

# A Review on the Study of Design and Fabrication of a Prototype Electric Vehicle

Promod Kumar N, Somashekar G, Vidhya Shankar S, Pavankumar Bhandari

Department of Mechanical Engineering

Alva's Institution of Engineering and Technology, Moodabidri, Dakshin Kannada, Karnataka, India

pramodnk90@gmail.com

**Abstract:** Charge is broadly considered as a reasonable system for lessening the oil reliance and ecological effects of road transportation. In quest for this system, most consideration has been paid to electric vehicles. Be that as it may, significant, yet undiscovered, possibilities could be acknowledged in metropolitan regions through the huge scope of presentation of electric bikes. Here, we survey the natural, financial, and social execution of electric bikes, demonstrating that these are for the most part more energy effective and less contaminating than traditionally controlled engine vehicles. Electric bikes will more often than not decline openness to contamination as their natural effects to a great extent result from vehicle creation and power generation outside of metropolitan regions. Because their ecological impact are largely a function of vehicle manufacturing and power generation outside of metropolitan areas, electric bikes will frequently reduce openness to contamination. According to our research, the cost of electric bicycles has been decreasing at an annual rate of 8%. Regardless of the price differences. The enormous scope reception of electric bikes can decrease traffic commotion and street blockage yet may require variations of metropolitan framework and security regulations. A case-explicit appraisal as a component of an incorporated metropolitan versatility arrangement that accounts, e.g., for the neighbourhood power blend, framework attributes, and mode-shift conduct, ought to be directed prior to making inferences about the manageability impacts of electric bikes.

**Keywords:** Electric two wheelers, E bikes, environmental impacts, Road transportation, pollution.

## REFERENCES

- [1]. Hazarathaiyah, Pappuri, et al. "Design and fabrication of hybrid electric bike." International Journal of Applied Engineering Research 14.4 (2019): 930-935.
- [2]. Maurya, Arun Kumar. "Design and Fabrication of a Prototype Electric Vehicle."
- [3]. Pachbhai, Shailesh S., and Laukik P. Raut. "Design and Fabrication of Power Scooter." International Journal of Innovative Research and Development 273 (2013).
- [4]. Maddukuri, S. V. P. K., and Borla Srikanth. "Design and fabrication of I-cycle." Int. J. Electron. Electr. Eng 3.5 (2015): 359-364.
- [5]. FU Aia (Ms.), "The Role of Electric Two-Wheelers in Sustainable Urban Transport in China". Market Analyst, Beijing, China.
- [6]. Durkin, Collin R., et al. "Design and Fabrication of an Electric Basic Utility Vehicle." 2020 IEEE International Conference on Electro Information Technology (EIT). IEEE, 2020.
- [7]. Nabil, Tamer, et al. "Design and fabrication of prototype battery electric three wheeled vehicles." Journal of Asian Electric Vehicles 17.2 (2019): 1823-1834.
- [8]. Mahendran, t., et al. "design optimisation and fabrication of hybrid two-wheel drive motorcycle." (2019).
- [9]. Matey, Shweta, et al. "Design and fabrication of electric bike." Hand 27.250 (2017): 40.
- [10]. Draz, Muhammad Umar, et al. "Segway electric vehicle." 2012 International Conference of Robotics and Artificial Intelligence. IEEE, 2012.