

The Utilization Of Off Grid Solar Power Plant As Energy Sources in Chicken Egg Hatcher Incubators

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ABSTRACT

Solar energy has the potential to generate electricity with Off Grid Solar Power Plant technology. Utilization of Off Grid Solar Power Plant technology as an energy source for chicken egg incubators. The method used in making chicken egg incubators is temperature control with a thermostat and DHT 11 sensor as digital readings of temperature and humidity. The power used for the fulfillment of the incubator is an average of 30.2 Watts / day. The technical planning of this Solar Power Plant is expected to be able to meet the needs of the incubator during the egg hatching program. From the results of the research analysis stated that the design of the 400 WP off grid Solar Power Plant was able to meet the needs of the incubator also the temperature and humidity in the incubator were able to meet the needs of eggs to develop into embryos, namely an average of 40.3 Celsius and 53%.

Keywords : incubator, solar power plant technology, temperature, humidity.