

# **Space-based Solar Power Market Size, Share & Trends Analysis Report By Satellite Type (Microwave Transmitting Solar Satellite, Laser Transmitting Solar Satellite), By Application, By Region, And Segment Forecasts, 2023 - 2030**

<https://marketpublishers.com/r/S576E0FD0BEDEN.html>

Date: July 2023

Pages: 100

Price: US\$ 4,950.00 (Single User License)

ID: S576E0FD0BEDEN

## **Abstracts**

This report can be delivered to the clients within 8 Business Days

### **Space-based Solar Power Market Growth & Trends**

The global space-based solar power market size is expected to reach USD 1,053.8 million by 2030, growing at a CAGR of 9.1% from 2023 to 2030, according to a new report by Grand View Research, Inc. The market is expanding due to increased investment in sustainable power generation and the adoption of rigorous government rules against pollution. On the contrary, R&D aimed at lowering the cost of solar space missions through improved technologies is expected to offer attractive growth prospects for key players in the global industry during the forecast period. For instance, in December 2021, Northrop Grumman, an American multinational aerospace and defense technology company, partnered with the Air Force Research Laboratory (AFRL) to develop and test hardware for space-based solar power experiments. Researchers and engineers intend to refine the technology and address potential challenges or limitations by conducting these tests and experiments.

The increase in energy demand globally and a rise in awareness about reliable and sustainable energy sources are major factors driving the growth of the global industry. Moreover, space-based solar power could significantly mitigate climate change's effects by reducing greenhouse gas (GHG) emissions from traditional power sources. This is likely to fuel market growth over the forecast period. Furthermore, a rise in the

application of space-based solar power in the military sector contributes to market growth. Moreover, space-based solar power systems can generate power continuously since they are not affected by factors like weather conditions or daylight limitations. They also help reduce GHG emissions and dependence on fossil fuels for energy generation. These systems can provide a source of energy to remote areas that are difficult to access with traditional energy infrastructure, such as developing countries or disaster-stricken areas. Thus, increasing their application scope in several end-use industries

### Space-based Solar Power Market Report Highlights

The microwave-transmitting solar satellite segment held the largest revenue share of over 70% in 2022

This satellite generates solar power at a high level of efficiency and with minimal disturbance making it an attractive alternative for space-based solar power projects

The electricity generation segment led the market in 2022 accounting for over 74% share of the global revenue

The high share was attributed to a rise in energy demand and the cleaner generation of electricity globally

North America dominated the market in 2022, accounting for over 41% share of the global revenue owing to increased investments in R&D activities by government organizations, such as NASA, and private organizations' participation in this region

## Contents

### CHAPTER 1. METHODOLOGY AND SCOPE

- 1.1. Research Methodology
- 1.2. Research Scope and Assumptions
- 1.3. Information Procurement
  - 1.3.1. Purchased Database
  - 1.3.2. Gvr's Internal Database
  - 1.3.3. Secondary Sources & Third-Party Perspectives
  - 1.3.4. Primary Research
- 1.4. Information Analysis
  - 1.4.1. Data Analysis Models
- 1.5. Market Formulation & Data Visualization
- 1.6. Data Validation & Publishing

### CHAPTER 2. EXECUTIVE SUMMARY

- 2.1. Market Outlook
- 2.2. Segmental Outlook
- 2.3. Competitive Insights

### CHAPTER 3. MARKET VARIABLES, TRENDS, AND SCOPE

- 3.1. Market Lineage
- 3.2. Industry Value Chain Analysis
- 3.3. Space-Based Solar Power Market - Market Dynamics
  - 3.3.1. Market Driver Analysis
    - 3.3.1.1. Global Energy Demand
    - 3.3.1.2. Unlimited And Clean Energy Source
  - 3.3.2. Market Restraint Analysis
    - 3.3.2.1. High Cost And Disadvantages Associated With Space-Based Solar Power
  - 3.3.3. Industry Challenges
- 3.4. Business Environmental Tools Analysis: Space-Based Solar Power Market
  - 3.4.1. Porter's Five Forces Analysis
    - 3.4.1.1. Bargaining Power of Suppliers
    - 3.4.1.2. Bargaining Power of Buyers
    - 3.4.1.3. Threat of Substitution
    - 3.4.1.4. Threat of New Entrants

- 3.4.1.5. Competitive Rivalry
- 3.4.2. Pestle Analysis
  - 3.4.2.1. Political Landscape
  - 3.4.2.2. Economic Landscape
  - 3.4.2.3. Social Landscape
  - 3.4.2.4. Technology Landscape
  - 3.4.2.5. Environmental Landscape
  - 3.4.2.6. Legal Landscape
- 3.5. Economic Mega-Trend Analysis

## **CHAPTER 4. SPACE-BASED SOLAR POWER MARKET: SATELLITE TYPE ESTIMATES & TREND ANALYSIS**

- 4.1. Space-based Solar Power Market, by Satellite Type: Key Takeaways
- 4.2. Space-Based Solar Power Market: Satellite Type Movement Analysis, 2022 & 2030
- 4.3. Microwave Transmitting Solar Satellite
  - 4.3.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)
- 4.4. Laser Transmitting Solar Satellite
  - 4.4.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

## **CHAPTER 5. SPACE-BASED SOLAR POWER MARKET: APPLICATION ESTIMATES & TREND ANALYSIS**

- 5.1. Space-based Solar Power Market, by Application: Key Takeaways
- 5.2. Space-Based Solar Power Market: Application Movement Analysis, 2022 & 2030
- 5.3. Electricity Generation
  - 5.3.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)
- 5.4. Space Applications
  - 5.4.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

## **CHAPTER 6. SPACE-BASED SOLAR POWER MARKET: REGIONAL ESTIMATES & TREND ANALYSIS**

- 6.1. Space-Based Solar Power Market: Regional Movement Analysis, 2022 & 2030
- 6.2. North America
  - 6.2.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)
  - 6.2.2. U.S.
    - 6.2.2.1. Market estimates and forecasts, 2017 - 2030 (USD Million)
  - 6.2.3. Canada

6.2.3.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

### 6.3. Europe

6.3.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

#### 6.3.2. Germany

6.3.2.1. Market estimates and forecasts, 2017 - 2030 (USD Million)

#### 6.3.3. UK

6.3.3.1. Market estimates and forecasts, 2017 - 2030 (USD Million)

#### 6.3.4. France

6.3.4.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

### 6.4. Asia Pacific

6.4.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

#### 6.4.2. China

6.4.2.1. Market estimates and forecasts, 2017 - 2030 (USD Million)

#### 6.4.3. Japan

6.4.3.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

#### 6.4.4. India

6.4.4.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

#### 6.4.5. South Korea

6.4.5.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

#### 6.4.6. Australia

6.4.6.1. Market estimates and forecasts, 2017 - 2030 (USD Million)

### 6.5. Latin America

6.5.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

#### 6.5.2. Brazil

6.5.2.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

#### 6.5.3. Mexico

6.5.3.1. Market estimates and forecasts, 2017 - 2030 (USD Million)

### 6.6. Middle East & Africa

6.6.1. Market Estimates And Forecasts, 2017 - 2030 (USD Million)

#### 6.6.2. Kingdom Of Saudi Arabia (KSA)

6.6.2.1. Market estimates and forecasts, 2017 - 2030 (USD Million)

#### 6.6.3. UAE

6.6.3.1. Market estimates and forecasts, 2017 - 2030 (USD Million)

#### 6.6.4. South Africa

6.6.4.1. Market estimates and forecasts, 2017 - 2030 (USD Million)

## CHAPTER 7. COMPETITIVE LANDSCAPE

### 7.1. Company Categorization

- 7.2. Company Market Positioning
- 7.3. Company Market Share Analysis, 2022
- 7.4. Company Heat Map Analysis
- 7.5. Strategy Mapping
- 7.6. Company Profiles/Listing
  - 7.6.1. AIRBORNE
    - 7.6.1.1. Overview
    - 7.6.1.2. Financial Performance
    - 7.6.1.3. Product Benchmarking
    - 7.6.1.4. Strategic Initiatives
  - 7.6.2. AZUR SPACE SOLAR POWER GMBH
    - 7.6.2.1. Overview
    - 7.6.2.2. Financial Performance
    - 7.6.2.3. Product Benchmarking
    - 7.6.2.4. Strategic Initiatives
  - 7.6.3. FRALOCK LLC
    - 7.6.3.1. Overview
    - 7.6.3.2. Financial Performance
    - 7.6.3.3. Product Benchmarking
    - 7.6.3.4. Strategic Initiatives
  - 7.6.4. JAPAN AEROSPACE EXPLORATION AGENCY
    - 7.6.4.1. Overview
    - 7.6.4.2. Financial Performance
    - 7.6.4.3. Product Benchmarking
    - 7.6.4.4. Strategic Initiatives
  - 7.6.5. NORTHROP GRUMMAN
    - 7.6.5.1. Overview
    - 7.6.5.2. Financial Performance
    - 7.6.5.3. Product Benchmarking
    - 7.6.5.4. Strategic Initiatives
  - 7.6.6. BORREGO ENERGY, LLC
    - 7.6.6.1. Overview
    - 7.6.6.2. Financial Performance
    - 7.6.6.3. Product Benchmarking
    - 7.6.6.4. Strategic Initiatives
  - 7.6.7. SOLAREN CORPORATION
    - 7.6.7.1. Overview
    - 7.6.7.2. Financial Performance
    - 7.6.7.3. Product Benchmarking

- 7.6.7.4. Strategic Initiatives
- 7.6.8. SPACETECH GMBH
  - 7.6.8.1. Overview
  - 7.6.8.2. Financial Performance
  - 7.6.8.3. Product Benchmarking
  - 7.6.8.4. Strategic Initiatives
- 7.6.9. SPACE CANADA
  - 7.6.9.1. Overview
  - 7.6.9.2. Financial Performance
  - 7.6.9.3. Product Benchmarking
  - 7.6.9.4. Strategic Initiatives
- 7.6.10. DHV TECHNOLOGY
  - 7.6.10.1. Overview
  - 7.6.10.2. Financial Performance
  - 7.6.10.3. Product Benchmarking
  - 7.6.10.4. Strategic Initiatives

## List Of Tables

### LIST OF TABLES

Table 1 Space - Based Solar Power - Industry snapshot & key buying criteria, 2017 - 2030

Table 2 Global Space - based solar power market, 2017 - 2030 (USD Million)

Table 3 Global space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 4 Global space - based solar power market by application, 2017 - 2030 (USD Million)

Table 5 Global space - based solar power market estimates and forecasts by Region, 2017 - 2030 (USD million)

Table 6 Space - based solar power market by microwave transmitting solar satellite, 2017 - 2030 (USD Million)

Table 7 Space - based solar power market by laser transmitting solar satellite, 2017 - 2030 (USD Million)

Table 8 Space - based solar power market by electricity generation, 2017 - 2030 (USD Million)

Table 9 Space - based solar power market by space applications, 2017 - 2030 (USD Million)

Table 10 North America space - based solar power market, 2017 - 2030 (USD Million)

Table 11 North America space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 12 North America space - based solar power market by application, 2017 - 2030 (USD Million)

Table 13 U.S. space - based solar power market, 2017 - 2030 (USD Million)

Table 14 U.S. space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 15 U.S. space - based solar power market by application, 2017 - 2030 (USD Million)

Table 16 Canada space - based solar power market, 2017 - 2030 (USD Million)

Table 17 Canada space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 18 Canada space - based solar power market by application, 2017 - 2030 (USD Million)

Table 19 Europe space - based solar power market, 2017 - 2030 (USD Million)

Table 20 Europe space - based solar power market by satellite type, 2017 - 2030 (USD Million)



Million)

Table 21 Europe space - based solar power market by application, 2017 - 2030 (USD Million)

Table 22 UK space - based solar power market, 2017 - 2030 (USD Million)

Table 23 UK space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 24 UK space - based solar power market by application, 2017 - 2030 (USD Million)

Table 25 Germany space - based solar power market, 2017 - 2030 (USD Million)

Table 26 Germany space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 27 Germany space - based solar power market by application, 2017 - 2030 (USD Million)

Table 28 France space - based solar power market, 2017 - 2030 (USD Million)

Table 29 France space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 30 France space - based solar power market by application, 2017 - 2030 (USD Million)

Table 31 Asia Pacific space - based solar power market, 2017 - 2030 (USD Million)

Table 32 Asia Pacific space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 33 Asia Pacific space - based solar power market by application, 2017 - 2030 (USD Million)

Table 34 China space - based solar power market, 2017 - 2030 (USD Million)

Table 35 China space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 36 China space - based solar power market by application, 2017 - 2030 (USD Million)

Table 37 Japan space - based solar power market, 2017 - 2030 (USD Million)

Table 38 Japan space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 39 Japan space - based solar power market by application, 2017 - 2030 (USD Million)

Table 40 India space - based solar power market, 2017 - 2030 (USD Million)

Table 41 India space - based solar power market by satellite type, 2017 - 2030 (USD Million)

Table 42 India space - based solar power market by application, 2017 - 2030 (USD Million)

Table 43 Australia space - based solar power market, 2017 - 2030 (USD Million)

Table 44 Australia space - based solar power market by satellite type, 2017 - 2030  
(USD Million)

Table 45 Australia space - based solar power market by application, 2017 - 2030 (USD  
Million)

Table 46 South Korea space - based solar power market, 2017 - 2030 (USD Million)

Table 47 South Korea space - based solar power market by satellite type, 2017 - 2030  
(USD Million)

Table 48 South Korea space - based solar power market by application, 2017 - 2030  
(USD Million)

Table 49 Latin America space - based solar power market, 2017 - 2030 (USD Million)

Table 50 Latin America space - based solar power market by satellite type, 2017 - 2030  
(USD Million)

Table 51 Latin America space - based solar power market by application, 2017 - 2030  
(USD Million)

Table 52 Brazil space - based solar power market, 2017 - 2030 (USD Million)

Table 53 Brazil space - based solar power market by satellite type, 2017 - 2030 (USD  
Million)

Table 54 Brazil space - based solar power market by application, 2017 - 2030 (USD  
Million)

Table 55 Mexico space - based solar power market, 2017 - 2030 (USD Million)

Table 56 Mexico space - based solar power market by satellite type, 2017 - 2030 (USD  
Million)

Table 57 Mexico space - based solar power market by application, 2017 - 2030 (USD  
Million)

Table 58 MEA space - based solar power market, 2017 - 2030 (USD Million)

Table 59 MEA space - based solar power market by satellite type, 2017 - 2030 (USD  
Million)

Table 60 MEA space - based solar power market by application, 2017 - 2030 (USD  
Million)

Table 61 UAE space - based solar power market, 2017 - 2030 (USD Million)

Table 62 UAE space - based solar power market by satellite type, 2017 - 2030 (USD  
Million)

Table 63 UAE space - based solar power market by application, 2017 - 2030 (USD  
Million)

Table 64 Kingdom of Saudi Arabia space - based solar power market, 2017 - 2030  
(USD Million)

Table 65 Kingdom of Saudi Arabia space - based solar power market by satellite type,  
2017 - 2030 (USD Million)

Table 66 Kingdom of Saudi Arabia space - based solar power market by application,

2017 - 2030 (USD Million)

Table 67 South Africa space - based solar power market, 2017 - 2030 (USD Million)

Table 68 South Africa space - based solar power market by satellite type, 2017 - 2030  
(USD Million)

Table 69 South Africa space - based solar power market by application, 2017 - 2030  
(USD Million)

## List Of Figures

### LIST OF FIGURES

Fig. 1 Research Process

Fig. 2 Market Formulation

Fig. 3 Market segmentation and scope

Fig. 4 Space-based solar power market, 2017 - 2030

Fig. 5 Space-based solar power - Value chain analysis

Fig. 6 Space-based solar power market dynamics

Fig. 7 Key Opportunities Analysis

Fig. 8 Space-based solar power market share by satellite type, 2022 & 2030

Fig. 9 Space-based solar power market share by application, 2022 & 2030

Fig. 10 Space-based solar power market share by region, 2022 & 2030

Fig. 11 North America marketplace: Key takeaways

Fig. 12 Europe marketplace: Key takeaways

Fig. 13 Asia Pacific marketplace: Key takeaways

Fig. 14 Latin America marketplace: Key takeaways

Fig. 15 MEA marketplace: Key takeaways

## I would like to order

Product name: Space-based Solar Power Market Size, Share & Trends Analysis Report By Satellite Type (Microwave Transmitting Solar Satellite, Laser Transmitting Solar Satellite), By Application, By Region, And Segment Forecasts, 2023 - 2030

Product link: <https://marketpublishers.com/r/S576E0FD0BEDEN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/S576E0FD0BEDEN.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