

Electric 3 wheeler Market by End Use (Passenger Carriers, Load Carriers), Range (Less than 50 miles, above 50 miles), Battery Type (Lead Acid, Lithium-ion), Battery Capacity, Motor Type, Motor Power, Payload Capacity and Region – Global Forecast to 2030

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Abstracts

The electric 3 wheeler market is projected to grow from USD 1.3 billion in 2024 to USD 1.5 billion by 2030, registering a CAGR of 2.2%. The electric 3 wheeler market is expanding rapidly due to rising demand for economical and environmentally friendly transportation alternatives in densely populated urban areas. Electric 3 wheelers are a low-cost, low-emission alternative to regular gasoline-powered vehicles. Government policies and incentives are another aspect driving the growth of the electric 3 wheeler market. Numerous countries are making efforts to minimize carbon dioxide emissions and promote the adoption of electric vehicles. These policies include subsidies, tax rebates for electric 3 wheeler manufacturers and customers, and investments in charging infrastructure.

'Load Carrier segment to be the fastest growing segment during the forecast period'

The demand for Electric 3 wheeler load carriers has been rising due to the increased focus of countries on emission reduction. Various retail, logistics, and courier companies have already started adopting Electric 3 wheelers on a small scale. With technological advancements and the development of more vehicles, the adoption rate of Electric 3 wheeler load carriers will grow exponentially. The Electric 3 wheeler is a cost-effective and eco-friendly mode of transportation, making it ideal for businesses that must move goods quickly and efficiently. This type of vehicle is also a great choice for

businesses that want to reduce their environmental impact. OEMs are partnering with logistics and last-mile delivery providers to increase the application of Electric 3 wheelers in the industry.

'Lead acid to remain the favoured battery chemistry in most developing countries segment during the forecast period'

Lead-acid batteries offer advantages such as low cost, high current delivery, and low internal impedance. The charging time of lead-acid batteries ranges between 6 and 8 hours, with a battery capacity of up to 6 kWh. However, they come with drawbacks such as slow charging times, high maintenance, and lower energy density compared to alternatives like lithium-ion batteries. Despite these limitations, lead-acid batteries remain popular in applications like electric 3-wheelers due to their affordability and availability, particularly in regions like Asia Pacific where last-mile transportation demands are high. The market sees a significant presence of lead-acid battery-powered electric 3-wheelers, driven by their lower pricing compared to ICE counterparts. As the demand for emission-free vehicles rises, manufacturers are exploring options that offer longer ranges and more battery life cycles. Nevertheless, lead-acid batteries continue to find applications, especially in electric 3-wheelers, where affordability remains a key factor influencing consumer choices.

“Asia Pacific to be the largest market during the forecast period.”

Asia Pacific to be the largest market during the forecast period. Increasing government initiatives to promote EVs in India, Sri Lanka, Bangladesh, Japan, and the Philippines will boost the electric 3 wheeler market. The Japanese government has taken steps to increase the adoption of EVs in the country as part of its emission reduction programs, leading to the growth of Japan's electric 3 wheeler industry. Similarly, Bangladesh prepared an auto industry policy that called for at least 15% of registered vehicles to be powered by “environment-friendly electricity” in 2030. This is expected to drive the electric 3 wheeler market in Bangladesh. Further, Philippines has been promoting the use of electric 3 wheelers across the country, including as a form of public transportation. Major cities in the Philippines have started using electric 3 wheelers to transport residents and transient workers. Electric 3 wheelers are also used in the country’s major business districts and urban areas. Such factors are expected to keep Asia Pacific the leading electric 3 wheeler market.

In-depth interviews were conducted with CEOs, marketing directors, other innovation and technology directors, and executives from various key organizations operating in

this market.

By Company Type: OEMs – 24%, Tier I – 67%, Tier II and Tier III – 9%

By Designation: CXOs – 33%, Managers – 52%, Executives – 15%

By Country: North America – 6%, Europe – 8%, Asia Pacific – 68%, and Rest of the World – 18%

The electric 3 wheeler market is dominated by a few globally established players, such as Mahindra&Mahindra Ltd. (India), YC Electric Vehicle (India), Saera Electric Auto Pvt. Ltd. (India), Piaggio Group (Italy), and Citylife Electric Vehicles (India). These companies manufacture and supply electric 3 wheelers to various countries globally. These companies have set up R&D infrastructure and offer best-in-class solutions to their customers.

Research Coverage:

The report covers the electric 3 wheeler market, in terms of End Use (Passenger Carrier, and Load Carrier), Range (Less than 50 miles, and above 50 miles), Battery Type (Lead Acid, Lithium-ion, and Others), Battery Capacity (Below 5 KWH, 5-8 KWH, and Above 8 KWH), Motor Type (Hub Motor, Mid Motor, and Other Motors), Motor Power (Below 1500 W, 1500-2500 W, and Above 2500 W) Payload Capacity (Upto 300 kg, 300 kg to 500 kg, and Above 500 kg), Region (Asia Pacific, Europe, North America, and Row). It covers the competitive landscape and company profiles of the major players in the electric 3 wheeler market ecosystem.

The study also includes an in-depth competitive analysis of the key players in the market, along with their company profiles, key observations related to product and business offerings, recent developments, and key market strategies.

Key Benefits of Buying the Report:

This report will help market leaders/new entrants in this market with information on the closest approximations of revenue numbers for the overall electric 3 wheeler ecosystem and its subsegments.

This report will help stakeholders understand the competitive landscape and

gain more insights to better position their businesses and plan suitable go-to-market strategies.

This report will also help stakeholders understand the market's pulse and provide information on key market drivers, restraints, challenges, and opportunities.

The report provides insight on the following pointers:

Analysis of key drivers (Low operating and maintenance costs, Government incentives and subsidies, Advancements in battery technology and reducing battery prices, and Established market for 3 wheelers in urban transportation), restraints (Lack of charging infrastructure, and Limited power output, range, and speed), challenges (Automobile manufacturer- and customer-oriented policies to promote electric 3 wheeler sales, and Partnerships between OEMs and delivery and logistics fleet operators), and opportunities (Limited battery capacity, High initial investments compared to ICE variants, and Lack of compatibility, interchangeability, and standardization).

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the electric 3 wheeler market.

Market Development: Comprehensive information about lucrative markets - the report analyses the electric 3 wheeler market across varied regions.

Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the electric 3 wheeler market.

Competitive Assessment: In-depth assessment of market ranking, growth strategies, and service offerings of leading players like Mahindra&Mahindra Ltd. (India), YC Electric Vehicle (India), Saera Electric Auto Pvt. Ltd. (India), Piaggio Group (Italy), and Citylife Electric Vehicles (India), among others in electric 3 wheeler market.

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