

Asia Pacific Solar Energy Market Forecast to 2030 – Regional Analysis – by Technology (Photovoltaic Systems and Concentrated Solar Power Systems), Application (Electricity Generation, Heating, and Others), and End User (Residential, Commercial & Industrial, and Utility Scale)

<https://marketpublishers.com/r/AEF6741C28C3EN.html>

Date: January 2024

Pages: 99

Price: US\$ 3,550.00 (Single User License)

ID: AEF6741C28C3EN

Abstracts

The Asia Pacific solar energy market is expected to grow from US\$ 1,17,078.14 million in 2022 to US\$ 3,34,342.91 million by 2030. It is estimated to grow at a CAGR of 14.0% from 2022 to 2030.

Application of Solar Power in Aerospace, Space, and Defense Industries Fuels Asia Pacific Solar Energy Market

The growing technological development and government initiatives are boosting the application of solar energy in various end-use sectors such as aerospace and defense. One of the key applications of solar power in the aerospace and defense industries is solar-powered UAVs. Solar-driven UAVs are unarmed platforms that depend solely on energy powered by the SUN to properly perform their functions. Solar UAVs are utilized in roles such as communications and persistent ISR. Solar-powered UAVs help secure communication in remote areas among defense forces, improving broadband connection. In addition, spacecraft have solar panels that transform the Sun's energy into electricity that provides power to the spacecraft. Also, solar energy has been utilized to power spacecraft on Mars, including NASA's Mars Exploration Rovers—Spirit and Opportunity and Mars' Phoenix lander. Thus, the rising application of solar power in the aerospace, space, and defense industries is likely to create lucrative opportunities for the solar energy market players to boost the adoption of solar energy-based systems

in the coming years.

Asia Pacific Solar Energy Market Overview

Growing focus on curbing environmental pollution by reducing greenhouse gas emissions and rising government initiatives toward increasing the stake of renewable energy resources in the overall power mix are major reasons for solar energy market growth in Asia Pacific. China, Australia, India, and Japan are a few key countries contributing to Asia Pacific's solar energy market growth. Growing focus on concentrated solar power plants and increasing demand for energy security are important drivers for the solar energy market in Asia Pacific. Net zero carbon emission targets of major countries and reducing carbon footprint in the industrial sector are also boosting the solar energy market in Asia Pacific. The growing government initiatives regarding rebates and tax credits influence the solar energy market growth. The rebates for solar panels and rooftop solar systems are increasing the application of solar systems in residential and commercial sectors.

Some of the policies related to renewable energy:

- The Australian government has pledged to expand the share of renewable power generation in Australia's main National Electricity Market to 82% by 2030. The Australian government also targets lowering carbon emissions by 43% by 2030 and becoming a carbon-neutral nation by 2050.
- The National Development and Reform Commission is accountable for framing and implementing strategies concerning economic and social development in the country. The power governing structure is managed by the National Energy Administration, which works with the NDRC. China aimed for non-fossil fuels to hold for 20% of the energy generation mix by 2025.
- Indian Renewable Energy Development Agency offers low-interest loans for developing eligible renewable energy projects in the country. India has targeted achieving 50% cumulative electric power installed by 2030 from renewables and net-zero carbon emissions by 2070. Moreover, in 2022, the government introduced a 'Mission 500GW' action plan to attain the overall renewable target.
- Japanese Ministry for Economy, Trade, and Industry's energy department declared a subsidy system for renewable energy. The FiTs will be swapped by Feed-in Premium's through an auction mechanism for some categories commencing from April 2022.

Japan targets to achieve approximately 36-38% renewable power in its generation mix by 2030 and net carbon neutrality by 2050.

- The South Korean power market underwent reform in 2001, and the Korean Electricity Commission (KOREC) was formed under the Ministry of Knowledge Economy (MKE). The South Korean government is firmly committed to accelerating the country's energy evolution and has targeted to grow the share of renewable power production to 20% by 2030 and approximately 30-35% by 2040.

Asia Pacific Solar Energy Market Revenue and Forecast to 2030 (US\$ Million)

Asia Pacific Solar Energy Market Segmentation

The Asia Pacific solar energy market is segmented into technology, application, end user, and country .

Based on technology , the Asia Pacific solar energy market is segmented into photovoltaic systems and concentrated solar power systems. The photovoltaic systems held a larger share of the Asia Pacific solar energy market in 2022. The photovoltaic systems is further sub segmented into monocrystalline, polycrystalline, and others. The concentrated solar power systems is further sub segmented into linear concentrator, dish/engine, and power tower systems.

Based on application , the Asia Pacific solar energy market is segmented into electricity generation, heating, and others . The electricity generation segment held the largest share of the Asia Pacific solar energy market in 2022.

Based on end user, the Asia Pacific solar energy market is segmented into residential, commercial & industrial, and utility scale . The utility scale segment held the largest share of the Asia Pacific solar energy market in 2022.

Based on country, the Asia Pacific solar energy market is segmented into Australia, China, India, Japan, South Korea, and the Rest of Asia Pacific. China dominated the Asia Pacific solar energy market in 2022.

Abengoa SA, Acciona SA, Canadian Solar Inc, First Solar Inc, JinkoSolar Holding Co Ltd, and Trina Solar Co Ltd are some of the leading companies operating in the Asia Pacific solar energy market.

Contents

1. INTRODUCTION

- 1.1 The Insight Partners Research Report Guidance
- 1.2 Market Segmentation

2. EXECUTIVE SUMMARY

- 2.1 Key Insights
- 2.2 Market Attractiveness

3. RESEARCH METHODOLOGY

- 3.1 Coverage
- 3.2 Secondary Research
- 3.3 Primary Research

4. ASIA PACIFIC SOLAR ENERGY MARKET LANDSCAPE

- 4.1 Overview
- 4.2 PEST Analysis
- 4.3 Ecosystem Analysis
 - 4.3.1 List of Solar Energy Suppliers

5. ASIA PACIFIC SOLAR ENERGY MARKET - KEY INDUSTRY DYNAMICS

- 5.1 Asia Pacific Solar Energy Market - Key Industry Dynamics
- 5.2 Market Drivers
 - 5.2.1 Growing Concerns Regarding Greenhouse Gas Emission and Energy Uncertainties
 - 5.2.2 Rising Government Initiatives for Solar Power
 - 5.2.3 Growing Demand for Energy
 - 5.2.4 Growing Photovoltaic Applications in Residential, Commercial, and Industrial Sectors
- 5.3 Market Restraints
 - 5.3.1 Irregular Power Supply and Expensive Storage Facilities
 - 5.3.2 High Initial Expenditure for Installation
- 5.4 Market Opportunities

- 5.4.1 Application of Solar Power in Aerospace, Space, and Defense Industries
- 5.5 Future Trends
 - 5.5.1 Growing Focus on Deploying Concentrated Solar Power Technology
- 5.6 Impact of Drivers and Restraints:

6. SOLAR ENERGY MARKET - ASIA PACIFIC MARKET ANALYSIS

- 6.1 Asia Pacific Solar Energy Market Revenue (US\$ Million), 2022 – 2030
- 6.2 Asia Pacific Solar Energy Market Forecast and Analysis

7. ASIA PACIFIC SOLAR ENERGY MARKET ANALYSIS - TECHNOLOGY

- 7.1 Photovoltaic Systems
 - 7.1.1 Overview
 - 7.1.2 Photovoltaic Systems: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)
 - 7.1.3 Monocrystalline
 - 7.1.3.1 Overview
 - 7.1.3.2 Monocrystalline: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)
 - 7.1.4 Polycrystalline
 - 7.1.4.1 Overview
 - 7.1.4.2 Polycrystalline: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)
 - 7.1.5 Others
 - 7.1.5.1 Overview
 - 7.1.5.2 Others: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)
- 7.2 Concentrated Solar Power Systems
 - 7.2.1 Overview
 - 7.2.2 Concentrated Solar Power Systems: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)
 - 7.2.3 Linear Concentrator
 - 7.2.3.1 Overview
 - 7.2.3.2 Linear Concentrator: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)
 - 7.2.4 Dish/Engine
 - 7.2.4.1 Overview
 - 7.2.4.2 Dish/Engine: Asia Pacific Solar Energy Market, Revenue and Forecast to

2030 (US\$ Million)

7.2.5 Power Tower Systems

7.2.5.1 Overview

7.2.5.2 Power Tower Systems: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)

8. ASIA PACIFIC SOLAR ENERGY MARKET ANALYSIS – APPLICATION

8.1 Electricity Generation

8.1.1 Overview

8.1.2 Electricity Generation: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)

8.2 Heating

8.2.1 Overview

8.2.2 Heating: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)

8.3 Others

8.3.1 Overview

8.3.2 Others: Asia Pacific Solar Energy Market Revenue, and Forecast to 2030 (US\$ Million)

9. ASIA PACIFIC SOLAR ENERGY MARKET ANALYSIS – END USER

9.1 Residential

9.1.1 Overview

9.1.2 Residential: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)

9.2 Commercial & Industrial

9.2.1 Overview

9.2.2 Commercial & Industrial: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)

9.3 Utility Scale

9.3.1 Overview

9.3.2 Utility Scale: Asia Pacific Solar Energy Market, Revenue and Forecast to 2030 (US\$ Million)

10. ASIA PACIFIC SOLAR ENERGY MARKET - COUNTRY ANALYSIS

10.1 Asia Pacific Solar Energy Market

10.1.1 Asia Pacific Solar Energy Market Revenue and Forecasts and Analysis - By Country

10.1.1.1 Asia Pacific Solar Energy Market Revenue and Forecasts and Analysis - By Country

10.1.1.2 Australia: Asia Pacific Solar Energy Market Revenue and Forecasts to 2030 (US\$ Mn)

10.1.1.2.1 Australia: Asia Pacific Solar Energy Market Breakdown by Technology

10.1.1.2.1.1 Australia: Asia Pacific Solar Energy Market Breakdown by Photovoltaic Systems

10.1.1.2.2 Australia: Asia Pacific Solar Energy Market Breakdown by Application

10.1.1.2.3 Australia: Asia Pacific Solar Energy Market Breakdown by End User

10.1.1.3 China: Asia Pacific Solar Energy Market Revenue and Forecasts to 2030 (US\$ Mn)

10.1.1.3.1 China: Asia Pacific Solar Energy Market Breakdown by Technology

10.1.1.3.1.1 China: Asia Pacific Solar Energy Market Breakdown by Photovoltaic Systems

10.1.1.3.1.2 China: Asia Pacific Solar Energy Market Breakdown by Concentrated Solar Power Systems

10.1.1.3.2 China: Asia Pacific Solar Energy Market Breakdown by Application

10.1.1.3.3 China: Asia Pacific Solar Energy Market Breakdown by End User

10.1.1.4 India: Asia Pacific Solar Energy Market Revenue and Forecasts to 2030 (US\$ Mn)

10.1.1.4.1 India: Asia Pacific Solar Energy Market Breakdown by Technology

10.1.1.4.1.1 India: Asia Pacific Solar Energy Market Breakdown by Photovoltaic Systems

10.1.1.4.2 India: Asia Pacific Solar Energy Market Breakdown by Application

10.1.1.4.3 India: Asia Pacific Solar Energy Market Breakdown by End User

10.1.1.5 Japan: Asia Pacific Solar Energy Market Revenue and Forecasts to 2030 (US\$ Mn)

10.1.1.5.1 Japan: Asia Pacific Solar Energy Market Breakdown by Technology

10.1.1.5.1.1 Japan: Asia Pacific Solar Energy Market Breakdown by Photovoltaic Systems

10.1.1.5.2 Japan: Asia Pacific Solar Energy Market Breakdown by Application

10.1.1.5.3 Japan: Asia Pacific Solar Energy Market Breakdown by End User

10.1.1.6 South Korea: Asia Pacific Solar Energy Market Revenue and Forecasts to 2030 (US\$ Mn)

10.1.1.6.1 South Korea: Asia Pacific Solar Energy Market Breakdown by Technology

10.1.1.6.1.1 South Korea: Asia Pacific Solar Energy Market Breakdown by

Photovoltaic Systems

10.1.1.6.2 South Korea: Asia Pacific Solar Energy Market Breakdown by Application

10.1.1.6.3 South Korea: Asia Pacific Solar Energy Market Breakdown by End User

10.1.1.7 Rest of Asia Pacific: Asia Pacific Solar Energy Market Revenue and Forecasts to 2030 (US\$ Mn)

10.1.1.7.1 Rest of Asia Pacific: Asia Pacific Solar Energy Market Breakdown by Technology

10.1.1.7.1.1 Rest of Asia Pacific: Asia Pacific Solar Energy Market Breakdown by Photovoltaic Systems

10.1.1.7.2 Rest of Asia Pacific: Asia Pacific Solar Energy Market Breakdown by Application

10.1.1.7.3 Rest of Asia Pacific: Asia Pacific Solar Energy Market Breakdown by End User

11. INDUSTRY LANDSCAPE

11.1 Overview

11.2 Market Initiative

11.3 New Product Development

11.4 Merger and Acquisition

12. COMPANY PROFILES

12.1 Acciona SA

12.1.1 Key Facts

12.1.2 Business Description

12.1.3 Products and Services

12.1.4 Financial Overview

12.1.5 SWOT Analysis

12.1.6 Key Developments

12.2 Abengoa SA

12.2.1 Key Facts

12.2.2 Business Description

12.2.3 Products and Services

12.2.4 Financial Overview

12.2.5 SWOT Analysis

12.2.6 Key Developments

12.3 Trina Solar Co Ltd

12.3.1 Key Facts

- 12.3.2 Business Description
- 12.3.3 Products and Services
- 12.3.4 Financial Overview
- 12.3.5 SWOT Analysis
- 12.3.6 Key Developments
- 12.4 First Solar Inc
 - 12.4.1 Key Facts
 - 12.4.2 Business Description
 - 12.4.3 Products and Services
 - 12.4.4 Financial Overview
 - 12.4.5 SWOT Analysis
 - 12.4.6 Key Developments
- 12.5 JinkoSolar Holding Co Ltd
 - 12.5.1 Key Facts
 - 12.5.2 Business Description
 - 12.5.3 Products and Services
 - 12.5.4 Financial Overview
 - 12.5.5 SWOT Analysis
 - 12.5.6 Key Developments
- 12.6 Canadian Solar Inc
 - 12.6.1 Key Facts
 - 12.6.2 Business Description
 - 12.6.3 Products and Services
 - 12.6.4 Financial Overview
 - 12.6.5 SWOT Analysis
 - 12.6.6 Key Developments

13. APPENDIX

- 13.1 About The Insight Partners
- 13.2 Word Index

List Of Tables

LIST OF TABLES

Table 1. Asia Pacific Solar Energy Market Segmentation

Table 2. @LIST OF Vendors in the Value Chain

Table 3. Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Table 4. Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million) – Technology

Table 5. Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million) – Photovoltaic

Table 6. Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million) – Concentrated Solar Power

Table 7. Upcoming CSP Solar Projects

Table 8. Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million) – Application

Table 9. Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million) – End User

Table 10. Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Country

Table 11. Australia: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Technology

Table 12. Australia: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Photovoltaic Systems

Table 13. Australia: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Application

Table 14. Australia: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By End User

Table 15. China: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Technology

Table 16. China: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Photovoltaic Systems

Table 17. China: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Concentrated Solar Power Systems

Table 18. China: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Application

Table 19. China: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By End User

Table 20. India: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Technology

Table 21. India: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Photovoltaic Systems

Table 22. India: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Application

Table 23. India: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By End User

Table 24. Japan: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Technology

Table 25. Japan: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Photovoltaic Systems

Table 26. Japan: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Application

Table 27. Japan: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By End User

Table 28. South Korea: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Technology

Table 29. South Korea: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Photovoltaic Systems

Table 30. South Korea: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Application

Table 31. South Korea: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By End User

Table 32. Rest of Asia Pacific: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Technology

Table 33. Rest of Asia Pacific: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Photovoltaic Systems

Table 34. Rest of Asia Pacific: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By Application

Table 35. Rest of Asia Pacific: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn) – By End User

Table 36. @LIST OF Abbreviation

List Of Figures

LIST OF FIGURES

Figure 1. Asia Pacific Solar Energy Market Segmentation, By Country

Figure 2. PEST Analysis

Figure 3. Ecosystem: Asia Pacific Solar Energy Market

Figure 4. Impact Analysis of Drivers and Restraints

Figure 5. Asia Pacific Solar Energy Market Revenue (US\$ Million), 2022 – 2030

Figure 6. Asia Pacific Solar Energy Market Share (%) – Technology, 2022 and 2030

Figure 7. Photovoltaic Systems: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 8. Monocrystalline: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 9. Polycrystalline: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 10. Others: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 11. Concentrated Solar Power Systems: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 12. Linear Concentrator: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 13. Dish/Engine: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 14. Power Tower Systems: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 15. Asia Pacific Solar Energy Market Share (%) – Application, 2022 and 2030

Figure 16. Electricity Generation: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 17. Heating: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 18. Others: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 19. Asia Pacific Solar Energy Market Share (%) – End User, 2022 and 2030

Figure 20. Residential: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 21. Commercial & Industrial: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Million)

Figure 22. Utility Scale: Asia Pacific Solar Energy Market Revenue and Forecasts To

2030 (US\$ Million)

Figure 23. Asia Pacific Solar Energy Market, By Key Country – Revenue (2022) (US\$ Million)

Figure 24. Asia Pacific Solar Energy Market Breakdown by Key Countries, 2022 and 2030 (%)

Figure 25. Australia: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn)

Figure 26. China: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn)

Figure 27. India: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn)

Figure 28. Japan: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn)

Figure 29. South Korea: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn)

Figure 30. Rest of Asia Pacific: Asia Pacific Solar Energy Market Revenue and Forecasts To 2030 (US\$ Mn)

I would like to order

Product name: Asia Pacific Solar Energy Market Forecast to 2030 – Regional Analysis – by Technology (Photovoltaic Systems and Concentrated Solar Power Systems), Application (Electricity Generation, Heating, and Others), and End User (Residential, Commercial & Industrial, and Utility Scale)

Product link: <https://marketpublishers.com/r/AEF6741C28C3EN.html>

Price: US\$ 3,550.00 (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/AEF6741C28C3EN.html>

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**

Customer 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