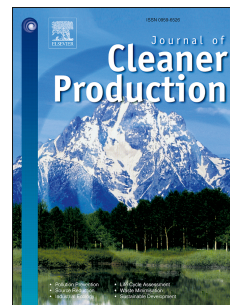


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Gintė Jonkutė, Jurgis K. Staniškis



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Realising Sustainable Consumption and Production in companies: the SURESCOM model

Gintė Jonkutė*, Jurgis K. Staniškis

Institute of Environmental Engineering, Kaunas University of Technology, K. Donelaičio str. 20, LT-44239 Kaunas, Lithuania

Abstract

The promotion of sustainable consumption and production (SCP) as the most important goal and the main challenge to continuously improve the well-being of present and future generations was stated in the European Union (EU) Sustainable Development Strategy, renewed in 2006. Theorists and practitioners highlight the importance of business for progress in SCP. However, the problems in many sustainable development (SD) areas are too complex for companies to deal with alone. Efficient progress in SCP can be only achieved by a systematic struggle of producers and consumers, incorporating members from other interested groups, such as governments, non-governmental organisations (NGOs), education and science institutions, the media, etc. Although there are many attempts to propose sustainable business models for the purpose of implementing SCP in companies, a detailed model that integrates environmental, social and economic aspects of sustainability, offers practical solutions, incorporates well-known engineering, management and communication tools and measures, controls characteristics of industrial processes, products and services as well as engages various stakeholders together with consumers/customers as active partners within the general SCP system is still missing. The SURESCOM (Sustainable and RESponsible Company) model presented in this paper is based on a classical closed loop cycle scheme for the management system and integrates a set of well-known and wide-accepted measures and tools that can be applied to the 3 main areas of company's activities, namely manufacturing processes or company's activities, products/services and cooperation with stakeholders. Some preliminary results of the implementation of this theoretical model are also introduced. The proposed algorithm for the model application offers methodical suggestions to assess current sustainability conditions of the company on the basis of sub-indices of the composite index I_{SCP} for sustainability evaluation and, according to them, can help to select and introduce the most suitable SD tools for a particular enterprise to achieve its environmental and social performance goals.

Keywords:

Sustainable Consumption and Production (SCP), companies, consumers, stakeholders, model, tools.

1. Introduction

Sustainable Consumption and Production (SCP) was firstly put on the global policy agenda at the United Nations (UN) Conference on Environment and Development in Rio de Janeiro in 1992 where unsustainable consumption and production patterns were recognised as the main factors influencing unsustainable world's development (Liu et al., 2010; Szlezak et al., 2008). According to the classical definition of sustainable development (SD), the UN Commission on Sustainable Development described SCP as the consumption of products and services that are necessary to satisfy essential needs and ensure better quality of life, while reducing consumption of natural resources, emissions of toxic substances and wastes through all their life cycles with the aim to cause no threat for the demands of future generations

Abbreviations: AHP, analytic hierarchy process; CP, cleaner production; CSR, corporate social responsibility; EMAS, Eco-Management and Audit Scheme; EMS, environmental management system; EPD, environmental product declaration; EU, European Union; GRI, Global Reporting Initiative; IE, industrial ecology; ISO, International Organisation for Standardisation; LCA, life cycle assessment; NGO, non-governmental organisation; RE & CP, resource efficiency and cleaner production; SCP, sustainable consumption and production; SD, sustainable development; UN, United Nations

* Corresponding author. Tel.: +370 674 40198.

E-mail addresses: ginte.jonkute@ktu.lt (G. Jonkutė), jurgis.staniskis@ktu.lt (J.K. Staniškis)

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