ABSTRACT

Urbanization occuring in major cities in Indonesia such as Bandung. The city of Bandung are the main urbanization destinations that causing the growth of urban occupation which averages more than 50 percent. The problems is more complex, congestion, flooding, waste, and carbon emissions are some of the problems caused by the impact of urbanization. Smart City is the one of the such of solutions in managing the city to keep comfortable, safe, growing and sustainable. In the smart city concept, there are smart energy parameters that are considered able to handle the problems surrounding energy and environment faced by a city.

This study aims to determine the factors that become parameters to measure smart energy by conducting confirmation of variables such as: Active Users, Access To Energy Service, Advanced Distribution Management System, Data Management, Energy Efficiency, Renewable Integration And Management, Resilience, And Security & Privacy Management System.

This research is a qualitative research with explorative method and conducting ethnographic type of investigation. The data collection is through with literature study which is confirmed through focus group discussion (fgd) and in-depth interview to the respondents from smart city experts especially on smart energy. The interview period was conducted for five months between January - May 2017. Secondary data related to the research theme were used to support the research, among others are scientific journals on smart energy, data from companies, and news related to the research topic.

Based from the results of data processing, all variables was confirmed by all the respondents. Access to energy service and data management variables are the most frequently confirmed variables of the respondents. In this variable, 94% of respondents agreed that access to energy service and data management is an important part to measure smart energy. The new findings from the indicator is the implementation of smart water management will be added to the renewable integration and management variables.

From the results, the government's effort in running/implementing the concept of smart energy is to provide access to energy services to the community equally. To obtain optimization on the energy usage side, the application of IoT (Internet of Things) on the data management system can be done, so the use of data in real time can be known/monitored. In addition, privacy and security can also be achieved on the consumer side..

Keywords: Urbanization, City Management, Smart City, Smart Energy