## IJARSCT



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 1, June 2025



## **Design and Innovation of Hybrid Solar Vehicle**

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Abstract: This paper proposes a Hybrid Solar Vehicle system which solves the major problems of fuel and pollution. The renewable energy is vital for today's world as in near future the renewable sources that we are using are going to get exhausted. Wind power is clean and sustainable natural resources that has yet to be fully utilized in the automotive industry. Also the sun is probably the most important source of renewable energy available today. The hybrid system has been designed and installed to generate power which combines wind turbine and solar panel. The hybrid model system is renewable energy system, which helps conserve energy by reducing the use of fuel in vehicle. Hence developing a new method for the economical evaluation of Hybrid Systems for electricity production. The hybrid solar vehicle is a step in saving these renewable sources of energy. The basic principle of solar vehicle is to use energy that is stored in a battery during and after charging it from a solar panel. Power generated by renewable energy sources has recently become one of the most promising solutions for the electrification of islands and remote rural areas. But high dependency on weather conditions and the unpredictable nature of these renewable energy sources are the main drawbacks. To overcome this weakness, Solar Energy combined with wind energy. The charged batteries are used to drive the motor which serves here as an engine and moves the vehicle in reverse or forward direction. This idea, in future, may help to protect our fuels from getting extinguished.

Keywords: Solar Panel, Converter, Battery pack, Motor, Framebody



DOI: 10.48175/IJARSCT-27367

