Analysis Temperature and Relative Humidity Effects on Polycrystalline Solar Panel Power Output during Transition Monsoon Climate

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#### ABSTRACT

Solar power generation had been used since years ago as renewable energy to support nonrenewable energy such as diesel, coal, natural gas etc. The main cause of why solar power generation is most popular solution for renewable energy is the type of the energy itself. This type of energy is very clean, no harm to environment and the most important is it unlimited source. This paper presents the analysis of temperature and relative humidity effects on polycrystalline solar panel output during transition monsoon climate. The efficiency of solar panel is measured in term of power produce from the solar panel by converting sunlight into electricity. The data for voltage and current value of the solar panel had been collected from 0730 until 1900 for three weeks. Meanwhile, the value of temperature and relative humidity measured using thermo hygrometer (H105AB) with the same time interval with voltage and current data. Result show that temperature and relative humidity during transition monsoon has not affect on the power output of the polycrystalline solar panel but characteristic of transition monsoon has affect the power output of the polycrystalline.

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