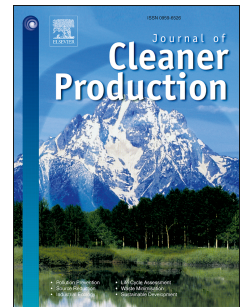


Accepted Manuscript

Environmental Management Systems in Small and Medium-sized Enterprises: An Analysis and Systematic Review

Helio Aisenberg Ferenhof, Luciano Vignochi, Paulo Mauricio Selig, Álvaro Guillermo Rojas Lezana, Lucila M.S. Campos



PII: S0959-6526(14)00248-0

DOI: [10.1016/j.jclepro.2014.03.027](https://doi.org/10.1016/j.jclepro.2014.03.027)

Reference: JCLP 4134

To appear in: *Journal of Cleaner Production*

Received Date: 7 May 2013

Revised Date: 5 March 2014

Accepted Date: 10 March 2014

Please cite this article as: Ferenhof HA, Vignochi L, Selig PM, Lezana ÁGR, Campos LMS, Environmental Management Systems in Small and Medium-sized Enterprises: An Analysis and Systematic Review, *Journal of Cleaner Production* (2014), doi: 10.1016/j.jclepro.2014.03.027.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Environmental Management Systems in Small and Medium-sized Enterprises: An Analysis and Systematic Review

Abstract: Despite the heterogeneity of the small and medium enterprises and the lack of strategic actions being performed within it, there has been increasing interest in the adoption of environmental management systems by practitioners and academics associated with this specific group of enterprises. This article seeks to answer the following question: based on the scientific publications on this topic, what aspects of environmental management systems are small and medium enterprises incorporating into their production processes? A bibliometric analysis and systematic review was performed to formulate a response. The study yielded a portfolio of 27 articles directly related to the research available online in the Web of Knowledge and Scopus databases. The bibliometric analysis identified the most relevant articles, authors, keywords and journals published without time slicing on studies between 1999 and 2013, while the systematic review allowed for the compilation of definitions, authors, research types, results and research opportunities. The primary aspects of the environmental management systems incorporated by small and medium enterprises were (1) certification, (2) fault analysis and improvement implementation, (3) environmental responsibility and (4) impact mitigation. Most of the articles in the portfolio database were associated with the study of environmental management systems implementation in small and medium enterprises with an emphasis on results, such as: (1) lack of knowledge on environmental impacts, (2) the need for training, policy, consulting, business cooperation and the integration of systems, (3) high costs at the beginning of implementation and (4) moral gains and cost reduction paired with sustainability in the medium term. Image improvement and the acquisition of new customers were also factors cited in the studies, highlighting the possibility of acquiring competitive advantages through environmental management systems. Based on the results of this study, future research should include (1) development of environmental management systems implementation methods for larger groups and different small and medium enterprises categories to generalize the results, (2) expansion of studies on the deployment of sustainable technologies for small and medium enterprises based on the use of environmental indicators and (3) research on the impacts of using environmental indicators from different perspectives such as owners, managers, employees and society.

Keywords: Small and Medium Enterprises; SMEs; Environmental Management Systems; EMS; Bibliometric Analysis; Systematic Review.

Download English Version:

<https://daneshyari.com/en/article/8106210>

Download Persian Version:

<https://daneshyari.com/article/8106210>

[Daneshyari.com](https://daneshyari.com)