

Solar E-Bike Market By Motor Type (HUB Motor, Mid Drive), By Battery Type (Lead acid, Lithium ion (Li-ion), Others), By Application (Sports, Fitness, Daily Commute), By Consumer Segment (Urban, Rural), By Power Output (250W & Less Than 250W, Above 250W): Global Opportunity Analysis and Industry Forecast, 2030-2040

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#### Report description:

A solar e-bike or solar electric bike is a standard bike equipped with an electric motor, battery, and solar panel which assist in propulsion. It captures the sunlight through the solar panels and send the power to the battery, charging it fully within 4-6 hours on a sunny day. However, solar e-bikes run on solar energy but can be supplemented by a battery to allow it to run even on the absence of sunlight. Thus, solar e-bikes have been considered a viable transportation option in recent years due to their power capacity, long-distance range, and moderate speed. The popularity of solar e-bikes is increasing due to rapid urbanization and a surge in vehicular traffic. At present, solar technology is growing more and more. With the new developments in this field, riders who aim for speed and power will not be disappointed as these bikes can achieve both (speed & power) while reducing one's carbon footprint. For instance, Lightning has launched its solar e-bike, Superbike 218, that offers average distance of 100 miles. It has a 200 horsepower and 10,500 rpm. This wonder can be charged in 30 minutes on a DC fast charger and in 120 minutes on a level 2 charger.

The factors such as positive government regulations and policies to encourage the use of solar e-bikes, increase in fuel costs, and rise in interest in cycling as a fitness & recreational activity is expected to drive the market growth. However, high purchase & and maintenance cost of solar e-bikes and low operating efficiency of solar e-bikes as compared to traditional bikes are some of the factors that hinders the market growth. Furthermore, technology advancement in solar e-bikes and improvement in the bicycle infrastructure are expected to offer lucrative opportunities for market growth.

For the purpose of analysis, the solar e-bike market is segmented into motor type, battery type, application, consumer segment, and power output, and region. By motor type, it is fragmented into a hub motor and a mid-drive. Based on battery type, it is classified into lead-acid, lithium-ion (Li-ion), and others. By application, the market is divided into sports, fitness, and daily

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commute. By consumer segment, the market is categorized into urban and rural. By power output, it is fragmented into 250W & less than 250W and above 250W. By region, it is analyzed across North America, Europe, Asia-Pacific, and LAMEA.

#### Key Benefits For Stakeholders

- -This study presents analytical depiction of the global solar e-bike market analysis along with current trends and future estimations to depict imminent investment pockets.
- -The overall solar e-bike market opportunity is determined by understanding profitable trends to gain a stronger foothold.
- -The report presents information related to the key drivers, restraints, and opportunities of the global solar e-bike market with a detailed impact analysis.
- -The current solar e-bike market is quantitatively analyzed from 2030 to 2040 to benchmark the financial competency.
- -Porter's five forces analysis illustrates the potency of the buyers and suppliers in the industry.

### **Key Market Segments**

By Motor Type

- HUB Motor
- Mid Drive

### By Battery Type

- Lead acid
- Others
- Lithium ion (Li-ion)

## By Application

- Sports
- Fitness
- Daily Commute

# By Consumer Segment

- Urban
- Rural

### By Power Output

- 250W Less Than 250W
- Above 250W

## By Region

- North America
- U.S.
- Canada
- Mexico
- Europe
- U.K.
- Germany
- France
- Belgium
- Netherlands
- Spain
- Denmark
- Rest of Europe
- Asia-Pacific
- China
- Japan
- India
- Australia

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- Vietnam
- Rest of Asia-Pacific
- LAMEA
- Latin America
- Middle East
- Africa
- Key Market Players
- DOREL INDUSTRIES INC.
- Accell Group
- CERVELO
- Fuji-ta Bicycle Co., Ltd.
- Giant Manufacturing Co., Ltd.
- CSE EV GROUP CO LTD
- Derby Cycle
- KONA BICYCLE COMPANY
- Merida Industry Co, Ltd
- OLYMPUS BIKES
- Royal Dutch gazelle
- SPECIALIZED BICYCLE COMPONENTS, INC.
- Trek Bicycle Corporation
- Yadea Group Holdings Ltd
- Yamaha Motor Co. Ltd.
- Kvaern (Key Innovator)

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