**Abstract***: —*

Energy crisis is one of the prime issues in the third world developing country like India. There is an enormous gap between generation and demand of electrical energy. Nearly 40% population of the country is extremely isolated from this blessing. Renewable energy is the only answer to solve this issue. ***Solar energy is one of the most effective resources*** of the renewable energy which could play a significant role to solve this crisis. This project presents a dual axis solar tracking system using Arduino. The main objective of this project is to show that the tracker follows the sun accurately in dual axis mode. The work is distinguished into a hardware and software part. In hardware part, four light dependent resistors (LDR) is used to detect the utmost light source from the sun. These LDR’s are then connected to an IR Module to work as a receiver for it.

Two servo motors are jointly used to rotate the solar tracker model towards the maximum light source location perceived by the LDR’s through the IR modules. In software part, the code is written by using C programming language and is targeted to the Arduino UNO controller. Finally it was seen that the dual axis tracker tracks the sun throughout the year more accurately than a single axis tracker. Also it follows the sun at all times from sunrise till sunset directly making it a better alternative than a static panel.

***Keywords—solar tracking; single axis; dual axis; light***

***depending resistor (LDR), IR Module, servo motor, Arduino.***