

DEVELOPMENT OF EFFICIENT POWER GENERATION USING AUTOMATED RENWABLE SOURCES AND AUTOMATING STREET LIGHTS ACCORDING TO TRAFFIC DENSITY

ABSTARCT:

The aim of this project is to ON and OFF streetlights when the sun is about to set in the evening and rising early in the morning respectively, so that the need of the operator can be eliminated. A IR sensor is used to detect the vehicles passing on the roads and the light intensity is varied accordingly as per the traffic so that the energy wastage is reduced to maximum. The power source is provided by renewable energy sources extracted by solar panel with tracking system for efficient power generation, stored it in battery and then used for street lights.

ADVANTAGES:

- Efficient Power Generation
 - Low cost and one time investment
 - Has wide range of applications.
 - Suitable for rural areas and urban areas
 - Manpower requirements are minimized.
 - Reduces human errors.
 - Has better efficiency.
- Makes the maximum utilization of solar energy