

Design, Fabrication and Analysis of A Prototype Electric Bike

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Abstract

Automobile sector started shifting its dependency from fossil fuel to electrical energy for the last few decades to mitigate the adverse environmental scenario like global warming, air pollution etc. Due to this, battery is emerging as the new source of power. At the same time, use of bikes for city transportation has been growing at a high rate in developed countries. For a heavily congested mega city like Dhaka, electric bikes can provide a better alternative to traditional fossil fuel vehicles. They are not only cost effective but also faster and can contribute to improved public health outcomes. This electric bike can be an aspiring solution to a rather bigger problem than just being a day-to-day commuter. It's highly desired that the motorcycle's overall design and construction will increase its road performances and meet customer needs if made commercially available.