

**Ebike Market by Class (Class I, II, & III), Battery (Li-ion, Li-ion Polymer, Lead Acid), Motor (Mid, Hub), Mode (Throttle, Pedal Assist), Usage (Mountain/Trekking, City/Urban, Cargo), Speed, Battery Capacity, Component, & Region - Global Forecast to 2030**

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**Report description:**

The e-bike market is projected to grow from USD 48.7 billion in 2024 to USD 71.5 billion by 2030, with a CAGR of 6.6%. The market experienced significant growth from 2019 to 2021, followed by steady growth in 2022. In 2023, e-bike sales declined again in some countries due to economic downturns, market uncertainty, and increased competition, which led to increased price competition. These trends are expected to be temporary, with growth anticipated to resume in 2024 and continue through 2026. The long-term outlook for the e-bike industry remains positive. While the global market for Class-I e-bikes is expected to dominate, Class-III e-bikes are projected to see promising growth during the forecast period, driven by increased demand for high-capacity e-bikes, particularly in North America. Cargo e-bikes and E-MTBs are experiencing a sudden demand as E-MTBs equip riders with the power to tackle challenging off-road adventures. The high-torque motors help them climb steeper hills, navigate rougher terrain, and maintain momentum on loose surfaces. E-cargo bikes offer a sustainable and efficient alternative to cars for short-distance hauling tasks. They can navigate traffic congestion and easily find parking, making them ideal for urban environments and efficient last-mile delivery options.

">70NM motor power is estimated to be the fastest growing market for e-bikes over the forecast period."

Riders increasingly seek e-bikes that can handle challenging terrains like hills, rough roads, or heavy cargo. Motors exceeding 70 NM offer the necessary muscle to maintain speed and conquer inclines. E-MTBs are a rapidly growing segment that heavily relies on powerful motors (often exceeding 70 NM) to navigate off-road adventures effectively. E-cargo bikes, particularly those designed for heavy loads, require powerful motors to maintain stability and efficiency while carrying groceries, equipment, or passengers. High-torque motors can contribute to achieving faster speeds, especially for Class III bikes on flat terrain. This can

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make commuting by bike more time-competitive than traditional bikes, especially for longer distances. North America is estimated to be the largest market for >70NM. The NILOX URBAN - Cargo e-bike C2 CARGO MID produces 80NM of torque, and the Pedibal E-Cruiza Fat Tyre Electric Bike 80NM are a few examples of >70NM motor power e-bikes.

"City/urban bikes are projected to be the largest segment during the forecast period as they are a practical, cost-effective, and environmentally friendly solution for urban transportation."

City/Urban e-bikes are estimated to be the largest e-bike segment during the projected period. City e-bikes are designed with comfort, ease of use, and practicality, making them well-suited for urban commuting. As e-bikes gain popularity as an eco-friendly and efficient mode of transportation in cities, the demand for electric city bikes has increased, fueling segment growth. E-bikes have lower running costs due to minimal electricity consumption for charging and require less maintenance than cars. The price range of City/Urban eBikes can range between USD 1,000 and USD 3,000. One of the critical reasons why city/urban electric bikes are regarded as environmentally friendly is their potential to lower carbon footprints. Research by the European Cyclist Federation highlights that in France, for instance, an e-bike produces only 9 grams of CO<sub>2</sub> per kilometer. This is significantly lower than the average conventional vehicle, which emits 271 grams of CO<sub>2</sub> per kilometer, making e-bikes about 30 times more efficient in emissions.

Asia Oceania is considered the region with the most significant city/urban e-bike sales in value in 2024. Cities with traffic congestion are shifting towards micro-mobility services, and most city/urban bikes are used for micro-mobility, like Hellobike (China), Anywheel (Singapore), Coorides (India), and many more. Prominent players who manufacture city/urban e-bikes are Giant Manufacturing Ltd. (Taiwan), Yadea Group Holdings Ltd. (China), Emotorad (India), and Trek Bicycle Corporation (US). Examples of City/Urban e-bikes include Rad Power Bikes RadCity 5 Plus, Tenways CGO600 Pro, Giant Escape+ E+ 3, Trek Verve+, and Specialized Turbo Vado 4.0.

"Europe is anticipated to be the second largest e-bike market in 2024 due to the rising demand for e-bikes."

Ebike sales in Europe declined in 2023 due to several factors: the Russia-Ukraine war, a global economic slowdown, rising living costs, supply chain disruptions, and high retail inventory levels. According to data from Zweirad-Industrie-Verband (ZIV),. According to data from Zweirad-Industrie-Verband (ZIV), e-bike sales in Germany in 2023, is 2.0 million units and is declined by 8.0% from 2022. Besides replacing old bikes with new ones, there is an increasing trend of acquiring a second or third bike. The market is expected to grow slowly in the coming years due to government incentives, the growing popularity of e-bikes for commuting, and the increasing availability of ebike infrastructure. In July 2022 At Eurobike 2022 in Frankfurt (Germany), the CHAdeMO Association showcased its progress on EPAC standards, which include a unified charging plug, socket, and communication protocol. This initiative aims to create a straightforward charging station featuring a compact connector with a maximum output power of 800W (20A), optimized for eBikes. Additionally, the charging station will be compatible with existing eBikes. In May 2023, The European Declaration on Cycling, signed a significant commitment by the EU to advance sustainable transportation. Transport Commissioner Adina Valean, along with prominent EU officials, endorsed cycling as a crucial element of Europe's mobility strategy. The declaration aims to incorporate safe and comprehensive cycling networks with public transport systems, provide secure bike parking, and establish e-bike charging stations. These initiatives are intended to improve infrastructure, boost the popularity of cycling, and align with the EU's broader industrial and environmental objectives. This will create emerging opportunities for the e-bike market by improving the infrastructure of the cities.

In 2023, Germany was Europe's largest market for e-bikes, followed by the Netherlands, France, Belgium, Italy, Austria, Switzerland, and the UK. Governments are offering substantial incentives to purchase cargo e-bikes. Consequently, the demand for cargo e-bikes is projected to increase. According to the European Union, buyers can claim up to 25% of the purchase price of e-bikes, with a maximum rebate of USD 1,100. According to Eco Move Europe, e-bikes are becoming increasingly popular in many UK cities for last-mile delivery, driven by the growing demand for online shopping. Companies choose e-bikes for deliveries because they are eco-friendly, cost-effective, and easy to maneuver in congested urban areas. This trend is anticipated to expand further as more businesses adopt e-bikes for their delivery operations.

#### Breakdown of primaries

The study contains insights from various industry experts, from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

-By Company Type: OEM - 80%, Tier I - 20%

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-□By Designation: D Level - 30%, C Level - 60%, and Others - 10%

-□By Region: North America - 10%, Europe - 60%, Asia Oceania - 30%,

The key players in the Ebike market are Giant Manufacturing Co., Ltd. (Taiwan), Yamaha Motor Company (Japan), Accell Group NV (Netherlands), Yadea Group Holdings., Ltd. (China), and Pedego (US). Major companies' key strategies to maintain their position in the global e-bike market are strong global networking, mergers and acquisitions, partnerships, and technological advancement.

#### Research Coverage

The study segments in the Ebike market and forecasts the market size based on Battery capacity (< 250W, >250W and <450W, >450W-<650W, >650W), by Battery Type (Li-ion, Li-ion Polymer, Lead acid), by Class (Class-I, Class-II, Class-III), by component (Battery, electric motor, wheels, frames and forks, brake systems, crank gears, motor controllers), by Mode (Pedal Assist, Throttle), by Motor type (Hub Motor, Mid Motor), by Motor weight (>2.4KG, >2KG and <2.4KG, <2KG), By Motor Power (<40nm, >40nm-<70nm, >70nm), by Ownership, by Region (Asia Oceania, Europe, North America), by speed (25 kmph, 25-25kmph) and by Usage (Mountain/trekking, city/urban, cargo, others).

#### Key Benefits of Buying the Report:

The report will help the market leaders/new entrants with information on the closest approximations of the revenue numbers for the e-bike market and the sub-segments. The report also discusses ups and downs in e-bike sales, allowing component suppliers to plan their strategies. 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 market pulse and provides information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

-□Analysis of key drivers (Government support to increase e-bike sales to reduce CO2 emissions, Growing popularity of e-MTB, Rising demand for micro-mobility services), restraints (High stagnant inventory of e-bikes, Government regulations, and lack of infrastructure, Ebike conversion kits), opportunities (Trend toward connected e-bikes, Development of lightweight electrical energy storage systems, Development in drive motors for increased e-bike performance), and challenges (Challenges in importing to EU and US from China, High cost of ebikes) influencing the growth of the eBike market.

-□Product Development/Innovation: Detailed insights on upcoming technologies and new product & service launches in the eBike market.

-□Market Development: Comprehensive market information ? the report analyses the authentication and brand protection market across varied regions.

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

-□Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players like Pon.Bike (Netherlands), Accell Group NV (Netherlands), Yamaha Motor Company (Japan), Giant Manufacturing Co., Ltd. (Taiwan), Yadea Group Holdings Ltd. (China), and Trek Bicycle Corporation (US) among others in the eBike market.

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**Ebike Market by Class (Class I, II, & III), Battery (Li-ion, Li-ion Polymer, Lead Acid), Motor (Mid, Hub), Mode (Throttle, Pedal Assist), Usage (Mountain/Trekking, City/Urban, Cargo), Speed, Battery Capacity, Component, & Region - Global Forecast to 2030**

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