

ABSTRACT

The needs of electrical energy is now becoming a basic needs for society. This is because human have lived dependently on technology, which it's source comes from electrical energy. On the other hand, the needs of electrical energy can't be used yet by some people who lived in remote areas. In this research, a will be designed for a micro hydro power plant with small sized and can produce electrical energy for home scales. this research uses a battery as a electical energy store that can be used for charging a cellphone and for lighting without high electrical voltages. therefore, in this final project, the system can utilize hydropower for producing electrical energy, the system can move using a waterwheel with an average water flow of 13.85l.minute, and the system can be implemented in rivers with a heavy flows. and the methodology used in this final project is prototyping

Keywords: water wheel, micro hydro, water flow, river.