+357 96 030922
info@marketpublishers.com

EV Solar Modules Market Size, Share & Trends Analysis Report By Vehicle Type (Passenger Vehicles, Commercial Vehicles), By Application (Vehicle-Integrated Photovoltaic (VIPV) Modules, Solar Modules for EV Charging Infrastructure), By Region, And Segment Forecasts, 2026 - 2033

https://marketpublishers.com/r/EAF1F243EFBDEN.html
Date: February 2026
Pages: 120
Price: US$ 5,950.00 (Single User License)
ID: EAF1F243EFBDEN

Abstracts

The global EV solar modules market size was estimated at USD 620.0 million in 2025 and is projected to reach USD 2,504.9 million by 2033, growing at a robust CAGR of 19% over the forecast period from 2026 to 2033. Market growth is primarily driven by the accelerating transition toward sustainable mobility, rising adoption of electric vehicles, and increasing emphasis on integrating renewable energy solutions within transportation ecosystems.

Automakers and technology providers are actively exploring solar-integrated vehicle technologies to extend driving range, improve energy efficiency, and reduce dependence on grid-based charging infrastructure. In addition, growing concerns related to carbon emissions, fuel dependency, and urban air quality are encouraging governments to promote clean transportation through incentives, subsidies, and supportive regulatory frameworks. Solar modules integrated into passenger and commercial vehicles help power auxiliary systems such as ventilation, infotainment, and battery trickle charging, thereby enhancing vehicle performance while lowering overall energy consumption. The expansion of EV charging infrastructure powered by solar energy is further supporting market growth by enabling decentralized and low-emission charging solutions.

Technological advancements in lightweight photovoltaic materials, flexible solar panels,

higher conversion efficiencies, and improved durability are making vehicle-integrated photovoltaic (VIPV) modules increasingly viable for mass-market adoption. Automakers are also investing in design innovations to seamlessly incorporate solar panels into vehicle roofs, hoods, and body surfaces without compromising aerodynamics or aesthetics.

The market is also benefiting from rising investments in smart mobility, increasing consumer awareness of energy-efficient vehicles, and the growing alignment between the automotive and renewable energy sectors. Strategic collaborations between automotive manufacturers, solar technology companies, and energy providers are accelerating product development and commercialization. As battery technologies evolve and the cost of photovoltaic components continues to decline, EV solar modules are expected to play a progressively important role in enhancing vehicle sustainability and supporting the broader electrification of transport.

Global EV Solar Modules Market Report Segmentation

This report forecasts revenue growth at global, regional, and country levels and provides an analysis of the latest industry trends in each of the sub-segments from 2021 to 2033. For the purpose of this study, Grand View Research has segmented the global EV solar modules market report on the basis of vehicle type, application and region:

Vehicle Type Outlook (Revenue, USD Million, 2021 - 2033)

Passenger Vehicles

Commercial Vehicles

Application Outlook (Revenue, USD Million, 2021 - 2033)

Vehicle-Integrated Photovoltaic (VIPV) Modules

Solar Modules for EV Charging Infrastructure

Regional Outlook (Revenue, USD Million, 2021 - 2033)

North America

U.S.

+357 96 030922
info@marketpublishers.com

- Canada
- Mexico

Europe

- Germany
- UK
- France

Asia Pacific

- China
- India
- Japan
- South Korea

Latin America

- Brazil

Middle East & Africa

- Saudi Arabia
- UAE

This report can be delivered to the clients within 7 Business Days

+357 96 030922
info@marketpublishers.com

Contents

CHAPTER 1. METHODOLOGY AND SCOPE

1.1. Market Segmentation & Scope
1.2. Market Definition
1.3. Information Procurement
  1.3.1. Information Analysis
  1.3.2. Market Formulation & Data Visualization
  1.3.3. Data Validation & Publishing
1.4. Research Scope and Assumptions
  1.4.1. List of Data Sources

CHAPTER 2. EXECUTIVE SUMMARY

2.1. Market Snapshot
2.2. Segmental Outlook
2.3. Competitive Outlook

CHAPTER 3. MARKET VARIABLES, TRENDS, AND SCOPE

3.1. Market Lineage Outlook
3.2. Penetration & Growth Prospect Mapping
3.3. Value Chain Analysis
3.4. Regulatory Framework
  3.4.1. Standards & Compliance
  3.4.2. Regulatory Impact Analysis
3.5. Market Dynamics
  3.5.1. Market Driver Analysis
  3.5.2. Market Restraint Analysis
  3.5.3. Market Opportunities
  3.5.4. Market Challenges
3.6. Porter’s Five Forces Analysis
  3.6.1. Bargaining Power of Suppliers
  3.6.2. Bargaining Power of Buyers
  3.6.3. Threat of Substitution
  3.6.4. Threat of New Entrants
  3.6.5. Competitive Rivalry
3.7. PESTLE Analysis

3.7.1. Political
3.7.2. Economic
3.7.3. Social Landscape
3.7.4. Technology
3.7.5. Environmental
3.7.6. Legal

CHAPTER 4. EV SOLAR MODULES MARKET: VEHICLE TYPE ESTIMATES & TREND ANALYSIS

4.1. EV Solar Modules Market: Vehicle Type Movement Analysis, 2025 & 2033
4.2. Passenger Vehicles
4.2.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
4.3. Commercial Vehicles
4.3.1. Market estimates and forecasts, 2021 - 2033 (USD Million)

CHAPTER 5. EV SOLAR MODULES MARKET: APPLICATION ESTIMATES & TREND ANALYSIS

5.1. EV Solar Modules Market: Application Movement Analysis, 2025 & 2033
5.2. Vehicle-Integrated Photovoltaic (VIPV) Modules
5.2.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
5.3. Solar Modules for EV Charging Infrastructure
5.3.1. Market estimates and forecasts, 2021 - 2033 (USD Million)

CHAPTER 6. EV SOLAR MODULES MARKET: REGIONAL ESTIMATES & TREND ANALYSIS

6.1. Regional Analysis, 2025 & 2033
6.2. North America
6.2.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.2.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.2.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.2.4. U.S.
6.2.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.2.4.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.2.4.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.2.5. Canada
6.2.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)

6.2.5.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.2.5.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.2.6. Mexico
6.2.6.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.2.6.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.2.6.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.3. Europe
6.3.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.3.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.3.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.3.4. Germany
6.3.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.3.4.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.3.4.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.3.5. UK
6.3.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.3.5.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.3.5.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.3.6. France
6.3.6.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.3.6.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.3.6.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.4. Asia Pacific
6.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.4.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.4.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.4.4. China
6.4.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.4.4.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.4.4.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.4.5. India
6.4.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.4.5.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.4.5.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.4.6. Japan
6.4.6.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.4.6.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.4.6.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.4.7. South Korea

6.4.7.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.4.7.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.4.7.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.5. Latin America
6.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.5.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.5.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.5.4. Brazil
6.5.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.5.4.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.5.4.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.6. Middle East & Africa
6.6.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.6.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.6.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.6.4. Saudi Arabia
6.6.4.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.6.4.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.6.4.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)
6.6.5. UAE
6.6.5.1. Market estimates and forecasts, 2021 - 2033 (USD Million)
6.6.5.2. Market estimates and forecasts, by vehicle type, 2021 - 2033 (USD Million)
6.6.5.3. Market estimates and forecasts, by application, 2021 - 2033 (USD Million)

CHAPTER 7. COMPETITIVE LANDSCAPE

7.1. Recent Developments By Key Market Participants
7.2. Company Categorization
7.3. List of Key Product Suppliers & Channel Partners
7.4. Company Market Share & Positioning Analysis, 2025
7.5. Heat Map Analysis
7.6. Vendor Landscape
7.6.1. List of Raw Product Suppliers
7.6.2. List of Distributors/Traders
7.6.3. List of Other Prominent Manufacturers
7.7. List of Prospective End Users
7.8. Strategy Mapping
7.9. Company Profiles/Listing
7.9.1. JinkoSolar

+357 96 030922
info@marketpublishers.com

7.9.1.1. Company Overview
7.9.1.2. Financial Performance
7.9.1.3. Product Benchmarking
7.9.2. Trina Solar
7.9.2.1. Company Overview
7.9.2.2. Financial Performance
7.9.2.3. Product Benchmarking
7.9.3. LONGi Green Energy Technology
7.9.3.1. Company Overview
7.9.3.2. Financial Performance
7.9.3.3. Product Benchmarking
7.9.4. JA Solar Technology
7.9.4.1. Company Overview
7.9.4.2. Financial Performance
7.9.4.3. Product Benchmarking
7.9.5. Canadian Solar
7.9.5.1. Company Overview
7.9.5.2. Financial Performance
7.9.5.3. Product Benchmarking
7.9.6. First Solar
7.9.6.1. Company Overview
7.9.6.2. Financial Performance
7.9.6.3. Product Benchmarking
7.9.7. Hanwha Qcells
7.9.7.1. Company Overview
7.9.7.2. Financial Performance
7.9.7.3. Product Benchmarking
7.9.8. Waaree Energies
7.9.8.1. Company Overview
7.9.8.2. Financial Performance
7.9.8.3. Product Benchmarking
7.9.9. Adani Solar
7.9.9.1. Company Overview
7.9.9.2. Financial Performance
7.9.9.3. Product Benchmarking
7.9.10. Vikram Solar
7.9.10.1. Company Overview
7.9.10.2. Financial Performance
7.9.10.3. Product Benchmarking

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

Table 1 EV Solar Modules market estimates & forecasts, 2021 - 2033 (USD Million)
Table 2 Passenger Vehicles market estimates & forecasts, 2021 - 2033 (USD Million)
Table 3 Commercial Vehicles market estimates & forecasts, 2021 - 2033 (USD Million)
Table 4 EV Solar Modules market estimates & forecasts, in Vehicle-Integrated Photovoltaic (VIPV) Modules, 2021 - 2033 (USD Million)
Table 5 EV Solar Modules market estimates & forecasts, in Solar Modules for EV Charging Infrastructure, 2021 - 2033 (USD Million)
Table 6 North America EV Solar Modules market estimates & forecast, 2021 - 2033 (USD Million)
Table 7 North America EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 8 North America EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 9 U.S. EV Solar Modules market estimates & forecasts, 2021 - 2033 (USD Million)
Table 10 U.S. EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 11 U.S. EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 12 Canada EV Solar Modules market estimates & forecasts, 2021 - 2033 (USD Million)
Table 13 Canada EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 14 Canada EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 15 Mexico EV Solar Modules market estimates & forecasts, 2021 - 2033 (USD Million)
Table 16 Mexico EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 17 Mexico EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 18 Europe EV Solar Modules market estimates & forecasts, 2021 - 2033 (USD Million)
Table 19 Europe EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)

+357 96 030922
info@marketpublishers.com

Table 20 Europe EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 21 Germany EV Solar Modules market estimates & forecasts, 2021 - 2033 (USD Million)
Table 22 Germany EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 23 Germany EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 24 France EV Solar Modules market estimates & forecasts, 2021 - 2033 (USD Million)
Table 25 France EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 26 France EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 27 UK EV Solar Modules market estimates & forecast, 2021 - 2033 (USD Million)
Table 28 UK EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 29 UK EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 30 Asia Pacific EV Solar Modules market estimates & forecast, 2021 - 2033 (USD Million)
Table 31 Asia Pacific EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 32 Asia Pacific EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 33 China EV Solar Modules market estimates & forecast, 2021 - 2033 (USD Million)
Table 34 China EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 35 China EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 36 Japan EV Solar Modules market estimates & forecast, 2021 - 2033 (USD Million)
Table 37 Japan EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 38 Japan EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 39 South Korea EV Solar Modules market estimates & forecast, 2021 - 2033 (USD Million)

Table 40 South Korea EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 41 South Korea EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 42 India EV Solar Modules market estimates & forecast, 2021 - 2033 (USD Million)
Table 43 India EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 44 India EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 45 Latin America EV Solar Modules market estimates & forecasts, 2021 - 2033 (USD Million)
Table 46 Latin America EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 47 Latin America EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 48 Brazil EV Solar Modules market estimates & forecasts, 2021 - 2033 (USD Million)
Table 49 Brazil EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 50 Brazil EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 51 Middle East & Africa EV Solar Modules market estimates & forecast, 2021 - 2033 (USD Million)
Table 52 Middle East & Africa EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 53 Middle East & Africa EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 54 Saudi Arabia EV Solar Modules market estimates & forecasts, 2021 - 2033 (USD Million)
Table 55 Saudi Arabia EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 56 Saudi Arabia EV Solar Modules market estimates & forecasts by application, 2021 - 2033 (USD Million)
Table 57 UAE EV Solar Modules market estimates & forecast, 2021 - 2033 (USD Million)
Table 58 UAE EV Solar Modules market estimates & forecasts by vehicle type, 2021 - 2033 (USD Million)
Table 59 UAE EV Solar Modules market estimates & forecasts by application, 2021 -

+357 96 030922
info@marketpublishers.com

2033 (USD Million)

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

Fig. 1 Market segmentation
Fig. 2 Information procurement
Fig. 3 Data analysis models
Fig. 4 Market formulation and validation
Fig. 5 Data validating & publishing
Fig. 6 Market snapshot
Fig. 7 Segmental outlook - Vehicle Type & Application
Fig. 8 Competitive Outlook
Fig. 9 EV Solar Modules market outlook, 2021 - 2033 (USD Million)
Fig. 10 Value chain analysis
Fig. 11 Market dynamics
Fig. 12 Porter’s Analysis
Fig. 13 PESTEL Analysis
Fig. 14 EV Solar Modules market, by vehicle type: Key takeaways
Fig. 15 EV Solar Modules market, by vehicle type: Market share, 2025 & 2033
Fig. 16 EV Solar Modules market, by application: Key takeaways
Fig. 17 EV Solar Modules market, by application: Market share, 2025 & 2033
Fig. 18 EV Solar Modules market: Regional analysis, 2025 & 2033
Fig. 19 EV Solar Modules market, by region: Key takeaways

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: EV Solar Modules Market Size, Share & Trends Analysis Report By Vehicle Type (Passenger Vehicles, Commercial Vehicles), By Application (Vehicle-Integrated Photovoltaic (VIPV) Modules, Solar Modules for EV Charging Infrastructure), By Region, And Segment Forecasts, 2026 - 2033

Product link: https://marketpublishers.com/r/EAF1F243EFBDEN.html

Price: US$ 5,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/EAF1F243EFBDEN.html