

PROTOTYPE OF WIND POWER AND SOLAR CELL POWER PLANT FOR STREET LIGHTING

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ABSTRACT

At this time Indonesia is experiencing a decline in energy supplies, but from a natural and environmental perspective there are still many available energy resources, but not many have been utilized for energy supply in Indonesia, apart from oil and coal mining, there are still many energy resources that have not been fully utilized, such as wind, sea waves, and solar thermal energy. With that, research was carried out on wind power plants and solar cells for street lighting, with a prototype made to find out how far the available natural resources are. With the vertical windmill method by utilizing wind power which is on the south linkar road with the potential for quite strong winds. With this it can turn a turbine as a source of electricity, then the turbine can turn a generator to produce electrical power. The electricity is stored in batteries and used for street lighting.

Keywords: Energy Source, Turbine, Wind, Generator, Solar Cell