

E-bike 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 2028

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Report description:

The e-Bike market is projected to reach USD 77.2 billion by 2028 from an estimated USD 51.5 billion in 2023, at a CAGR of 8.4% from 2023 to 2028. With the growth in the automotive industry, there has been a rise in air pollution. To control the emission rate, the inclination towards green and clean mobility solutions for daily commutes is growing. This is leading to increased demand for e-Bikes globally. Asia Oceania is forecasted to lead the e-Bike market.

E-Bikes assist in optimum space utilization and help in faster commute in urban and highly populated areas. Governments of many countries in Europe, North America, and Asia Oceania are working toward supporting the usage of e-Bikes through subsidies and regulatory changes to reduce traffic congestion stress, ultimately helping to decrease emissions and improve air quality. For instance, in Italy, the government offers a subsidy of up to USD 527 in municipalities with over 50,000 inhabitants to purchase new bicycles and e-Bikes. Therefore, such initiatives are attracting consumers to e-Bikes.

">650W e-bike battery capacity segment estimated to be the fastest growing market at a CAGR of 15.0%."

>650W batteries are mostly preferred where high performance is required. These batteries are more expensive than other batteries. However, they are useful in e-MTB and e-cargo bikes. For instance, QWIC offers its e-bike Mira Tour, with a 756W battery, for customers who do not want to compromise performance. Due to recent developments in lithium-ion battery technology, manufacturers can resolve the high energy-to-weight ratio of high voltage batteries, such as the >650W segment, which further helps increase the energy efficiency and range per charge e-bikes. The Haibike Adventr models come with an InTube (720 Wh) battery. Trekking 11 high, city E-bike and trekking E-bike are equipped with a >650W battery. Asia Oceania is estimated to be the largest market for >650W due to its strong foothold in China. It is also expected to grow rapidly because of

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the expected growth in Japan and India. Major players in China, such as Yadea and AIMA Technology Group Co., Ltd., offer e-bike models such as YT-500, 27.5" Mountain E-Bike, DYU D1 Smart Electric Bike, and 700c Trekking S that are equipped with large capacity batteries. Models such as Mtb Pedelec E-Bike M4, City Espresso E-Bike Pedelec T5 700c, and Airwheel E19B101 are a few popular models.

"Class-I segment is projected to be the largest in the e-bike market during the forecast period due to the least restrictions imposed on the e-bikes. "

The Class-I e-Bike is also known as a pedal assist e-Bike. A bike with an electric motor that assists only during pedaling is called a pedelec bike. The drive system of the pedal-assist/Class-I e-Bike is only activated once the rider starts pedaling. Class-I. Class-I e-Bikes have a maximum speed limit of 32 km/h. However, depending on the region, the speed and regulation vary. These are most popular in the Asia Oceania region due to the regulations and their popularity. These e-Bikes are allowed on bike paths and lanes shared with traditional, non-assisted, analog bikes. The Class-I category is the least restricted of all the e-Bikes. The Class-I e-Bikes would be the most popular for federal and state-regulated singletrack mountain bike trails and mixed-use bike paths. The price range for Class-I e-bikes in Asia Oceania is around USD 500- USD 800; in Europe and North America, around USD 2,500 - USD 3,000.

In China, from 2019, helmets are compulsory in Class-I e-Bikes with a speed limit of 25 km/h, a 400 W motor, and a maximum weight of 55 kg. In Japan, the speed limit for this Class of e-Bikes is 24 km/h, with a 250 W motor. In Europe, the speed limit is <25 km/h, with ?250W motor. North America has a maximum speed limit of up to 32 km/h and ?750 W motor for Class-I e-Bikes, with helmets being mandatory.

Some of the examples of Class-I e-Bikes include the Verve+ Series by Trek Bicycle Corporation (Wisconsin, US), S-Works Turbo Kenevo SL by Specialized Bicycle Components Co Ltd (Morgan Hill, US), and Townie Path Go Series by Electra (US), and others.

"Europe is anticipated to be the second largest market in 2023 due to the emission standards and raising demand for e-bikes."

The European cycling and electric bike market was worth USD 21.1 billion in 2021, with a rise of 7.5% in 2020, according to the trade body umbrella CONEBI. European consumers prefer greener e-mobility solutions over buying cars or using public transport for the daily commute, which has resulted in a staggering 52% increase in sales in 2021. In the European region, Germany was the largest market for e-Bikes in 2022, followed by the Netherlands, France, Belgium, Italy, Austria, Switzerland, and the UK. Due to the pandemic, these countries witnessed a boost in e-Bike sales in 2020. Governments are also providing the highest incentives possible to purchase cargo e-bikes. This would lead to decreased traffic congestion and business operating costs. Therefore, the demand for cargo e-bikes is expected to grow rapidly. According to the European Union, buyers can claim back up to 25% of the purchase price of e-bikes, a maximum of USD 1,100.

Europe has stringent emission standards to cope with rising vehicle emissions. Several countries in this region promote the use of e-Bikes by providing incentives. The demand for e-Bikes has increased tremendously due to urbanization and consumer desire to move from cars to alternative mobility. The increasing number of incentives for e-Bikes across Europe is expected to fuel the demand for e-Bikes in the European region.

Breakdown of primaries

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

-□By Company Type: OEM - 70%, Tier I - 30%

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

-□By Region: Asia Oceania - 50%, Europe - 30%, and North America - 20%

The key players in the E-Bike market are Accell Group NV (Netherlands), Giant Manufacturing Co., Ltd. (Taiwan), Yadea Group Holdings., Ltd. (China), Yamaha Motor Company (Japan) and Pedego (US), etc. 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

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The study segments in the E-Bike 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 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 overall e-Bike market and the sub-segments. 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.

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