



São Paulo - Brazil - May - 22nd to 24th - 2013

Acc4ademic

INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

“INTEGRATING CLEANER PRODUCTION INTO SUSTAINABILITY STRATEGIES”

Ecodesign Integration Models: Systematic Literature Review with a Systemic Focus

BRONES, F.A. ^{a*}, CARVALHO, M.M. ^{a,}, AMATO NETO, J. ^a

a Universidade de São Paulo, São Paulo

**Corresponding author, fabienbrones@usp.br*

Abstract

The concept of integration plays a key role in Ecodesign, defined as incorporating environmental aspects with a life cycle perspective into projects and the Product Development Process (PDP) of businesses. Assuming that a broad framework for a comprehensive integration adhering to the principles of innovation management is still missing, this article seeks to make a scientific state of the art of the theme, focusing on published Models. The methodology associates bibliometric techniques and content analysis, based on searches conducted on two databases (Web of Science and Scopus) and several complementary sources giving priority to the primary publications of the Models. The research identified 52 models that were analyzed in depth, coming from various types of publications and worldwide geographical origins, predominantly from northern Europe. It was possible to trace a systemic pattern of the Models, using scientific concepts associated with the success factors of innovation management together with principles of environmental sustainability in business. The adopted three levels segmentation (micro, meso and macro) covers the main issues and challenges of the Ecodesign integration in the PDP of business, contributing to the analysis and comparison of the Models. Throughout the scientific literature reported in this paper, a convergence and consolidation of Ecodesign knowledge was initiated, gathering scientific constructs and best practices from various areas. The proposed systemic approach is a promising way to synthesize the main constructs involved in Ecodesign integration and Life Cycle Management, and is a useful step towards the construction of a complete integration Model.

Keywords: *Ecodesign, integration, models, systemic, development.*

“INTEGRATING CLEANER PRODUCTION INTO SUSTAINABILITY STRATEGIES”

São Paulo - Brazil - May 22nd to 24th - 2013