PROJECT REPORT

On

"DUAL CYLINDER AIR COMPRESSED CAR"

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ABSTRACT

This is the Next Generation, **Zero Emission, Eco Friendly and High Efficient** Four Wheeler with **Exhaust Air Boosting Technology.**

The main objective of this project is **to reduce the fuel consumption, air pollution** & in turn **increase the efficiency** of the vehicle. 95% of automobiles used in day-to-day life for various purposes, uses non-renewable source of energy that is petrol, diesel, gasoline etc which is fast depleting & also affects the environment adversely due to high emissions. Hence we thought of using renewable source of energy that is wind energy.

Another positive point of the project is that the engine uses **only compressed air as fuel** which has absolutely **zero emissions** & also costs us less as we use **Re- Generative Technology & Air Driven Air Booster.**
Air Compressed Car was first introduced by Moteur Development International (MDI) in France but the difference between the MDI product & our Project is that we have **introduced an Air Boosting Technology & recycled the Exhaust Air through it back to the Empty Air Tank** thereby making it a **closed loop.** This car is **totally Independent of the Non-renewable Sources of Energy.**

This car runs only on Compressed Air & the Engine Cylinders are made accordingly. The compressed air expands inside the engine cylinder's & piston starts reciprocating where as this job is done by combustion process in conventional engines which result in high emissions.

The exhaust air is re-circulated to the Empty Air Tank by increasing the pressure back to initial conditions by **Re-Generative System** & passing it through the **Air Booster** & thus this recycled re-compressed air is used as fresh air to run the engine & the cycle follows this process.

The source of **Harmful emissions and dependency on Petrol, Diesel & gasoline is almost nil** in this project. We even modified the 4-stroke conventional petrol engine to a 2-stroke engine by changing the valve timing & making the cam shaft gear ratio equal to the crank shaft gear ratio, which can also run with compressed air thus preventing the present conventional engines to go as a waste. Thus making our car humbly Ingenious.