SOLAR MOBILE CHARGER WITH THE USE OF POWER BACKUP

Description

The main theme of this project is to use the solar power and convert it to charge a power backup which can be used to charge a battery of a mobile even in the absence of sunlight.

Motivation

In this busy world charging our mobile when we are outside is really challenging, in order to overcome this problem we have chosen this as our project.

Working

We will be focusing on converting the solar energy into electrical energy then to step up the voltage as required for the backup, then store the energy and then convert the stored energy to charge the battery when the battery is low.

Timeline (weekwise)

WEEK-1 AND WEEK-2
We will start to plan a appropriate process and start working to make a solar charger and then to step up the voltage as required for the backup.

WEEK-3 AND WEEK-4
We will start to make a backup power bank and see that the energy received is stored. Then we will make a process to charge the battery from the power bank when the battery is low.

Components required

Solar PV panel
Voltage regulator
Backup battery
IC chips
Capacitors
Resistors
Sufficient amount of wires
Step down transformer
AC to DC converter
DC to AC converter
Soldering kit

Estimated Cost

Roughly the estimated cost of the project is 3000 rupees.

References

http://en.wikipedia.org/wiki/Solar_cell
www.solarbuzz.com/going-solar
www.solarserver.com/knowledge

TEAM MEMBERS

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What do we Learn:

Working Mechanism of energy transferring.
Storing the energy and using it when the mobile battery is low.
Backing up the power bank.
Hard working and Group working Obviously!