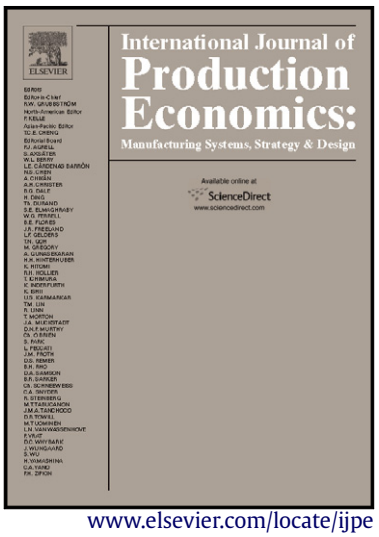

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PII: S0925-5273(14)00308-9
DOI: http://dx.doi.org/10.1016/j.ijpe.2014.09.030
Reference: PROECO5888

To appear in: *Int. J. Production Economics*

Cite this article as: Kuo-Jui Wu, Ching-Jong Liao, Ming-Lang Tseng, Anthony S. F. Chiu, Exploring Decisive Factors in Green Supply Chain Practices under Uncertainty, *Int. J. Production Economics,* http://dx.doi.org/10.1016/j.ijpe.2014.09.030

Exploring Decisive Factors in Green Supply Chain Practices under Uncertainty

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Keywords: Green supply chain practices; Fuzzy set theory; Decision-Making Trial and Evaluation Laboratory method (DEMATEL)

Abstract

In recent years, many firms have become aware that environmental issues are critical barriers to the sustainability of a business. To overcome these barriers, several studies have been conducted to develop quantitative measurements associated with industry practices to prevent pollution and waste. As a result of the joint effort among industry players, green supply chain practices (GSCP) received positive feedback regarding their ecological and economic performance from two eco-industrialists. Hence, GSCP has become an instrument to provide a practical approach and reduce environmental impact while also affording economic benefits to industry. Firms are aggressively integrating green practice within their supply chains for balancing triple-bottom line performance. Thus, the current study combined fuzzy set theory and the Decision-Making Trial and Evaluation Laboratory (DEMATEL) method for a hybrid approach to investigate the effects of each criterion within GSCP. Moreover, the hybrid approach offered a visual analysis for the Vietnamese automobile manufacturing industry to explore the indicators in GSCP implementation. The study results include the significant finding that recovering and recycling used products is the major criterion affecting economic performance. In other words, firms can improve economic performance in GSCP through establishing a recovering and recycling system. This