

## ABSTRACT

Telkom University is an enterprising college to implement Green Campus program. As a proof, Telkom University has got 9th place from Greenmetrics 2017 National level UI ranking. However, there are several weaknesses in Telkom University that have not yet been efficient in electricity use. Every month electricity payment records show that there are about five hundred thousand rupiah. This is quite large in the use of electrical energy.

This research is making design and realization of the Electric Power Consumption Monitoring System. The system was carried out with a 3-Dimensional Map Monitoring Feature (Case Study of the Faculty of Applied Sciences Building). Some rooms in each floor will be installed equipment to calculate electricity consumption, then it will send electricity consumption data through IoT technology to the server to be processed and displayed on a 3-dimensional map. Every floor and room will be given a different color according to the level of electricity consumption. So what floor and which room with the most electricity consumption will be known.

With implementation of this project it can contribute to reducing electricity consumption at the Telkom University campus and give added value to the management unit, Telkom University Logistics in the form of ease in monitoring and controlling electricity usage.

**Keywords:** *Green Campus, Electrical power, Monitoring.*