**Solar panel tracking mechanism**

**Abstract:**

Now a days as a source of renewable energy solar energy is becoming very popular. When sun rays fall on Photovoltaic panel, Panel converts it in to electrical energy. As per basic principles of solar photovoltaic cells maximum electrical energy is generated when rays collide panel in perpendicular direction.

If we mount solar panel at single angle & position we will be unable to utilize 100% solar energy. To achieve the above target we need to rotate solar panel as sun moves from east to west.

In our project we have mounted high torque DC motor with necessary gear set up to rotate panel from one end to other. The rotation of motor is controlled Microcontroller which rotates from east to west and comes to original position at night automatically.