Editorial

Pietro Evangelista*

Institute for Research on Innovation and
Services for Development (IRISS),
National Research Council (CNR),
Via G. Sanfelice 8,
80134 Naples, Italy
Email: p.evangelista@iriss.cnr.it

Maria Huge-Brodin

Department of Management and Engineering,
Institute of Technology, Linköping University,
58183 Linköping, Sweden
Email: maria.huge-brodin@liu.se

Edward Sweeney*

School of Engineering and Applied Science,
Aston University,
Birmingham, B4 7ET, UK
Email: e.sweeney@aston.ac.uk
*Corresponding authors

Alfonso Morvillo

Institute for Research on Innovation and
Services for Development (IRISS),
National Research Council (CNR),
Via G. Sanfelice 8,
80134 Naples, Italy
Email: a.morvillo@iriss.cnr.it

Biographical notes: Pietro Evangelista is a Senior Researcher in Logistics and SCM at the Naples Institute for Research on Innovation and Services for Development of the Italian National Research Council. He was awarded a PhD in Logistics and SCM by Heriot-Watt University (UK). His current scientific interest is focused on ICT and environmental sustainability in the logistics service industry. He is an Adjunct Professor of Logistics at the Lappeenranta University of Technology (Finland). He is a member of the Research Committee of the European Logistics Association. He assists the EU Commission as an independent expert in the evaluation of project proposals in the field of transport and logistics.

Maria Huge-Brodin is a Professor of Environmental Logistics Management at the Division of Logistics and Quality Management, IEI Department of Management and Engineering and leader of the Sustainable Logistics research group at Linköping University (Sweden). She has specialised in research on the environmental impact of logistics system design and logistics management. Her areas of interest include strategic aspects of logistics decision making and business models to support a greening of logistics; product development; and innovation in logistics and SCM. Her research has been presented on conferences and has been published in e.g., the *International Journal of Logistics Management*, *Supply Chain Management: an International Journal* and *International Journal of Logistics: Research and Application*.

Edward Sweeney is a Professor of Logistics and Head of the Engineering Systems and Management (ESM) Group. He was previously Director of the National Institute for Transport and Logistics (NITL) based at the Dublin Institute of Technology. He has held full-time academic posts at the University of Warwick (UK) and the University of Technology (Malaysia) as well as visiting positions in several Asian universities and institutes. He worked and lectured in over 50 countries in Europe, North America and Asia. His research has been widely disseminated with over 100 publications. The focus of his current work is on resilience and sustainability in global supply chains.

Alfonso Morvillo is Director of Institute for Research on Innovation and Services for Development of the Italian National Research Council. His research interests are wide-ranging, notably: innovation in services, entrepreneurship and technology transfer, destination management and local development, and shipping and port strategy. He is a member of the most important academic and practitioner's associations in the fields of tourism, transport and logistics. He is the author of articles, books, book chapters and communications at international research conferences.

1 Introduction

Logistics and supply chain activities are vital in the globally connected and technologically advanced economic and business environment of the 21st century. Products and services reach the final consumer through often complex networks of firms that typically comprise manufacturers, retailers, third party logistics (3PLs) providers and other actors. These supply chains activities aim to satisfy exacting customer requirements in an economically efficient manner. Logistics activities, with their focus on the efficient and effective distribution of products, play an important role in this regard. Contemporary supply chain management (SCM) emphasises the need to manage material, money and information flows in an integrated and holistic way, thus recognising that many non-value adding activities (NVAs) – activities that consume time and money without necessarily contributing meaningfully to customer value – are caused directly by the traditionally fragmented supply chain architectures that are evident in many sectors. This often requires a quite radical reassessment or reappraisal of the way in which customer/supplier relationships are established and managed.

There can be little doubt that supply chain and logistics activities have a significant negative impact on the natural environment. Recent years have seen a sharpening of the focus on the need to take action to reduce this impact. Part of this involves the

incorporation of environmental objectives into the strategic thinking of firms and the attendant adoption of business and supply chain strategies that focus on the simultaneous achievement of economic and environmental sustainability. In this context, the publication of this special issue on putting together environmental sustainability and profitability in logistics and supply chains is timely. It showcases the work of leading researchers from a variety of geographical settings, as well as from across a range of industry sectors, all of whom are focused on enhancing our understanding of the myriad complex phenomena that contribute to the design, planning and execution of logistics and supply chain operations that are truly sustainable.

2 Inside this issue

This special issue contains five papers related to environmental sustainability and profitability in logistics and supply chains.

The first paper by Isaksson et al. presents the findings of an investigation into the roles of green strategic commitment and organisation in the adoption of green initiatives by logistics service providers (LSPs). The results indicate that there are relationships between the nature, as well as the scope, of functional involvement and the strategic priority attributed to green initiatives.

In their paper, Solakivi et al. identify empirically the effects of environmental collaboration in the supply chain on the operational and financial performance of manufacturing firms. The research is based on a self-reported survey data combined with financial reporting data on 135 manufacturing firms operating in Finland.

The paper by Hernández et al. presents a decision-tree-based study of the effect of the objective structure of the supply chain members on their sustainability-related behaviour. This work discusses different relations that can arise between the sustainability and economic objectives of supply chain members and their representation by influence diagrams, utility functions and probabilities. Then, decision trees are used to predict how decisions are affected by their view of sustainability as a fundamental objective.

Change has been persistent in the European Union in terms of new directives and international agreements concerning logistics sector. Recently, cabotage rules were implemented for road transport, and new demanding low sulphur levels applied in the English Channel, the North Sea and Baltic Sea for sea vessels. The paper of Hilmola et al. provides interesting insights into these developments.

Finally, the paper by Kisperska-Moroń and Zowada demonstrates how manufacturers in different countries apply the concept of sustainability in their internal operations and in supply chain activities. The results indicate that there is no confirmed relationship between environmental and social performance versus economic performance, however, the details of that interdependence differ for various countries and their clusters.

3 Some reflections

Our reflection on the papers indicates a number of factors which are critical if putting together environmental sustainability and profitability in logistics and supply chains is to become a reality. First, supply chain actors need to fully understand how the rapidly

evolving business environment, including the regulatory and legislative dimension, impacts their strategic and operational thinking. Second, real change can only take place where there is a strong senior management commitment to the development and implementation of sustainable business and supply chain strategies. Third, the effective implementation of change requires that staff at all levels in supply chain firms are equipped with the required awareness and competencies; this has significant implications for logistics and supply chain education and training. Finally, and in line with contemporary SCM thinking, the creation and management of effective relationships throughout the supply chain is important if environmental and economic objectives are to become regarded as being mutually compatible and supportive rather than mutually exclusive.