

Low-Speed Vehicle Market by Vehicle Type (Commercial Turf Utility, Industrial Utility Vehicle, Golf Cart, Personal Mobility Vehicle), Power Output (<8, 8-15, >15 kW), Propulsion, Battery Type, Application, Category Voltage & Region - Global Forecast to 2028

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Report description:

The low speed vehicle market is projected to grow from USD 10.4 billion in 2023 to USD 15.0 billion by 2028, at a CAGR of 7.4%. According to World Bank Statistics, more than 25% of citizens in US are above 60 years and have a separate community where they prefer street-legal vehicles for their daily commute and door-to-door mobility solutions. Also, a country like Japan has more than 28% of the aged population in the country. After the pandemic situation, many tourists have started traveling abroad where it was observed that in 2020 the number of people visiting museums and landmarks was 54 million which grew up to 71 million in 2021. Also, the anticipated growth of LSVs has increased as golf as a sport has noticed higher adoption across North America, Europe & Asian countries. Considering all these factors, LSV is the most preferred vehicle at golf courses, visiting tourist spots, and daily short-distance commutes for the retired community which will drive the market demand under the review period.

"The LSVs with <60V batteries are projected to dominate the market."

The standard electric low speed vehicles are installed with six or eight batteries and the voltage could be 36V or 48V. The 48V batteries are mostly preferred for LSV vehicles as they have good vehicle load-carrying capacities up to 4 -6 seating capacities. LSVs with 36V or 48V deliver adequate power & torque and offer a cost advantage as replacing batteries are easy and affordable. These LSVs can perform well on flat & smooth surfaces at golf courses, large resorts, museums, amusement parks, college campuses, etc. They can run on a smooth surface with ~23-28 mph maximum speed. Many businesses have gone online which has led to an increase in mega distribution centers and warehouses globally to cater to public demand, which has boosted the sales of electric commercial turf utility vehicles and industrial utility vehicles which has ultimately increased the demand for high voltage batteries. These factors will boost the demand for lithium-ion batteries for <60V range batteries as they are more efficient

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and has lower maintenance cost which would keep the market demand upright for this segment in future .

"The lithium-ion battery LSVs are expected to be the largest segment for electric LSVs in 2023."

Lithium-ion has the largest market for electric LSVs owing to its advantages such as higher travel range, better weight-to-performance ratio, lower self-discharge time, low maintenance, and less harmful to the environment. Further, falling prices of lithium-ion have attracted US and European OEMs to adopt lithium-ion batteries in LSVs to comply with the strict environmental laws of developed countries and develop green mobility solutions. Most of the LSVs are equipped with lithium-ion batteries and getting electrified due to having a proper charging infrastructure globally. The electric golf cart usually costs around USD 5500 to - USD 6000, whereas the gasoline-based golf cart usually costs USD 700 - USD 1000. Most of the OEMs offer a range of 30 -40 miles of range in full charge whereas in daily use, an electric golf cart runs only 5 - 10 miles a day and it costs very low for charging the vehicle with a better ROI than IC-based LSVs.

"Europe is another prominent largest market for low speed vehicles"

In Europe, the countries like UK, Germany & France have contributed to the largest market for low speed vehicles. The industrial utility vehicle has the largest market share in the European region, in which <8 kW power output vehicles are mostly preferred in resorts and golf courses due to their excellent torque and performance. Further, government and regional regulatory bodies provide the highest incentives for purchasing electric vehicles to promote clean transport to achieve reduced CO2 emissions in this region.

In Europe, commercial utility vehicle is the fastest growing market due to the increase in warehouse and mega centers. Until 2019, Germany had 140 mega centers which grew by almost 50% Y-o-Y between 2018 & 2019 which promotes demand for these vehicles for load carrying in warehouses. To suffice the demand, many Chinese players are exporting their industrial and commercial utility vehicles to Europe at relatively lower costs.

The break-up of the profile of primary participants in the low speed vehicle market:

-□By Company Type: Tier 1 - 40%, Tier 2 -35 %, and Tier 3 - 25%

-□By Designation: C Level - 50%, Director Level - 10%, Others-40%

-□By Region: North America - 30%, Europe - 00%, Asia Pacific - 60%, Rest of the World - 10%

Prominent companies include Textron Inc. (US), Deere & Company (US), Yamaha Motor Co. Ltd. (Japan), The Toro Company (US), Waev Inc. (US), and Club Car (US) among others.

Research Coverage:

This research report categorizes the LSV market by application (Golf course, hotels and restaurants, airports, industrial facility, and others), by vehicle type (Golf cart, industrial turf utility vehicle, commercial utility vehicle, and personal mobility vehicle), by power output (<8kW, 8 - 15 kW, and >15 kW), by propulsion type (Electric, gasoline, and diesel), by voltage type (<60V, and >60V), by battery (Lithium -ion, and Lead acid), by category type (L6 and L7) and by region (North America, Europe, Asia Pacific, and Rest of the World). The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the LSV market. A detailed analysis of the key industry players has been done to provide insights into their business overview, solutions, and services; key strategies; contracts, partnerships, agreements, new product & service launches, mergers and acquisitions, recession impact, and recent developments associated with the LSV market. Competitive analysis of upcoming startups in the LSV market ecosystem is covered in this report.

Reasons to buy this report:

The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall LSV market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

-□Analysis of key drivers (Need of golf carts and street legal vehicle with autonomous technology for the geriatric population for their daily commute, increasing popularity of golf sports with increase in number of golf courses in US and Asia Pacific region, and increase in charging infrastructure), restraints (High cost of LSVs has lower sales of the vehicles in developing and

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underdeveloped countries), opportunities (Increase in infrastructure development in real estate, hotel and resort, and rehabilitation in other European countries for the families of Ukraine after Russia war, increase in autonomous vehicle and connected car technology for better experience of the LSV riders, and increase in global tourism sector which has reached to pre pandemic situation), and challenges (Adoption of lithium ion batteries with high density has increased the battery cost compared to lead acid battery, and lack of safety standards followed by the OEMs with LSV body structure design) are influencing the growth of the LSV market.

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

-□Market Development: Comprehensive information about lucrative markets - the report analyses the LSV market across varied regions.

-□Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the LSV market

-□Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players like Textron Inc. (US), Deere & Company (US), Club Car (US), The Toro Company (US), and Yamaha Motor Co Ltd (Japan) among others in the LSV market

The report also helps stakeholders understand the pulse of the automotive micro-mobility market & electric vehicle market by providing them with information on key market drivers, restraints, challenges, and opportunities.

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Low-Speed Vehicle Market by Vehicle Type (Commercial Turf Utility, Industrial Utility Vehicle, Golf Cart, Personal Mobility Vehicle), Power Output (<8, 8-15, >15 kW), Propulsion, Battery Type, Application, Category Voltage & Region - Global Forecast to 2028

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