

Integrating Carbon Footprint into Supply Chain Management of Manufacturing Companies: Sri Lanka

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Abstract : When the manufacturing industry is concerned the Environment Management System (EMS) is a common term. Currently most organizations have obtained the environmental standard certification, ISO 14001. In the Sri Lankan context even though the organizations adopt Environmental Management, a very limited number of companies tend to calculate their Carbon Footprints. This research discusses the demotivating factors of manufacturing organizations in Sri Lanka to integrate calculation of carbon footprint into their supply chains. Further it also identifies the benefits that manufacturing organizations can gain by implementing calculation of carbon footprint. The manufacturing companies listed under "ISO 14001" certification were considered in this study in order to investigate the problems mentioned above. 100% enumeration was used when the surveys were carried out. In order to gather essential data two surveys were designed to be done among manufacturing organizations that are currently engaged in calculating their carbon footprint and the organizations that have not. The survey among the first set of manufacturing organizations revealed the benefits the organizations were able to gain by implementing calculation of carbon footprint. The latter set organizations revealed the demotivating factors that have influenced not to integrate calculation of carbon footprint into their supply chains. This paper has summarized the results obtained by the surveys and segregated depending on the market share of the manufacturing organizations. Further it has indicated the benefits that can be obtained by implementing carbon footprint calculation, depending on the market share of the manufacturing entity. Finally the research gives suggestions to manufacturing organizations on applicability of adopting carbon footprint calculation depending on the benefits that can be obtained.

Keywords : carbon footprint, environmental management systems (EMS), benefits of carbon footprint, ISO14001

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