

Solar-Powered Vehicle Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Solar Panel (Monocrystalline Solar Panel and Polycrystalline Solar Panel), By Battery Type (Lithium-Ion Battery, Lead-Acid Battery, Lead-Carbon Battery and Others), By Propulsion (Battery Vehicles and Hybrid Electric Vehicles), By Region, Competition, 2019-2029F

<https://marketpublishers.com/r/S7BD8F51EBD0EN.html>

Date: May 2024

Pages: 180

Price: US\$ 4,900.00 (Single User License)

ID: S7BD8F51EBD0EN

Abstracts

The Global Solar-Powered Vehicle Market size reached USD 1.04 Billion in 2023 and is expected to grow with a CAGR of 6.88% through 2029. The global solar-powered vehicle market represents an innovative and sustainable frontier in the automotive industry, driven by the imperative to reduce dependence on traditional fuels and mitigate environmental impact. Solar-powered vehicles harness solar energy through photovoltaic cells integrated into the vehicle's structure to generate electric power. This renewable energy source is employed to propel the vehicle or charge its electric batteries, offering a clean and efficient alternative to conventional internal combustion engines.

One key aspect defining the solar-powered vehicle market is the emphasis on eco-friendly transportation solutions. The adoption of solar technology aligns with global efforts to address climate change and reduce greenhouse gas emissions. Solar-powered vehicles contribute to cleaner air and a decreased reliance on fossil fuels, making them an integral part of the broader shift toward sustainable and renewable energy solutions in the transportation sector.

While the solar-powered vehicle market is still in its nascent stages, technological advancements are propelling its growth. Continuous improvements in solar cell efficiency, energy storage systems, and lightweight materials contribute to enhancing the overall performance and practicality of solar-powered vehicles. The integration of these advancements aims to overcome challenges related to limited range and energy storage, making solar-powered vehicles more viable for everyday use.

Government initiatives and incentives play a pivotal role in shaping the solar-powered vehicle market. Countries around the world are introducing policies to promote clean energy adoption, offering tax incentives, subsidies, and infrastructure development support. These measures not only encourage manufacturers to invest in solar-powered vehicle technology but also stimulate consumer interest, fostering a conducive environment for market growth.

In conclusion, the global solar-powered vehicle market signifies a paradigm shift towards sustainable and renewable transportation solutions. While facing challenges, such as energy storage limitations and infrastructure development, ongoing technological innovations and strong governmental support position solar-powered vehicles as a promising and environmentally conscious alternative in the evolving landscape of the automotive industry.

Key Market Drivers

Sustainable Transportation Initiatives

The global drive towards sustainability and reduced carbon emissions is a primary driver for the solar-powered vehicle market. Governments and environmental organizations worldwide are promoting sustainable transportation solutions to combat climate change. Solar-powered vehicles, harnessing clean energy from the sun, align with this overarching goal, positioning them as a key player in the transition to eco-friendly mobility.

Advancements in Solar Technology

Continuous advancements in solar technology are instrumental in propelling the solar-powered vehicle market. Improvements in photovoltaic cell efficiency, lightweight solar panels, and energy storage systems are addressing historical challenges such as limited range and storage capacity. These technological strides contribute to making solar-powered vehicles more practical and appealing to a broader consumer base.

Government Incentives and Policies

Supportive government incentives and policies play a crucial role in driving the adoption of solar-powered vehicles. Many countries offer tax credits, subsidies, and research grants to manufacturers and consumers, creating a favorable environment for the development and purchase of solar-powered vehicles. These incentives not only stimulate market growth but also encourage investment in research and development to enhance solar vehicle technology.

Global Energy Transition

The global shift towards renewable energy sources is a macro-level driver influencing the solar-powered vehicle market. As solar energy becomes a mainstream component of the broader energy transition, the integration of solar technology into vehicles gains prominence. The growing awareness of the environmental impact of traditional fuels is steering consumers and manufacturers towards cleaner and sustainable alternatives.

Reduced Dependency on Fossil Fuels

Solar-powered vehicles contribute significantly to the reduction of dependency on fossil fuels, a critical driver considering the finite nature of traditional energy sources. As the world seeks alternatives to mitigate environmental damage and address energy security concerns, solar-powered vehicles emerge as a viable solution, offering a pathway to cleaner and more sustainable transportation.

Technological Collaboration and Innovation

Collaborations between automotive manufacturers, technology companies, and solar experts are fostering innovation in the solar-powered vehicle market. Joint ventures and partnerships lead to the development of cutting-edge technologies, addressing challenges and pushing the boundaries of solar integration in vehicles. These collaborations are key drivers in the evolution of solar-powered vehicle capabilities.

Rising Consumer Environmental Awareness

Increasing consumer awareness of environmental issues is driving interest in sustainable transportation options, including solar-powered vehicles. As individuals become more conscious of their carbon footprint, there is a growing demand for eco-

friendly alternatives in the automotive sector. Solar-powered vehicles, with their promise of clean energy and reduced environmental impact, resonate with environmentally conscious consumers.

Infrastructure Development

The development of charging infrastructure for electric vehicles, including solar-powered ones, is a critical driver for market expansion. Governments and private entities are investing in the establishment of solar charging stations, making it more convenient for consumers to adopt solar-powered vehicles. A robust charging infrastructure addresses concerns related to range anxiety and accessibility, bolstering the appeal of solar-powered mobility solutions.

Key Market Challenges

Limited Energy Generation and Range

One of the foremost challenges facing the global solar-powered vehicle market is the limited energy generation capacity of current solar technologies. Solar panels on vehicles, constrained by surface area and exposure to sunlight, struggle to generate sufficient energy to meet the high-power demands of modern vehicles. This limitation results in challenges related to the range of solar-powered vehicles, making them less practical for long-distance travel without supplementary charging.

Energy Storage Technology Constraints

The efficiency of energy storage technologies, such as batteries, is a critical challenge for solar-powered vehicles. While advancements have been made, current battery technologies may not store enough energy to provide consistent and reliable power during periods of low sunlight. Overcoming these limitations is crucial for enhancing the practicality and competitiveness of solar-powered vehicles in comparison to conventional electric vehicles.

Cost of Solar Technology Integration

The cost associated with integrating solar technology into vehicles remains a significant barrier to widespread adoption. High manufacturing costs of efficient solar panels and the intricate integration process contribute to elevated overall vehicle costs. This cost challenge hinders market penetration, limiting the accessibility of solar-powered

vehicles to a broader consumer base and posing a hurdle to their mainstream adoption.

Charging Infrastructure Development

The lack of a comprehensive and widespread solar charging infrastructure is a substantial challenge for the global market. Unlike traditional electric vehicles that can rely on established charging networks, solar-powered vehicles face the hurdle of limited infrastructure availability. The development of a robust solar charging infrastructure is essential to address range anxiety concerns and encourage consumer confidence in adopting solar-powered mobility solutions.

Weight and Design Trade-Offs

Integrating solar panels into vehicles presents a trade-off between weight and design. The need to keep vehicles lightweight for optimal efficiency conflicts with the desire to maximize solar panel surface area for enhanced energy generation. Striking the right balance between aerodynamics, aesthetics, and energy generation poses a design challenge for manufacturers aiming to create visually appealing and functional solar-powered vehicles.

Weather Dependency and Geographic Variability

Solar-powered vehicles are inherently weather-dependent, relying on sunlight for energy generation. Factors such as cloud cover, nighttime, and adverse weather conditions significantly impact their performance. Geographic variability, with regions experiencing different sunlight patterns, adds another layer of complexity. Overcoming these weather-related challenges is crucial for ensuring the reliability and functionality of solar-powered vehicles across diverse climates.

Consumer Awareness and Acceptance

Limited awareness and acceptance among consumers pose challenges to the mass adoption of solar-powered vehicles. Educating consumers about the benefits, capabilities, and limitations of solar technology in vehicles is essential for overcoming skepticism and fostering confidence in this emerging market. Consumer perceptions regarding the practicality and cost-effectiveness of solar-powered vehicles need to evolve for widespread acceptance.

Regulatory Framework and Standardization

The absence of standardized regulations and frameworks specific to solar-powered vehicles is a hindrance to market growth. Establishing clear guidelines for safety, performance standards, and incentives would provide a conducive environment for manufacturers and consumers alike. A lack of harmonized regulations across regions creates uncertainties and delays in the development and deployment of solar-powered vehicles on a global scale.

Key Market Trends

Advancements in Solar Technology

Ongoing advancements in solar technology stand out as a pivotal trend in the global solar-powered vehicle market. Improvements in photovoltaic efficiency, lightweight materials, and flexible solar panels are enhancing the energy-capturing capabilities of solar-powered vehicles. These technological strides are instrumental in overcoming historical challenges related to limited energy generation and range, making solar-powered vehicles more viable and appealing to consumers.

Integration of Solar Roof Systems

The integration of solar roof systems in conventional vehicles is gaining prominence as a trend. Automotive manufacturers are incorporating solar panels into the roofs of cars, allowing them to harness solar energy while parked or in motion. This trend not only contributes to the overall energy efficiency of vehicles but also addresses the issue of limited surface area for solar panels on smaller vehicles.

Focus on Energy Storage Solutions

A significant trend revolves around the development of advanced energy storage solutions for solar-powered vehicles. Manufacturers are investing in research and development to enhance battery technologies, improving energy storage capacity and efficiency. Innovations in energy storage are crucial for ensuring consistent power supply, especially during periods of low sunlight, and are integral to the practicality of solar-powered vehicles for daily use.

Emergence of Solar-Electric Hybrids

The convergence of solar and electric vehicle technologies has led to the emergence of

solar-electric hybrid systems. These systems combine solar energy with traditional electric power, offering extended range and enhanced efficiency. Solar-electric hybrids present a transitional solution, addressing concerns related to range limitations and providing consumers with a practical and versatile option in the evolving landscape of sustainable mobility.

Collaborations and Partnerships

Collaborations and partnerships between automotive manufacturers, solar technology companies, and research institutions are fostering innovation in the solar-powered vehicle market. Joint ventures aim to pool resources and expertise, resulting in the development of cutting-edge technologies and overcoming industry challenges. These collaborations contribute to the evolution of solar-powered vehicle capabilities and drive market growth.

Focus on Lightweight Materials and Design

The trend towards utilizing lightweight materials and innovative vehicle design is gaining prominence in the solar-powered vehicle market. Manufacturers are exploring materials that balance strength and weight, optimizing aerodynamics to maximize solar panel exposure. This trend addresses the challenge of weight and design trade-offs, ensuring that solar-powered vehicles maintain efficiency without compromising structural integrity.

Consumer Education and Awareness Campaigns

Increasing efforts in consumer education and awareness campaigns represent a notable trend as manufacturers seek to familiarize the public with the benefits of solar-powered vehicles. These campaigns aim to dispel misconceptions, provide insights into the technology's capabilities, and highlight the environmental and cost advantages. Enhanced consumer understanding is crucial for fostering acceptance and driving adoption in the market.

Government Support and Incentives

Growing government support and incentives for the solar-powered vehicle market are shaping the industry's trajectory. Various countries are introducing policies that encourage the adoption of clean and renewable energy in transportation. Tax credits, subsidies, and grants for manufacturers and consumers incentivize the development

and purchase of solar-powered vehicles, fostering a favorable environment for market growth. The alignment of government policies with environmental sustainability goals reinforces the trend toward solar-powered mobility solutions.

Segmental Insights

By Solar Panel

Monocrystalline solar panels represent a leading segment in the solar-powered vehicle market, characterized by their high efficiency and space utilization. These panels are crafted from single-crystal silicon, allowing for a uniform structure that maximizes energy conversion. Monocrystalline solar panels boast a higher energy conversion rate compared to their polycrystalline counterparts, making them particularly suitable for applications where space is limited, such as the surface area of vehicles. The efficiency gains are significant, contributing to the extended range and improved performance of solar-powered vehicles. While the production cost of monocrystalline panels tends to be higher, advancements in manufacturing processes are gradually reducing these costs, enhancing the overall competitiveness of this solar panel segment.

Polycrystalline solar panels, although slightly less efficient than monocrystalline panels, play a crucial role in the solar-powered vehicle market, offering a cost-effective alternative with advantages of their own. Manufactured from multiple crystal structures, polycrystalline panels are more straightforward to produce, resulting in lower manufacturing costs. This cost efficiency makes polycrystalline panels an attractive option, especially in applications where space is less constrained. While they may occupy larger surface areas, advancements in design and integration techniques are optimizing the use of available space on vehicles. Polycrystalline solar panels contribute to making solar-powered vehicles more economically accessible, appealing to a broader consumer base. The ongoing refinement of both monocrystalline and polycrystalline technologies reflects a commitment to addressing diverse market needs and advancing the capabilities of solar-powered mobility solutions.

Regional Insights

North America is witnessing a growing interest in solar-powered vehicles, driven by a combination of environmental consciousness, government incentives, and technological innovation. In the United States and Canada, where sustainability is increasingly prioritized, consumers and manufacturers alike are exploring solar solutions in the automotive sector. Government initiatives, such as tax credits for electric and solar-

powered vehicles, are influencing consumer choices. Additionally, research and development activities in solar technology are contributing to the region's position at the forefront of the solar-powered vehicle market. However, the market is still evolving, and further infrastructure development and consumer awareness campaigns are essential for widespread adoption.

Europe & CIS stands as a significant hub for solar-powered vehicles, with a strong emphasis on sustainability and renewable energy solutions. Countries like Germany, France, and the Netherlands are witnessing a surge in interest and adoption of solar-powered mobility. Government support, including subsidies and stringent emission regulations, is propelling the market forward. The European automotive industry, known for its innovation, is actively integrating solar technology into vehicles. The continent's commitment to combating climate change aligns with the ideals of solar-powered transportation, making Europe a key player in shaping the global solar-powered vehicle market.

The Asia-Pacific region, with its dynamic automotive landscape, is embracing solar-powered vehicles as part of the broader push towards sustainable transportation. Countries like China and Japan are making significant strides in solar technology and electric mobility. In China, the government's focus on clean energy and electric vehicles is reflected in policies encouraging the development and adoption of solar-powered vehicles. Japan, with its strong technological base, is actively contributing to advancements in solar panels and energy storage for vehicles. The diverse consumer market in the Asia-Pacific region presents opportunities for both mass-market adoption and high-end solar-powered vehicle offerings.

While the solar-powered vehicle market is in the early stages of development in the Middle East and Africa, there is growing interest, particularly in the Middle East. Countries with abundant sunlight, such as the United Arab Emirates and Saudi Arabia, are exploring solar-powered mobility solutions. The region's focus on sustainability, coupled with an affinity for luxury vehicles, creates a conducive environment for the adoption of solar-powered technology. Infrastructure development, including solar charging stations, is becoming a priority. In Africa, solar-powered vehicles have the potential to address transportation challenges in remote areas, offering a sustainable and off-grid mobility solution.

Key Market Players

Kiira Motors Corporation (KMC)

Aptera Motors Corp.

Hyundai Motor Company

Sono Motors GmbH

Ford Motor Company

Report Scope:

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

Solar-Powered Vehicle Market, By Solar Panel:

Monocrystalline Solar Panel

Polycrystalline Solar Panel

Solar-Powered Vehicle Market, By Battery Type:

Lithium-Ion Battery

Lead-Acid Battery

Lead-Carbon Battery

Others

Solar-Powered Vehicle Market, By Propulsion:

Battery Vehicles

Hybrid Electric Vehicles

Solar-Powered Vehicle Market, By Region:

North America

United States

Canada

Mexico

Europe & CIS

Germany

Spain

France

Russia

Italy

United Kingdom

Belgium

Asia-Pacific

China

India

Japan

Indonesia

Thailand

Australia

South Korea

South America

Brazil

Argentina

Colombia

Middle East & Africa

Turkey

Iran

Saudi Arabia

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies presents in the Global Solar-Powered Vehicle Market.

Available Customizations:

Global Solar-Powered Vehicle Market report with the given market data, TechSci 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. INTRODUCTION

- 1.1. Product Overview
- 1.2. Key Highlights of the Report
- 1.3. Market Coverage
- 1.4. Market Segments Covered
- 1.5. Research Tenure Considered

2. RESEARCH METHODOLOGY

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

3. EXECUTIVE SUMMARY

- 3.1. Market Overview
- 3.2. Market Forecast
- 3.3. Key Regions
- 3.4. Key Segments

4. IMPACT OF COVID-19 ON GLOBAL SOLAR-POWERED VEHICLE MARKET

5. GLOBAL SOLAR-POWERED VEHICLE MARKET OUTLOOK

- 5.1. Market Size & Forecast
 - 5.1.1. By Value
- 5.2. Market Share & Forecast
 - 5.2.1. By Solar Panel Market Share Analysis (Monocrystalline Solar Panel and Polycrystalline Solar Panel))
 - 5.2.2. By Battery Type Market Share Analysis (Lithium-Ion Battery, Lead-Acid Battery, Lead-Carbon Battery and Others)
 - 5.2.3. By Propulsion Market Share Analysis (Battery Vehicles and Hybrid Electric

Vehicles)

5.2.4. By Region Market Share Analysis

5.2.4.1. Asia-Pacific Market Share Analysis

5.2.4.2. Europe & CIS Market Share Analysis

5.2.4.3. North America Market Share Analysis

5.2.4.4. South America Market Share Analysis

5.2.4.5. Middle East & Africa Market Share Analysis

5.2.5. By Company Market Share Analysis (Top 5 Companies, Others - By Value, 2023)

5.3. Global Solar-Powered Vehicle Market Mapping & Opportunity Assessment

5.3.1. By Solar Panel Market Mapping & Opportunity Assessment

5.3.2. By Battery Type Market Mapping & Opportunity Assessment

5.3.3. By Propulsion Market Mapping & Opportunity Assessment

5.3.4. By Regional Market Mapping & Opportunity Assessment

6. ASIA-PACIFIC SOLAR-POWERED VEHICLE MARKET OUTLOOK

6.1. Market Size & Forecast

6.1.1. By Value

6.2. Market Share & Forecast

6.2.1. By Solar Panel Market Share Analysis

6.2.2. By Battery Type Market Share Analysis

6.2.3. By Propulsion Market Share Analysis

6.2.4. By Country Market Share Analysis

6.2.4.1. China Market Share Analysis

6.2.4.2. India Market Share Analysis

6.2.4.3. Japan Market Share Analysis

6.2.4.4. Indonesia Market Share Analysis

6.2.4.5. Thailand Market Share Analysis

6.2.4.6. South Korea Market Share Analysis

6.2.4.7. Australia Market Share Analysis

6.2.4.8. Rest of Asia-Pacific Market Share Analysis

6.3. Asia-Pacific: Country Analysis

6.3.1. China Solar-Powered Vehicle Market Outlook

6.3.1.1. Market Size & Forecast

6.3.1.1.1. By Value

6.3.1.2. Market Share & Forecast

6.3.1.2.1. By Solar Panel Market Share Analysis

6.3.1.2.2. By Battery Type Market Share Analysis

- 6.3.1.2.3. By Propulsion Market Share Analysis
- 6.3.2. India Solar-Powered Vehicle Market Outlook
 - 6.3.2.1. Market Size & Forecast
 - 6.3.2.1.1. By Value
 - 6.3.2.2. Market Share & Forecast
 - 6.3.2.2.1. By Solar Panel Market Share Analysis
 - 6.3.2.2.2. By Battery Type Market Share Analysis
 - 6.3.2.2.3. By Propulsion Market Share Analysis
- 6.3.3. Japan Solar-Powered Vehicle Market Outlook
 - 6.3.3.1. Market Size & Forecast
 - 6.3.3.1.1. By Value
 - 6.3.3.2. Market Share & Forecast
 - 6.3.3.2.1. By Solar Panel Market Share Analysis
 - 6.3.3.2.2. By Battery Type Market Share Analysis
 - 6.3.3.2.3. By Propulsion Market Share Analysis
- 6.3.4. Indonesia Solar-Powered Vehicle Market Outlook
 - 6.3.4.1. Market Size & Forecast
 - 6.3.4.1.1. By Value
 - 6.3.4.2. Market Share & Forecast
 - 6.3.4.2.1. By Solar Panel Market Share Analysis
 - 6.3.4.2.2. By Battery Type Market Share Analysis
 - 6.3.4.2.3. By Propulsion Market Share Analysis
- 6.3.5. Thailand Solar-Powered Vehicle Market Outlook
 - 6.3.5.1. Market Size & Forecast
 - 6.3.5.1.1. By Value
 - 6.3.5.2. Market Share & Forecast
 - 6.3.5.2.1. By Solar Panel Market Share Analysis
 - 6.3.5.2.2. By Battery Type Market Share Analysis
 - 6.3.5.2.3. By Propulsion Market Share Analysis
- 6.3.6. South Korea Solar-Powered Vehicle Market Outlook
 - 6.3.6.1. Market Size & Forecast
 - 6.3.6.1.1. By Value
 - 6.3.6.2. Market Share & Forecast
 - 6.3.6.2.1. By Solar Panel Market Share Analysis
 - 6.3.6.2.2. By Battery Type Market Share Analysis
 - 6.3.6.2.3. By Propulsion Market Share Analysis
- 6.3.7. Australia Solar-Powered Vehicle Market Outlook
 - 6.3.7.1. Market Size & Forecast
 - 6.3.7.1.1. By Value

6.3.7.2. Market Share & Forecast

6.3.7.2.1. By Solar Panel Market Share Analysis

6.3.7.2.2. By Battery Type Market Share Analysis

6.3.7.2.3. By Propulsion Market Share Analysis

7. EUROPE & CIS SOLAR-POWERED VEHICLE MARKET OUTLOOK

7.1. Market Size & Forecast

7.1.1. By Value

7.2. Market Share & Forecast

7.2.1. By Solar Panel Market Share Analysis

7.2.2. By Battery Type Market Share Analysis

7.2.3. By Propulsion Market Share Analysis

7.2.4. By Country Market Share Analysis

7.2.4.1. Germany Market Share Analysis

7.2.4.2. Spain Market Share Analysis

7.2.4.3. France Market Share Analysis

7.2.4.4. Russia Market Share Analysis

7.2.4.5. Italy Market Share Analysis

7.2.4.6. United Kingdom Market Share Analysis

7.2.4.7. Belgium Market Share Analysis

7.2.4.8. Rest of Europe & CIS Market Share Analysis

7.3. Europe & CIS: Country Analysis

7.3.1. Germany Solar-Powered Vehicle Market Outlook

7.3.1.1. Market Size & Forecast

7.3.1.1.1. By Value

7.3.1.2. Market Share & Forecast

7.3.1.2.1. By Solar Panel Market Share Analysis

7.3.1.2.2. By Battery Type Market Share Analysis

7.3.1.2.3. By Propulsion Market Share Analysis

7.3.2. Spain Solar-Powered Vehicle Market Outlook

7.3.2.1. Market Size & Forecast

7.3.2.1.1. By Value

7.3.2.2. Market Share & Forecast

7.3.2.2.1. By Solar Panel Market Share Analysis

7.3.2.2.2. By Battery Type Market Share Analysis

7.3.2.2.3. By Propulsion Market Share Analysis

7.3.3. France Solar-Powered Vehicle Market Outlook

7.3.3.1. Market Size & Forecast

- 7.3.3.1.1. By Value
- 7.3.3.2. Market Share & Forecast
 - 7.3.3.2.1. By Solar Panel Market Share Analysis
 - 7.3.3.2.2. By Battery Type Market Share Analysis
 - 7.3.3.2.3. By Propulsion Market Share Analysis
- 7.3.4. Russia Solar-Powered Vehicle Market Outlook
 - 7.3.4.1. Market Size & Forecast
 - 7.3.4.1.1. By Value
 - 7.3.4.2. Market Share & Forecast
 - 7.3.4.2.1. By Solar Panel Market Share Analysis
 - 7.3.4.2.2. By Battery Type Market Share Analysis
 - 7.3.4.2.3. By Propulsion Market Share Analysis
- 7.3.5. Italy Solar-Powered Vehicle Market Outlook
 - 7.3.5.1. Market Size & Forecast
 - 7.3.5.1.1. By Value
 - 7.3.5.2. Market Share & Forecast
 - 7.3.5.2.1. By Solar Panel Market Share Analysis
 - 7.3.5.2.2. By Battery Type Market Share Analysis
 - 7.3.5.2.3. By Propulsion Market Share Analysis
- 7.3.6. United Kingdom Solar-Powered Vehicle Market Outlook
 - 7.3.6.1. Market Size & Forecast
 - 7.3.6.1.1. By Value
 - 7.3.6.2. Market Share & Forecast
 - 7.3.6.2.1. By Solar Panel Market Share Analysis
 - 7.3.6.2.2. By Battery Type Market Share Analysis
 - 7.3.6.2.3. By Propulsion Market Share Analysis
- 7.3.7. Belgium Solar-Powered Vehicle Market Outlook
 - 7.3.7.1. Market Size & Forecast
 - 7.3.7.1.1. By Value
 - 7.3.7.2. Market Share & Forecast
 - 7.3.7.2.1. By Solar Panel Market Share Analysis
 - 7.3.7.2.2. By Battery Type Market Share Analysis
 - 7.3.7.2.3. By Propulsion Market Share Analysis

8. NORTH AMERICA SOLAR-POWERED VEHICLE MARKET OUTLOOK

- 8.1. Market Size & Forecast
 - 8.1.1. By Value
- 8.2. Market Share & Forecast

- 8.2.1. By Solar Panel Market Share Analysis
- 8.2.2. By Battery Type Market Share Analysis
- 8.2.3. By Propulsion Market Share Analysis
- 8.2.4. By Country Market Share Analysis
 - 8.2.4.1. United States Market Share Analysis
 - 8.2.4.2. Mexico Market Share Analysis
 - 8.2.4.3. Canada Market Share Analysis
- 8.3. North America: Country Analysis
 - 8.3.1. United States Solar-Powered Vehicle Market Outlook
 - 8.3.1.1. Market Size & Forecast
 - 8.3.1.1.1. By Value
 - 8.3.1.2. Market Share & Forecast
 - 8.3.1.2.1. By Solar Panel Market Share Analysis
 - 8.3.1.2.2. By Battery Type Market Share Analysis
 - 8.3.1.2.3. By Propulsion Market Share Analysis
 - 8.3.2. Mexico Solar-Powered Vehicle Market Outlook
 - 8.3.2.1. Market Size & Forecast
 - 8.3.2.1.1. By Value
 - 8.3.2.2. Market Share & Forecast
 - 8.3.2.2.1. By Solar Panel Market Share Analysis
 - 8.3.2.2.2. By Battery Type Market Share Analysis
 - 8.3.2.2.3. By Propulsion Market Share Analysis
 - 8.3.3. Canada Solar-Powered Vehicle Market Outlook
 - 8.3.3.1. Market Size & Forecast
 - 8.3.3.1.1. By Value
 - 8.3.3.2. Market Share & Forecast
 - 8.3.3.2.1. By Solar Panel Market Share Analysis
 - 8.3.3.2.2. By Battery Type Market Share Analysis
 - 8.3.3.2.3. By Propulsion Market Share Analysis

9. SOUTH AMERICA SOLAR-POWERED VEHICLE MARKET OUTLOOK

- 9.1. Market Size & Forecast
 - 9.1.1. By Value
- 9.2. Market Share & Forecast
 - 9.2.1. By Solar Panel Market Share Analysis
 - 9.2.2. By Battery Type Market Share Analysis
 - 9.2.3. By Propulsion Market Share Analysis
 - 9.2.4. By Country Market Share Analysis

- 9.2.4.1. Brazil Market Share Analysis
- 9.2.4.2. Argentina Market Share Analysis
- 9.2.4.3. Colombia Market Share Analysis
- 9.2.4.4. Rest of South America Market Share Analysis
- 9.3. South America: Country Analysis
 - 9.3.1. Brazil Solar-Powered Vehicle Market Outlook
 - 9.3.1.1. Market Size & Forecast
 - 9.3.1.1.1. By Value
 - 9.3.1.2. Market Share & Forecast
 - 9.3.1.2.1. By Solar Panel Market Share Analysis
 - 9.3.1.2.2. By Battery Type Market Share Analysis
 - 9.3.1.2.3. By Propulsion Market Share Analysis
 - 9.3.2. Colombia Solar-Powered Vehicle Market Outlook
 - 9.3.2.1. Market Size & Forecast
 - 9.3.2.1.1. By Value
 - 9.3.2.2. Market Share & Forecast
 - 9.3.2.2.1. By Solar Panel Market Share Analysis
 - 9.3.2.2.2. By Battery Type Market Share Analysis
 - 9.3.2.2.3. By Propulsion Market Share Analysis
 - 9.3.3. Argentina Solar-Powered Vehicle Market Outlook
 - 9.3.3.1. Market Size & Forecast
 - 9.3.3.1.1. By Value
 - 9.3.3.2. Market Share & Forecast
 - 9.3.3.2.1. By Solar Panel Market Share Analysis
 - 9.3.3.2.2. By Battery Type Market Share Analysis
 - 9.3.3.2.3. By Propulsion Market Share Analysis

10. MIDDLE EAST & AFRICA SOLAR-POWERED VEHICLE MARKET OUTLOOK

- 10.1. Market Size & Forecast
 - 10.1.1. By Value
- 10.2. Market Share & Forecast
 - 10.2.1. By Solar Panel Market Share Analysis
 - 10.2.2. By Battery Type Market Share Analysis
 - 10.2.3. By Propulsion Market Share Analysis
 - 10.2.4. By Country Market Share Analysis
 - 10.2.4.1. Turkey Market Share Analysis
 - 10.2.4.2. Iran Market Share Analysis
 - 10.2.4.3. Saudi Arabia Market Share Analysis

- 10.2.4.4. UAE Market Share Analysis
- 10.2.4.5. Rest of Middle East & Africa Market Share Analysis
- 10.3. Middle East & Africa: Country Analysis
 - 10.3.1. Turkey Solar-Powered Vehicle Market Outlook
 - 10.3.1.1. Market Size & Forecast
 - 10.3.1.1.1. By Value
 - 10.3.1.2. Market Share & Forecast
 - 10.3.1.2.1. By Solar Panel Market Share Analysis
 - 10.3.1.2.2. By Battery Type Market Share Analysis
 - 10.3.1.2.3. By Propulsion Market Share Analysis
 - 10.3.2. Iran Solar-Powered Vehicle Market Outlook
 - 10.3.2.1. Market Size & Forecast
 - 10.3.2.1.1. By Value
 - 10.3.2.2. Market Share & Forecast
 - 10.3.2.2.1. By Solar Panel Market Share Analysis
 - 10.3.2.2.2. By Battery Type Market Share Analysis
 - 10.3.2.2.3. By Propulsion Market Share Analysis
 - 10.3.3. Saudi Arabia Solar-Powered Vehicle Market Outlook
 - 10.3.3.1. Market Size & Forecast
 - 10.3.3.1.1. By Value
 - 10.3.3.2. Market Share & Forecast
 - 10.3.3.2.1. By Solar Panel Market Share Analysis
 - 10.3.3.2.2. By Battery Type Market Share Analysis
 - 10.3.3.2.3. By Propulsion Market Share Analysis
 - 10.3.4. UAE Solar-Powered Vehicle Market Outlook
 - 10.3.4.1. Market Size & Forecast
 - 10.3.4.1.1. By Value
 - 10.3.4.2. Market Share & Forecast
 - 10.3.4.2.1. By Solar Panel Market Share Analysis
 - 10.3.4.2.2. By Battery Type Market Share Analysis
 - 10.3.4.2.3. By Propulsion Market Share Analysis

11. SWOT ANALYSIS

- 11.1. Strength
- 11.2. Weakness
- 11.3. Opportunities
- 11.4. Threats

12. MARKET DYNAMICS

12.1. Market Drivers

12.2. Market Challenges

13. MARKET TRENDS AND DEVELOPMENTS

14. COMPETITIVE LANDSCAPE

14.1. Company Profiles (Up to 10 Major Companies)

14.1.1. Kiira Motors Corporation (KMC)

14.1.1.1. Company Details

14.1.1.2. Key Product Offered

14.1.1.3. Financials (As Per Availability)

14.1.1.4. Recent Developments

14.1.1.5. Key Management Personnel

14.1.2. Aptera Motors Corp

14.1.2.1. Company Details

14.1.2.2. Key Product Offered

14.1.2.3. Financials (As Per Availability)

14.1.2.4. Recent Developments

14.1.2.5. Key Management Personnel

14.1.3. Hyundai Motor Company

14.1.3.1. Company Details

14.1.3.2. Key Product Offered

14.1.3.3. Financials (As Per Availability)

14.1.3.4. Recent Developments

14.1.3.5. Key Management Personnel

14.1.4. Sono Motors GmbH

14.1.4.1. Company Details

14.1.4.2. Key Product Offered

14.1.4.3. Financials (As Per Availability)

14.1.4.4. Recent Developments

14.1.4.5. Key Management Personnel

14.1.5. Ford Motor Company

14.1.5.1. Company Details

14.1.5.2. Key Product Offered

14.1.5.3. Financials (As Per Availability)

14.1.5.4. Recent Developments

- 14.1.5.5. Key Management Personnel
- 14.1.6. Toyota Motor Corporation
 - 14.1.6.1. Company Details
 - 14.1.6.2. Key Product Offered
 - 14.1.6.3. Financials (As Per Availability)
 - 14.1.6.4. Recent Developments
 - 14.1.6.5. Key Management Personnel

15. STRATEGIC RECOMMENDATIONS

- 15.1. Key Focus Areas
 - 15.1.1. Target Regions
 - 15.1.2. Target Solar Panel
 - 15.1.3. Target Battery Type

16. ABOUT US & DISCLAIMER

I would like to order

Product name: Solar-Powered Vehicle Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Solar Panel (Monocrystalline Solar Panel and Polycrystalline Solar Panel), By Battery Type (Lithium-Ion Battery, Lead-Acid Battery, Lead-Carbon Battery and Others), By Propulsion (Battery Vehicles and Hybrid Electric Vehicles), By Region, Competition, 2019-2029F

Product link: <https://marketpublishers.com/r/S7BD8F51EBD0EN.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:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/S7BD8F51EBD0EN.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