

ABSTRACT

Renewable energy sources play an important role in electricity generation. Various renewable energy sources like wind, solar, geothermal, ocean thermal, and biomass can be used for generation of electricity and for meeting our daily energy needs. Energy from the sun is the best option for electricity generation as it is available everywhere and is free to harness. The primary purpose of this system is to maximize the amount of solar energy that can be received from the sun. By tracking the sun, such that the sun's rays always strike normal to the array's surface, more energy can be received.

The prototype model designed containing two stepper motors (one for the horizontal axe (throughout the year) and the other for vertical axe (throughout the day)), and the control of the stepper motors is done by an interface (parallel port) with a personal computer (PC) using the visual basic language as a software.