ROAD POWER GENERATION

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Objective

a) Design a prototype of electrical power generation which does not negatively impact the environment

b) Harness the wind power of rapidly moving vehicles on roads

c) Generate electricity from the kinetic energy of vehicles on the road

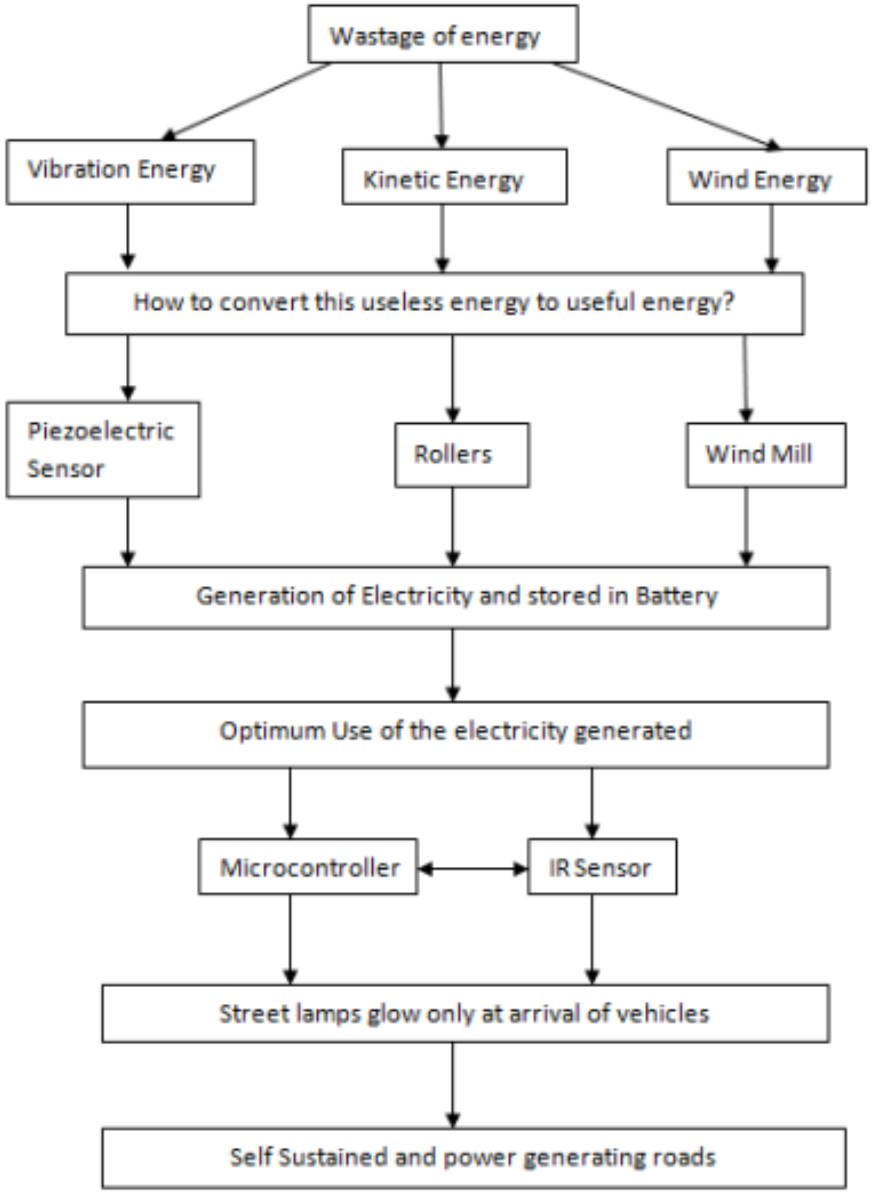
d) Utilize the wasted vibration energy using piezoelectric technology

e) Develop a model of a self-sustained system that uses the generated energy to control street lamps

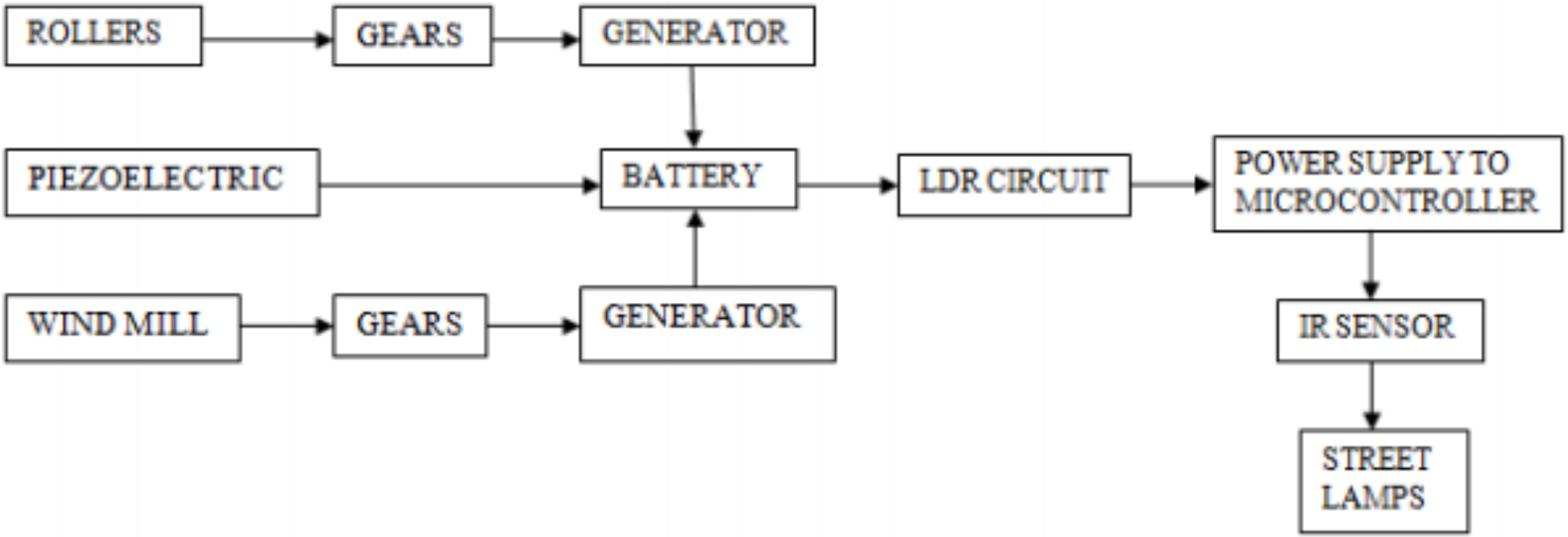
Background

- Need for alternate renewable source of energy
- Wastage of energy on Roads
- Conservation of Energy – Energy can only be transformed
- Kinetic, Wind and Vibrational energy can be converted into electricity

Solution Methodology



Implementation



Results and Conclusions

S No.	Module	Voltage
1	Peizoelectric	15V DC
2	Roller	3V DC
3	Wind Mill	5V DC

Voltage depends upon

1. Mechanical stress on piezoelectric crystal
2. Speed of rotation of Roller and Windmill
3. More speed of roller, less generation
4. Higher the position of windmill, more is the wind velocity

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