ABSTRACT

One of the development sectors that build the economy in Indonesia is the construction sector. The construction sector is an activity in development that provides results in the form of buildings or construction that can be used in general or private. With the growth of the construction sector in Indonesia, this can not be separated from the influence caused by the construction sector itself, one of which is environmental problems in the form of construction waste. So, to overcome this is needed the application of green supply chain management.

The purpose of this study is to design a green supplier selection system with ISO 14001 reference that can be used to help determine the selection of green suppliers. Supplier selection requires a variety of criteria so in this study used fuzzy ANP method where this method can consider the problem of interrelationships between criteria and reduce inaccuracy and uncertainty.

The results of this study are eight main criteria as well as sub-criteria. The resulting criteria are quality, delivery, service, environment, price, inventory and production capacity, strategic alliance and flexibility. And obtained results in the form of sequences from suppliers obtained from the calculation of the value of criteria weights and sub-criteria and the results of the assessment scale, and produced a supplier selection dashboard system that can help the company in determining the best supplier.

*Keyword – **green supplier, environment, waste, construction, policy, Fuzzy ANP, system dashboard***