

ABSTRACT

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Menggunakan Aplikasi HOMER Energi Studi Kasus Mayasari
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Electrical energy is a source that is needed to power industrial devices and machines. Hybrid energy combines two energy sources where one of the electrical energy produced comes from nature.

This study aims to determine the feasibility and create a simulation using the HOMER software at Mayasari Plaza Tasikmalaya. The source of electrical energy used comes from PLN and solar energy.

The results of the analysis of the 4 configurations resulted in the best configuration, namely a system connected to the PLN network and renewable energy components in the form of 1,000 kW solar panels, 48V battery banks, and converters. Energy efficiency of 96.3%, cost returns within 5.74 years.

Keywords: *Electrical Energy, Solar Energy, HOMER.*