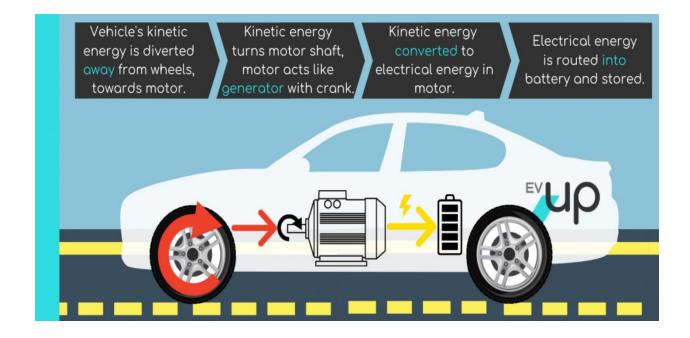
# Regenerating Electric Car

- Subject: a car which recharge itself through work done by the car.
- > This ideology works on the process called electro-magnetic induction

#### #SYNOPSIS-1



#### Apparatus

- Gearmotor
- lithium ion battry
- Bluetooth receiver
- motor drive
- adruino uno
- jumper wires

### Pros

- Electricity is conserved.
- This car is much convenient to use in hills as it consist of duel system of functioning the car.
- It is a user friendly model and act as a non-polluting vehicle

#### Cons

- There might be a velocity gradient among front and back wheel.
- This gradient may affect the breaking system of car.
- THIS CONS ARE PREDICTED, NOT EXPERIMENTALLY PROVED

# FUNCTIONING

This electric car contains two system of functioning. When one system is active the another inactive system converts the mechanical energy into electrical energy according to LAW OF ELECTRO MAGNETIC INDUCTION (the inactive system acts as a generator) once the system A dried then system B starts functioning



- The vehicle's kinetic energy is diverted away from wheels towards motor.
- Kinetic energy turns motor shaft, motor acts like generator with crank.
- Kinetic energy converted to electrical energy in motor.
- Electrical energy is routed into battery and stored.

When the car is driving through an active system approximately 50-60% electricity is regenerated.

Experimental calculation
When 7.5v is applied to system A, 3.5-4v is regenerated.

# Conclusion

In normal electric cars by charging once, nearly we can travel nearly upto 300-350Km.

Using regenerating method, we can travel upto 475-500Km by charging once.

Economically it will be much beneficial.