

# Exploration strategies and key activities for the system of environmental management

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## Abstract

The increasing emphasis on environmental protection has forced firms in virtually all industries to implement environmental management systems and to produce 'green' products. The activities of 'environmental management and green production' include all efforts to minimise the adverse environmental impacts of a firm's processes and products throughout their life-cycle. However, the question of how to decide the key activities to achieve the performance of environmental management is an important issue in all industries. The present study addresses this problem by using a literature review and an expert panel to develop a proposed framework for environmental management activities based on Porter's 'value-chain model'. The study first uses the Delphi method to determine the critical activities and develop the system of environmental management and green product, which consists of three perspectives, 12 initiatives, and 30 activity items. Analytic hierarchy process is then used to determine the priorities of these activities. Finally, the study uses quality function deployment to investigate which existing environmental management systems make the most significant contribution to enhancing the effectiveness of these activities.

Keyword : green value chain; environmental management activity; environmental management system; green product