

Design of an Economical and Mechanically Stable E-Cycle

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ABSTRACT

The greenhouse effect, and air pollution that our societies are facing, require immediate solutions. Among the vehicles available to-day for transportation, many are gas guzzlers. This results in excessive fossil fuel consumption, and consequently, high amounts of co₂ and other poisonous gases are released in the environment.

So far, the alternate electric vehicles which are free from this problem are too expensive for the consumers. However, there are some other problems associated with these vehicles such as - Range in kilometers per charge. Two new electric vehicles have been designed to overcome some of the problems mentioned above. First of all, it is economical and easily affordable in any country of the world for common masses. Their fuel consumption, in dollars or any other currency, the cost is 16 % approximately that of gasoline based vehicles. They have high acceleration. These have a minimum range of approximately 35 kilometers per charge, with a possibility of increasing the range by incorporating more batteries. One of these has a solar panel mounted on its top which supplements the electric energy during the day while the vehicle is in use. This way, its range is increased.