

Sustainable Innovation 2010

Sustainability Hot Spot Analysis:

A streamlined life-cycle assessment towards sustainable product innovation

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In order to take full advantage of sustainability opportunities technological and organisational progress has to be provided with an appropriate direction. New policy approaches, concepts and practical tools are needed to govern product innovation towards sustainability. Especially, accounting for the social dimension of sustainability proves to be a challenge for corporate practitioners, due to its intangible, qualitative nature and lack of consensus on relevant criteria. We suggest the “Sustainability Hot Spot Analysis” as semi-quantitative approach based on stakeholder involvement to integrate social and environmental dimensions along the entire value chain and to identify relevant aspects for a product specific sustainability management.

This presentation illustrates the development of the Hot Spot Analysis, which has first been developed by the Wuppertal Institute as reliable and practical tool for environmental assessments. In order to integrate the social dimension into the assessment the Hot Spot Analysis prioritises social themes based on their relevance within a particular life cycle phase. For each life cycle phase and each life cycle aspect the relevance needs to be specified as low, medium or high based on scientific data gathered through literature reviews and stakeholder analysis. This enables to develop a matrix of themes and the phase specific relevance as decision-making support. The presentation illustrates single steps and results of the Sustainability Hot Spot Analysis with a case study. Furthermore the paper discusses the strengths and weaknesses of the tool within a broader context of alternative tools and approaches to shift product systems towards sustainability.