

Utilization of Used Electric Vehicle Batteries for The Design of Mini-Generating Systems

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ABSTRACT

One of the main objectives of this research is to reduce battery waste from electric vehicles, namely by processing the battery waste to be used as electrical energy storage which is then used in mini generators. Therefore, it is necessary to have methods and stages to do it all. The method used with BMS (Battery Management System) with the Battery Cell Balancing model. It aims to determine the classification of the total battery capacity and battery lifetime, and determine which batteries can still be reused. The results of the balancing of the battery cells will be used as recommendations and are more economical in power generation storage systems and also provide practical solutions in the management of used electric vehicle battery waste to prevent pollution of active ingredients in battery cells, and also become an alternative for energy storage choices. for reuse. This research can be considered in the future for the electric vehicle industry to be able to reuse used batteries from electric vehicles, as well as the design of the use of used batteries for mini generation systems

Kata Kunci: Battery Management System, Cell Ballancing Model, Energy Storage System, Electric Vehicle, Solar Power Plant