

Pemanfaatan Energi Surya Sebagai Sumber Energi Pada Penerangan Lapangan Bola Voli *Outdoor*

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ABSTRACT

The rapid technological developments increasingly growing and developing requires technology to bring people to think about making something new. In this case, solar power can be converted directly into electrical energy using solar cells or photovoltaics, which will generate electricity in such a way that the electrical energy can be stored in batteries to be used as an energy source for lighting an open volleyball court. Testing of a solar power generator for lighting an open volleyball field was carried out in Plaosan hamlet. This tool's test results conclude that the total light load of 300 watts per hour can be fulfilled with 100 Wp Solar Panel, 30 A SCC, 1000 Watt Inverter, and 120 Ah Battery. Whereas in 1 time using the system for lighting it takes four days for the battery to be full, and when the battery is full, the system can meet the lighting needs of the volleyball field for 2 hours.

Keywords: *Energy sources, Solar Energy, Alternative Energy, Volleyball court lighting*