Eco-Friendly Vehicle

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This project is the combination of three different technologies, merged together to implant in any diesel based cars/vehicle to make it ecofriendly. In the first place biodiesel was prepared by transesterification reaction of ethanol with waste cooking Sunflower oil, using KOH as catalyst .Waste Cooking Oil produced biodiesel reduces greenhouse gas emissions. The use of biodiesel reduces carbon dioxide emissions by more than 75% compared with petroleum diesel, which can further be reduced by using CO2 scrubber which the second stage of our project. In the second stage of the project the regenerative Activated carbon filter to absorb the remaining CO2 from car exhaust (as the amount of exhaustible CO2 is already reduced by using biodiesel) is placed in the vehicle .It's a system that provided continuous removal of carbon dioxide without expendable products. An assembled system consist of a sorbent canister filled with activated carbon(which is prepared by waste material like used tyre, coconut shells and orange peels) and a regenerator assembly. In the third stage of experiment wind energy and solar energy is used to full fill the electricity needs in the car ,using an old CPU fan and solar plates on the roof of the car and on bonut .Our objective is to generate enough energy so that no engine fuel or battery fuel is consumed to fulfil vehicle electricity needs

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