

ABSTRACT

Solar energy is the energy form of light and heat from the sun. This energy will be converted to a form of electrical energy using photovoltaic (PV). The electrical energy generated can be utilized on Self-balance Scooter.

Problems of this tool is the device should be in-charge first and can be used. Of these problems, the authors will implement the use of solar power to the electrical energy in the form of Self-balance Scooter as the power supply system (direct) and charging (reserve).

In this final project, the author uses solar panels / photovoltaic (PV) electricity generation, solar charge controller regulates the traffic of the solar cell to the battery and the load, and battery function to save electric current (backup power) generated by solar panels before used to drive the load.

With the results of measurements of solar panels that produce 100 Wp watt-hour 324.55 in one day to supply the battery and the load to optimally for 1 hour or 60 minutes.

Keywords: *Electrical Energy, Solar Power, Self-balance Scooter.*