

Modeling for green supply chain evaluation

ABSTRACT

Green supply chain management (GSCM) has become a practical approach to develop environmental performance. Under strict regulations and stakeholder pressures, enterprises need to enhance and improve GSCM practices, which are influenced by both traditional and green factors. This study developed a causal evaluation model to guide selection of qualified suppliers by prioritizing various criteria and mapping causal relationships to find effective criteria to improve green supply chain. The aim of the case study was to model and examine the influential and important main GSCM practices, namely, green logistics, organizational performance, green organizational activities, environmental protection, and green supplier evaluation. In the case study, decision-making trial and evaluation laboratory technique is applied to test the developed model. The result of the case study shows only “green supplier evaluation” and “green organizational activities” criteria of the model are in the cause group and the other criteria are in the effect group.

Keyword: Green supply chain management (GSCM)