5.2.3. By Concentration Level

13. MARKET DYNAMICS

13.1. Drivers

13.2. Challenges



14. MARKET TRENDS AND DEVELOPMENTS

15. COMPANY PROFILES

- 15.1. First Solar, Inc.
 - 15.1.1. Business Overview
 - 15.1.2. Key Revenue and Financials
 - 15.1.3. Recent Developments
 - 15.1.4. Key Personnel
 - 15.1.5. Key Product/Services Offered
- 15.2. Azzurro Group
- 15.2.1. Business Overview
- 15.2.2. Key Revenue and Financials
- 15.2.3. Recent Developments
- 15.2.4. Key Personnel
- 15.2.5. Key Product/Services Offered
- 15.3. ArcelorMittal Solar
 - 15.3.1. Business Overview
 - 15.3.2. Key Revenue and Financials
 - 15.3.3. Recent Developments
 - 15.3.4. Key Personnel
- 15.3.5. Key Product/Services Offered
- 15.4. Envision Energy
 - 15.4.1. Business Overview
 - 15.4.2. Key Revenue and Financials
 - 15.4.3. Recent Developments
 - 15.4.4. Key Personnel
 - 15.4.5. Key Product/Services Offered
- 15.5. Huaneng First Solar
 - 15.5.1. Business Overview
 - 15.5.2. Key Revenue and Financials
- 15.5.3. Recent Developments
- 15.5.4. Key Personnel
- 15.5.5. Key Product/Services Offered
- 15.6. eSolar
 - 15.6.1. Business Overview
 - 15.6.2. Key Revenue and Financials



- 15.6.3. Recent Developments
- 15.6.4. Key Personnel
- 15.6.5. Key Product/Services Offered
- 15.7. AREVA Solar
 - 15.7.1. Business Overview
 - 15.7.2. Key Revenue and Financials
 - 15.7.3. Recent Developments
 - 15.7.4. Key Personnel
 - 15.7.5. Key Product/Services Offered
- 15.8. Abengoa Solar
- 15.8.1. Business Overview
- 15.8.2. Key Revenue and Financials
- 15.8.3. Recent Developments
- 15.8.4. Key Personnel
- 15.8.5. Key Product/Services Offered
- 15.9. BrightSource Energy
- 15.9.1. Business Overview
- 15.9.2. Key Revenue and Financials
- 15.9.3. Recent Developments
- 15.9.4. Key Personnel
- 15.9.5. Key Product/Services Offered
- 15.10. Solar Trust of America
- 15.10.1. Business Overview
- 15.10.2. Key Revenue and Financials
- 15.10.3. Recent Developments
- 15.10.4. Key Personnel
- 15.10.5. Key Product/Services Offered

16. STRATEGIC RECOMMENDATIONS

17. ABOUT US & DISCLAIMER



I would like to order

- Product name: Concentrator Photovoltaic Market Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Product (Reflector and Refractor), By Application (Utility and Commercial), By Concentration Level (High and Low), By Region, and By Competition, 2018-2028
 - Product link: https://marketpublishers.com/r/C363CD80AF60EN.html
 - Price: US\$ 4,900.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: <u>info@marketpublishers.com</u>

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/C363CD80AF60EN.html</u>

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

First name: 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 <u>https://marketpublishers.com/docs/terms.html</u>



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