

ABSTRACT

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Title : *Planning for a Solar Power Generation System for the Salted Fish Drying Machine at Tanjung Pakis Karawang Beach.*

Tanjung Pakis Beach, Karawang, West Java, is an area where residents work as salted fish farmers. The process of drying salted fish utilizes the sun's heat with a drying time of 8-9 hours a day. This long process will hinder the production of salted fish, so a tool for drying salted fish is needed to save time for the process of drying salted fish. This study aims to plan a solar power plant for drying salted fish. The method used is calculation and simulation to determine the number of solar panels and batteries used. The selection of solar panels can be done by calculating the output power requirements while the battery requirements can be determined by the battery capacity using Ohm's law formula. In this study the time required for drying salted fish is 4-5 hours, and it requires around 2400 W of electrical power. In the calculation process it produces 18 units of 100Wp solar panels with 14 pieces of 12V 100Ah batteries, while for the Pvsyst simulation it produces 24 units of 100Wp solar panels with 33 pieces of 12V 100Ah battery. The tilt angle and direction of the sun are 15° and 0° respectively facing north.

Keywords: *Pvsyst Simulation, Solar panels*