

ABSTRACT

Car production massively and use of conventional fuels become the concern and reason in the development of automotive technology using renewable fuels. One technology that has begun is an electric car, but now, is how to generate power for the electric car as the main fuel that is renewable and efficient.

In this research, there are several methods to be used, including methods for generating power and electric current with wind turbines, and also solar panel then there is a method to perform charging and flows into the accumulator automatically when the condition of the accumulator is empty. In the first method will be analyzed on how power and current can be generated, and how much time it takes to charge the accumulator to full condition.

At the end, the result outcome of this research can produce enough current power and large without disturbing the overall performance of the electric car, and also can be developed further in order to achieve efficient results.

Keywords: *Electric Car, Wind Turbine, Solar Cell, Buck Converter*