ABSTRACT

This research aim to design efficient model of green logistic for pharmaceutical distribution company. Green logistics for pharmaceutical distribution company consists of green warehousing with 5 parameters and green transportation with 6 parameters, both were combined with green cold chain management. This research is applied research with quantitative/positive approach in one pharmaceutical distribution company in Surabaya, Indonesia. Data were collected using interview, observation and data from physical document and company ERP. Collected data were analyzed to create new model of green logistic that suitable for company X and also suggest corrective action for company to reach green logistic.

New model of green logistic for company X consists of green warehousing with 5 parameters and green transportation with 4 parameters, both were combined with green cold chain management. New model of green logistic was implemented partially by optimizing layout and goods movement inside warehouse resulting in reduction of logistic lead time. Lead time reduction resulted in reduced overtime by 37.68% leading to reduced electricity consumption by 4.59%.

Research concluded that partial implementation of new green logistic model in company X can increasing green value by reducing energy consumption.

Keywords: green logistic, green warehousing, green transportation, green cold chain management, pharmaceutical distribution