

A STUDY ON THE ELECTRIC BIKES MARKET IN INDIA- 2022-23

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ABSTRACT: Since the prices of petrol and deiseal are raising and their consumption is also un avoidable, the today's travelling cost has increased in such a way that it is beyond the reach of an ordinary individual. The electric bikes and cars will solve the problem of today's increased cost of travelling due to their lowest per kilometre cost. But such electric vehicles should be reachable to all classes of the people in the society from price point of view. The objective of this paper is to study the emerging e-bikes in 2022-23, the e-bikes available in lesser prices, e-bikes market size, market trends, market segmentation, government initiatives and covid impact on the e-bikes market in India.

Key words: prices, noice, e-bykes, market

1. INTRODUCTION: A bicycle embedded with an electric motor is called an electric bike. The rider can use the pedals eventhough the electric bike is powered by a rechargeable battery. The trend of usage of Electric Vehicles are in increasing it may be due to the reasons like their availability in the market at economic prices, such vehicles are exempted from motor vehicle tax and fees, they are also exempt from registration if they are below 25kw. Another important reason is the rise in the prices of petrol leads to the usage of Electric Vehicles. The running costs of electric vehicles is around one rupee per kilometre where as it is rupees three to four in case of petrol vehicles. Similarly in some cities the government officials are encouraging their usage because of they are noise free (they would reduce the noise over eighty percent), air pollution free(they will reduce the air pollution by ninety nine percent) and environment free, particularly the two wheelers can be charged at home itself without depending upon the outside charging stations. In order to increase the market share of Electric Vehicles the Governments should take the initiative to establish large number of power charging stations.

2. Research Methodology: The paper is based on the descriptive study.

Sources of data: The researcher has collected is asecondary data mobilized from various academic books on GST, published research articles, and the relevant websites.

3. Discussion: It involves -

(a) **Emerging Electric bikes in 2022-23:**The following are some of the emerging electric bikes in the financial year 2022-23 in the Indian Market.

Sl. No	Model	Expected Price(Rs.)
1	2022 Bajaj Chetak	1,60,000
2	Honda <u>Activa</u> Electric	1,10,000
3	Hero Electric AE-29	85,000
4	Hero Electric AE-3	1,50,000
5	Hero Electric AE-47 E-Bike	1,00,000
6	Hero Electric AE-75	80,000
7	Hero Electric AE-8	70,000
8	Suzuki <u>Burgman</u> Electric	1,50,000
9	TVS Creon	1,50,000
10	Okinawa Cruiser	1,00,000

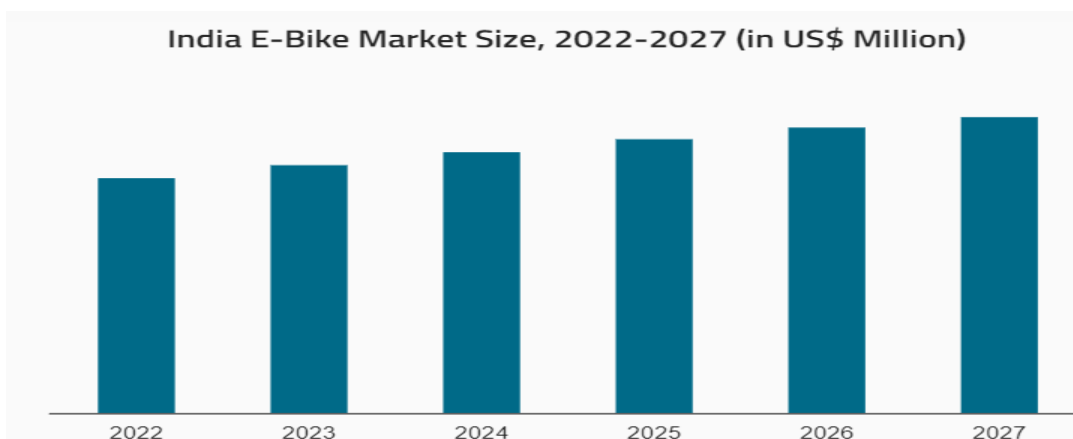
Source: <https://www.zigwheels.com/newbikes/Bajaj/2022-chetak>

(b) **Electric Bikes available at low prices:** However some category of bikes are available in less than Rs.50,000 which are as under-

Sl. No	Model	Ex-showroom Price(Rs.)
1	Bounce Infinity E1	45,099
2	Avon E Plus	25,000
3	Avon E Scoot	45,000
4	<u>Ujaas</u> Energy eZy	31,880
5	<u>Ujaas</u> Energy eGO	34,880
6	<u>Lohia</u> Oma Star	41,444
7	Avon E Lite	28,000
8	Avon E Mate	45,000
9	<u>Raftaar</u> Electrica	48,540
10	<u>Essel</u> Energy GET 1	37,500

Source: <https://www.zigwheels.com/newbikes/electric-bikes-under-Rs.50,000>

(c) **E-Bikes market size in India:** The e-bikes market in India is expected to exhibit a compound annual growth rate (CAGR) of 12.90% during the period 2022-27. Due to the reasons like availability of e-bikes at affordable prices, providing energy efficiency and also emission-free the demand for e-bikes is increasing throughout India. The increasing trend of demand for e-bikes can be depicted in a graph with a dummy data as under.

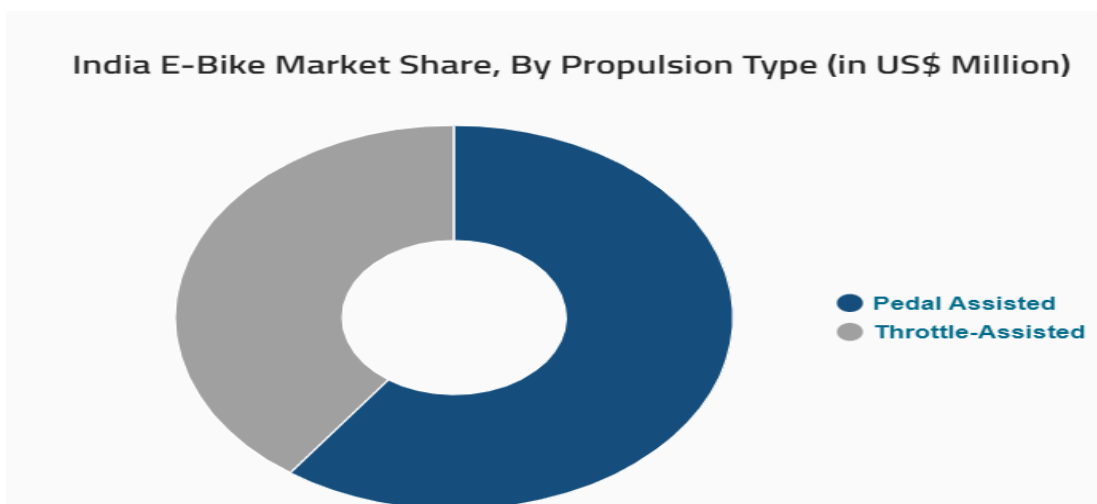


Source: <https://www.imarcgroup.com/india-e-bike-market>

(d) E-Bikes market trend in India: At present there is rise in the sales of e-bikes in India due to the following reasons-

- (i) using such bikes for recreational and adventure activities.
- (ii) Since they are also reduce the pollution in the atmosphere, they became an eco-friendly alternative to the conventional two wheelers runs with petrol and petroleum related fuels.
- (iii) The Government of India is also encouraging the usage of e-bikes with view to reduce the vehicular pollution caused by conventional bikes.
- (iv) The prices of the e-bikes and their maintenance costs are also lesser when comparing to the conventional bikes.
- (v) E-bikes are available in both online as well as off line to purchase.
- (vi) The market players of e-bikes are focusing much on Research and development to ensure that the increased product quality by improved battery quality, usage of light weight components.
- (vii) The manufacturers are also investing much on promotional activities to augment their sales

(e) E-bikes market segmentation in India: Pedal assist and throttle are the two typical modes of motor engagement on electric motorcycles. When using a pedal assist system, the motor only activates when the pedals are being turned. The throttle option, on the other hand, activates the motor whether you are pedalling or not. IMARC group has made analysis about the market segmentation based on pedal assist and throttle for the years from 2022-27 and developed the following diagram.



Source: <https://www.imarcgroup.com/india-e-bike-market>

(f) The initiatives of Government of India: These include the following.

- (i) The Niti Aayog policy think tank of the Indian government suggested and legislated the electrification of all two-wheelers with a displacement capacity of under 150cc by March 2025 in February 2018.
- (ii) In conjunction with the FAME and FAME II programmes of the Society of Indian Automobile Manufacturers, the government made significant reforms to the Department of Heavy Industry.
- (iii) The Atmanirbhar Bharat Abhiyan, the Make in India campaign, and the National Electric Mobility Mission Plan 2020 (NEMMP 2020) are other government programmes that will encourage the use of electric bikes.

(g) Analysis of COVID-19 Impact: The state-wide curfew imposed in the wake of the pandemic will benefit India's market for electric bikes in the long run. People's reluctance to use public transportation during the pandemic raised the demand for electric bikes. The government's electrification initiative has also helped to meet the rising demand for electric bikes. Additionally, consumers are beginning to understand that cars with combustion engines emit 60% more pollution than their electrified counterparts. The use of electric bikes as a personal means of transportation increased once the lockdown was lifted. Long-term projections indicate that this growth will also continue.

4. Conclusion: Due to the rising demand for natural resources like gasoline and diesel, we must turn to alternative resources like electric bikes and others in order to find new forms of transportation. An electric bike is a variation of the current cycle that increases energy production by using both electric energy and solar energy, if solar panels are provided. Electric bikes are energy efficient hence they are affordable to majority of the population of

the country. Like conventional bikes, the electric bikes can be used for shorter distances and for various other purposes. Since the electric bikes does not use the fossil fuels, the country can save huge amount of foreign currencies to import the same. The cost per kilometre travel is also very less in case of electric bikes when comparing the to the conventional bikes besides they are also noise less operation, eco-friendly and also pollution free. Based on the above study, it can be observed that the demand for e-bikes will be increased for the coming five years ie., from 2022-27 which is the period of study, however proper initiatives still required from the governments that the electric bikes should be available at lesser prices gradually in such a way that their usage has to be increased drastically in the country.

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