

Solar Carport Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

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Abstracts

The Global Solar Carport Market was valued at USD 978.2 million in 2024 and is estimated to grow at a CAGR of 10.6% to reach USD 2.67 billion by 2034.

Market momentum continues to build as businesses and institutions invest in multifunctional infrastructure that delivers on-site renewable energy while offering shaded vehicle parking. Growing interest in energy independence, improved land utilization, and sustainability commitments is reshaping adoption trends. Solar carports enhance property value, support net-zero planning, and align with rising consumer expectations for visible clean energy integration. These structures incorporate solar panels on overhead canopies to generate electricity for direct use or grid supply while protecting vehicles from environmental exposure. They also maximize available space, support expanding EV charging needs, and contribute to broader clean energy infrastructure goals. Supportive policies, including tax incentives, green financing options, and renewable energy credits, continue to boost project feasibility. As more regions adopt streamlined permitting processes and EV-ready standards, collaboration among utilities, developers, and local governments is accelerating deployment across commercial and public properties.

The V-shape carport design is projected to reach USD 450 million by 2034. Its dual-angled structure enhances solar capture, improves drainage, and delivers stable architecture suited for large-scale parking areas. This configuration allows efficient routing of electrical components, balanced load management, and seamless incorporation of EV charging systems.

The >100 kW–250 kW segment accounted for a 40.2% share in 2024 and is expected to reach USD 1 billion by 2034. These installations continue gaining popularity among

commercial users seeking to reduce operational energy costs and demonstrate progress toward ESG objectives. They also tend to qualify for larger incentive programs, strengthening overall project economics and increasing return on investment.

U.S. Solar Carport Market held 85% share in 2024, generating USD 92.5 million. Market expansion is driven by rising EV adoption, corporate sustainability planning, and attractive federal tax incentives for solar generation and charging infrastructure. Commercial and institutional sites are increasingly transforming parking areas into dual-use renewable energy assets to meet growing energy and transportation electrification demands.

Companies participating in the Solar Carport Market include Solaire Generation, EvoEnergy, New England Clean Energy, ANTAI Solar, RenEnergy UK, Enova, SolarEdge, Positive Energy Solar, Mibet Energy, Baja Carports, Sunlite Group, Tata Power Solar Systems, Neosun, Enerprac, Mahindra Solarize, Himzen, KDC Solar, FlexiSolar, Ornate Solar, Phoenix Solar Panel Systems, SolarSense, Xiamen Sunforson Power, Schletter, and Shanghai Chiko Solar Technology. Companies in the solar carport market employ several strategic approaches to secure stronger market positioning. Many focus on enhancing system designs to improve energy yield, structural durability, and compatibility with EV charging infrastructure. Firms also expand manufacturing capacity and establish global distribution networks to accelerate deployment timelines. Strategic partnerships with commercial property owners, EPC firms, and utilities help broaden project pipelines. Companies increasingly invest in modular and scalable carport solutions to accommodate a variety of site layouts and power requirements.A

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