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External Environmental Costs in Strategic Management

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How shall companies respond to the environmental crisis? The legal environmental pressure on companies will increase as well as the customer's demands for "green" products. Companies need orientation towards environmental issues and therefore, instruments for decision making. Environmental management systems provide a continuous improvement stimulus but do not provide much strategic orientation.

Few traditional instruments of strategic analysis screen the general environment of a company. Tools like PESTEL or a stakeholder analysis will generate helpful insights in tendencies related to the natural environment. To analyse products and processes in environmental terms life-cycle analysis (LCA) is used. The results allow a comparison of competing products and processes and give proof to environmental quality claims, though LCA results are often complex and need interpretation. A single-point LCA like the "Carbon Foot Print" or the "Water Footprint" avoids this problem but may be misleading by neglecting other important environmental issues. The portfolio method "Eco-Efficiency Analysis" for products and services compares the total cost of ownership (TCO) and the relative environmental performance based on a scoring model of LCA-results. It is aiming at a combination of the generic strategy of cost leadership and differentiation in environmental quality. These approaches offer a relative comparison of products from competitors.

For strategic management purposes a better understanding of the environmental value of products and a direct economic interpretation could be helpful. In the environmental policy of the EU the Cost-Benefit-Analysis (CBA) is widely used, taking environmental aspects as external environmental costs into account. The application a CBA including the environmental aspects has been restricted in the past by high costs and the necessary very specific scientific know-how. Recent developments like easily accessible process data bases, LCA-software, standardized methods and data for the economic evaluation of environmental impacts have made these methods accessible even for mid-size companies. They offer the advantage to integrate environmental aspects economically into their strategic planning. Therefore, external environmental costs can serve as a strategic radar und give a better understanding regarding the relevance of environmental impacts, caused by a company or its products. Knowing the environmental costs of their products allows a strategic marketing for customer groups with rational "green" decision making.

If LCA-results are converted into external environmental costs and added to the TCO-results, the combined costs allow a comparison of total costs and benefits including the environmental impacts of technologies, materials, processes, products and services. These results are not limited to a relative comparison with competing products, but allow a distinct estimation of the environmental value added. A further analysis in a market/total-cost-portfolio determines the strategic position in the environmental context more clearly than a LCA or an eco-efficiency analysis does. From the portfolio model standard strategies can be derived for green products. The paper will discuss examples of green products, which have been successful or failed using the portfolio approach.