**GENERATION OF ELECTRICITY BY SPEED BREAKERS**

**ABSTRACT**

This is a power project based on the fact that how electricity can be generated with the help of speed breaker by making gear arrangement and using electronic gadgets, thus a huge amount of electricity can be generated saving lot of money. And if implemented will be very beneficial for society.

An energy crisis is great bottleneck in the supply of energy resources to an economy. It usually refers to the shortage of oil and additionally to electricity or other natural resources or price rise of energy cost. An energy crisis may be referred to as an oil crisis, petroleum crisis, energy shortage, electricity shortage electricity crisis. While not entering a full crisis, political riots that occurred during the 2007 Burmese anti-government protests were initially sparked by rising energy prices. Likewise the Russia-Ukraine gas dispute and the Russia-Belarus energy dispute have been mostly resolved before entering a prolonged crisis stage. Market failure is possible when monopoly manipulation of markets occurs. A crisis can develop due to industrial actions like union organized strikes and government embargoes.

South African electrical crisis Solution for Energy Crisis NEXT time on the roads, don’t scoff at the speed-breakers. They could actually light up small villages off the highway.

This project is about GENERATION OF ELECTRICITY with the SPEED BREAKERS. Generally when vehicle is in motion it produces various forms of energy like, due to friction between vehicle’s wheel and road i.e. rough surface HEAT Energy is produced, also when vehicle traveling at high speed strikes the wind then also heat energy is produced which is always lost in environment and of which we can’t make use of….OR directly we can say that all this energy that we can’t make use of is just the WASTAGE OF ENERGY that is abundantly available around us. In this project we are just trying to make use of such energy in order to generate an ELECTRICAL ENERGY. This project will work on the principle of “POTENTIAL ENERGY TO ELECTRICAL ENERGY CONVERSION” Potential energy can be thought of as energy stored within a physical system.

This energy can be released or converted into other forms of energy, including kinetic energy. It is called potential energy because it has the potential to change the states of objects in the system when the energy is released If the height above an arbitrarily assigned reference point, then Kinetic energy of an object is the extra energy which it possesses due to its motion. It is defined as the work needed to accelerate a body of a given mass from rest to its current velocity. Having gained this energy during its acceleration, the body maintains this kinetic energy unless its speed changes. Negative work of the same magnitude would be required to return the body to a state of rest from that velocity. The kinetic energy can be calculated using the formula: In this project a mechanism to generate power by converting the potential energy generated by a vehicle going up on a speed breaker into kinetic energy. When the vehicle moves over the inclined plates, it gains height resulting in increase in potential energy, which is wasted in a conventional rumble strip When the breaker come down, they crank a lever fitted to a ratchet-wheel type mechanism (a angular motion converter). This in turn rotates a geared shaft loaded with recoil springs. The output of this shaft is coupled to a dynamo to convert kinetic energy into electricity. A vehicle weighing 1,000 kg going up a height of 10 cm on such a rumble strip produces approximately 0.98 kilowatt power. So one such speed-breaker on a busy highway, where about 100 vehicles pass every minute, about one kilo watt of electricity can be produced every single

**BLOCK DIAGRAM**



