THE UTILIZATION OF SOLAR POWER PLAN FOR MECHANICAL COOLING SYSTEM ON FISHING VESSEL

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Abstract

Largest energy source that had not been aware is the sun power. The sun provides about 100,000 terawatt of energy into the earth about 10,000 times more than the energy consumed on earth today. This final project analyze of solar cell use on fishing vessel which used to supply the power of the compressor at mechanical cooling system in KM. Samodra-46. Based from the data, 36 pieces solar modules can supply power for 10 hours (07.00 - 17.00) and installed with 2 battery to supply power about one hour. That power will be takeover the compressor power of 5,700 watts from total load of 21,763 watts. This application of solar cell will be decrease 26,19% of generator loads. Expected usage of this solar energy could reduce of fossil fuel consumption and economize this vessel operational costs.

Keyword : solar cell, cooling system, fishing vessel.