A PROJECT REPORT ON

"HYBRID NANO CAR"

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ABSTRACT

This hybrid mini automobile is to prove the feasibility of less dependency on conventional, non renewable energy sources such as petrol, diesel etc. Due to time and cost constraints, though the above is not being fully demonstrated, but the lesser dependency on conventional fuel is established.

The aim of the project is to design, manufacture, assemble and demonstrate a mini hybrid automobile for internal short shuttle type trips with two stroke IC engine or electrically driven by DC motor and supplemented by solar power and wind energy on a small scale. Hence the emphasis is totally on the potential of tapping and implementing the useful renewable sources of energy which otherwise goes wasted.

Apart from this an external 230v AC supply will be used to recharge the batteries during extreme conditions when the availability of wind and solar power will be minimum.

A simple indigenously designed chassis system is assembled with a standard scooter IC engine as the primary source of energy of higher power (3.15 HP). A lower power electrical DC motor of 1 HP is chosen as alternate prime mover powered by 24 V , 130 A-hr Battery which can be charged by Solar Power of 37 watts capacity and also by a small wind turbine of 18 watts capacity.

The basic minimum control on vehicle such as steering system and brake system, independent control of both prime movers by clutch mechanisms are also established.