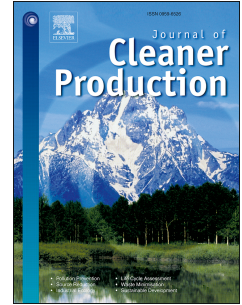


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Organizational environmental footprint in German construction companies

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Abstract

Besides the application of the life cycle assessment methodology in products and services, the consideration of environmental impacts at the organizational level in a holistic approach can also provide significant information about other environmental issues. In 2012 the European Commission developed the Organizational Environmental Footprint Guide, however there is still scarce experience with its implementation. In this research it was examined whether the conduct of an Organizational Environmental Footprint could be readily applied to construction companies, and additionally the corresponding costs and benefits were estimated. Using a case study within a German organization, the feasibility of the application of the guide in construction companies was reviewed and possible adjustments were proposed. The main obstacle lies in the product portfolio of such companies, which can be very heterogeneous. It was observed that most data could be collected from the already implemented accounting and procurement software. Additional data were obtained through the environmental management system of the analyzed company. Difficult was the determination of resource use and emissions from upstream activities along the supply chain. Using the Greenhouse Gas Protocol, decision supports were set to generate emissions data. The results of the case study were then generalized to construction companies, what can support such organizations to achieve a sustainable transition to a cleaner production.

Keywords

Organizational Environmental Footprint, OEF Guide, Construction Industry, LCA, ISO/TS 14072

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