FINAL YEAR PROJECT REPORT

SOLAR ENERGY VEHICLE

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Dedication

Cardinally, we are very thankful to Allah Almighty who has bestowed upon us to complete this task. Besides, it is collaterally dedicated to our kind parents who helped us and supported us in 4 years of graduation. We thank our parents for their prayers and guidance throughout our education. We also would like to thank our teachers of SEN, UMT who taught us throughout the graduation, guided us and nourished our soul and body to find our modes and future perspectives. We also thank our teachers who helped us groom our personality and moral education.

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Abstract

In this modern technological era, usage of energy resources has increased tremendously. The population explosion has been a major element in draining energy resources. Pakistan is facing greater energy crisis than its neighbors. It is imperative that we judiciously and imperatively utilize the available alternate energy resources. Solar energy is one of the everlasting energy resources which can be used to produce electricity and can be used to propel the transportation system. Moreover non- renewable energy resources such as fossil fuels are decreasing rapidly. As a final year project; we have designed a solar energy vehicle. This idea, in future, may help protect our fuels from getting extinguished. Electric vehicle with more advantages of no noise, no pollution, saving energy and reduce carbon dioxide emissions is to power-driven vehicle with a motor drive wheels moving the back tire. The charged batteries are used to drive the motor which serves here as an engine and moves the vehicle in reverse or forward direction. Designed vehicle is environment friendly and most economical in long term. We have designed battery charger, digital speedometer, and battery level Indicator, mechanical structure of the vehicle and prototype speed controller. Our designed vehicle also has an option of being charged via utility grid or WAPDA in case of inclement weather. Solar energy vehicle is very efficient and useful vehicle for short distance city travelling, which speed up to 40km/hour and could covers up to 70 km distance in a day's charge.