

ABSTRACT

As population is increasing globally, we are very concerned for Electricity. There are various ways of electricity generation like Hydro power plant, Nuclear power plant, Windmill plants and also Solar power plants. The former two are Non Renewable source of energy. Hence we cannot depend only on such technology. Also Harnessing Energy from Hydro and Nuclear is equally difficult. The latter two are Renewable source of Energy. nowadays we have lots of power plants established on Solar and Wind Technology. Our project aims at Dual axis or Dual direction tracker. The Solar panel used in this system can adjust its direction both in X-Y coordinates. This helps better directivity with Sun rays, thus increasing the efficiency of the solar system. system consists of microcontroller, LDRs, stepper motor, solar panel, mirror booster, automated cleaning system etc. LDR sensor senses the sun light falling on the solar panel and rotates the solar panel according to the intensity of light with help of stepper motor. Programmed microcontroller controls the system by communicating with sensor and motor driver based on the movement of sun.