

Conceptual Design of an Electric Car with Packaging to Suit Tier-1 City Family



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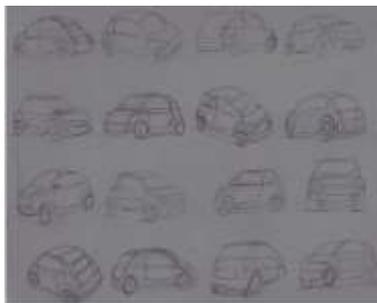
Keywords: Vehicle Packaging, Pure Drive, Ergonomics, Interchangeable Battery

Abstract:

As countries seek to address future energy requirements in a quickly rising and changing world, achieving sustainable transportation has emerged as a vital mission. Worldwide, automotive industries are mainly focusing on the alternate power source and developing new advanced technology to make it environmental friendly product. Presently many automotive OEM's are moving towards go green initiative to make it pure drive.

The use of automotive within the city is essential to commute in our day to day activities. Need for alternative means of transportation is major concern in present scenario because of depletion of fossil fuels. By adopting new trend in the vehicle design it is required change in the total situation, hence using electrical vehicle while commuting within city will be more advantages when compared to traditional vehicles. In this report the main focus is on the development of conceptual design of an electric car for a small family tire 1 city users based on the user needs.

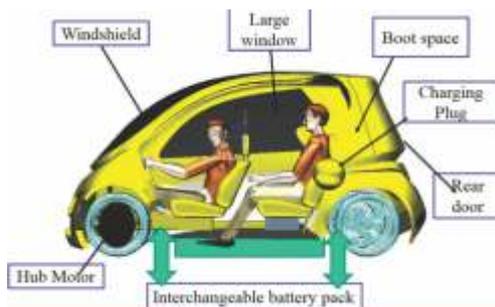
The major needs of tier-1 city family, and existing electric vehicle users' statement was recorded through Gemba study and depending upon Quality Function Deployment (QFD) rating the exterior and interior design was carried out with ergonomic consideration. Vehicle packaging was developed using the study. In this concept, interchangeability of battery pack has been incorporated which can increase the range of electric vehicle. So by this the future urban city mobility will find a paradigm shift while commuting.



Ideation sketches



Digital rendering of a final concept



Packing of the final concept



Final concept scaled mockup model