Editorial

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Frank Birkin is a Professor of Accounting for Sustainable Development at the University of Sheffield. His research work has the goal of accounting for sustainable industrial development but this is a very broad topic that embraces social, environmental and traditional accounting as well as engineering, scientific, cultural, philosophical and policy aspects of sustainable development. His theoretical contributions to this topic are pioneering and include seminal papers and research-project ideas on ecological and sustainable development accounting. He has won in excess of £1 million for research-project funding.

1 Introduction

The concept of waste treatment was initiated at the Earth Summit in Rio de Janeiro in 1992 at which a number of international agreements were signed including Agenda 21, which had a part to state in minimising the amount of waste we generated and being responsible for its disposal. The increasing amount of waste that is being generated in the European Union (EU) is becoming a growing concern for the European authorities, who

have confirmed the significant impacts that its excessive generation, together with its poor management, is causing on the environment. This concern is propagating to other developing (e.g. China and India) and developed countries (e.g. the USA and UK). Although many legislations and directives are available to enable such compliances, little innovative technology and methods for waste minimisation could be found. Additionally, limited theory building research on waste minimisation in supply chains can be identified in the literature.

This Special Issue of *International Journal of Global Environmental Issues (IJGEnvI)* on Waste Minimisation in Supply Chains aims to identify any new technology and methods for waste minimisation in supply chains. The objectives are to compare performance between existing and new development, between new technologies and new methods and to give a cross-countries view and progress on waste minimisation in supply chains. This Special Issue contains four papers. A mix of theory building and empirical study papers that have strong relevance to the practical world are available. The normal *IJGEnvI* review guidelines were followed. We provide a brief overview of the papers, which appear in this issue.

Lakhal and H'Mida in their paper, 'A model for accessing the greenness effort in an product supply chain' notes that the many enterprises are beginning to acknowledge that strategies and practices that incorporate environmental considerations can be tools for acquiring a competitive advantage. They purported that while proactive and value-seeking approaches have been suggested in the management literature, a very few theories and frameworks have been presented in the domain of supply chain operations. In this research, a framework for achieving a green supply chain, using the gap analysis to compare different supply chains, was proposed. It was concluded that this praxis would help managers to assess the greenness of a supply chain within or across sectors; and to determine the gap between the current supply chain and the ideal or targeted green supply chain.

Identifying the factors affecting product take back is important in minimising waste in a supply chain. The paper, 'An investigation of perception gap of reverse logistics service quality: the case of mobile phone industry', by Lee et al. presents a study on reverse logistics service quality using the PZB model. The study was carried out with enterprise registered in the Taiwan Chain Stores and Franchise Association and the consumers who use the mobile phone. Six significant factors affecting the service quality in reverse logistics for the mobile phone industry in Taiwan were identified. These include transparent price for accessories and repair, high enthusiasm for recycling the accessories, free of charge for product upgrade and service within the warranty period, convenient product return and exchange service, free of charge for function checking and active notice after repair.

Patel and Woodward in their paper, 'Supermarkets and the organic supply chain: a wasteful experiment?' Examines the role of multiple grocery retailers ('supermarkets') within the organic food industry, with an analysis conducted to determine how these businesses attempt to ensure the integrity of their organic products, and whether mandatory standards are thereby exceeded, thus potentially exerting pressure on their suppliers. The assurance approach adopted by each of the six most significant sellers in the organic market was analysed, and examples of product waste that can ensue should appropriate assurance controls not be in place, identified. However, their research extended beyond this consideration to identify other areas of potential supply chain waste generation, be this of materials, time, funding or other, nature. Suggestions were

presented aiming to reduce the types of waste identified, drawing upon examples of current practice amongst the supermarkets surveyed, but also making further suggestions for future possibilities in the light of contemporary comment.

The paper, 'Current issues of sustainable production, eco-supply chains and eco-logistics for sustainable development', by Koh et al. discusses the current issues on sustainable development in the global market in general and focuses the initiatives particularly related to sustainable production; green innovations and practices and eco-supply chain and eco-logistics. Government, enterprises and individual initiatives towards sustainable development are explored. Cases from around the world are discussed to highlight the successes, initiatives and most importantly the increasing awareness of the need to be ecofriendly at all levels. The research methodology used in the research was primarily based on the review of the literature and two case studies. It was found that earlier research has omitted important issues when looking at the global level, and hence a holistic perspective was proposed to gear the effort of sustainable development and its integration to the existing 'organisational structure'. This research also suggested future directions for research on the integration of sustainable development into existing organisational structures.

We could not have done this by ourselves and we totally appreciate the efforts and support of all who were involved in making this Special Issue possible, which includes the authors, referees, Chief Editor of Inderscience, editorial staff of *IJGEnvI* and the Editor of the journal. The guest editors gratefully acknowledge the assistance provided by the Chief Editor of Inderscience, the Editor of the *International Journal of Global Environmental Issues* and the referees who reviewed the manuscripts for this Special Issue.