Project title:	Ecodesign methodology for recyclable textile coverings used in the European construction and transport industry
Acronym:	EcoMeTex
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Partner:	RWTH Aachen University, Germany Institut für Textiltechnik (ITA) (Coordinator) Institut für Bodensysteme an der RWTH Aachen e.V (TFI) Ecodesign Company Engineering & Managment Consultancy GmbH, Austria Centre Scientifique & Technique de L'Industrie Textile Belge, Belgium Aquafil Spa, Italy Colbond BV, Netherlands Gneuss Kunststofftechnik GmbH, Germany Oerlikon Textile GmbH & Co. KG, Germany Sioen Industries NV, Belgium Anker-Teppichböden Gebr. Schoeller GmbH + Co.KG, Germany European Carpet and Rug Association AISBL, Belgium Klieverik Heli BV, Netherlands Interface European Manufacturing BV, Netherlands

Mission Statement

The overall aim of EcoMeTex is to develop a tailored Ecodesign methodology for optimising the design of textile coverings with regard to eco-efficiency and cost-effectiveness. This comprises an analysis of the entire life cycle identify significant environmental and economic impacts and hence potential for improvement guaranteeing high product quality, as well as high product safety. Life Cycle Assessment (LCA) allows to identify the crucial weak points in the life cycle and to assess improvement strategies to achieve an environmentally sensitive product design. LCA informs designers and developers concerning the implications of their choices on the environmental impacts and is therefore a decision-making tool. The innovative methodology faces the challenge to solve the paradox of textiles coverings: on the one hand the bonding of the multi layers has to be solid; on the other hand the multi layers have to be easy to dismantle for recycling. Applying this methodology a closed loop system of resources is realised, enabling material recycling. Re-design comprises not only optimisation of currently used material sets or manufacturing and distribution processes but also product and process innovations: It covers the development of innovative material adaptations as well as new approaches within the manufacturing process, recovery and reuse stage itself. The feasibility of the re-design concepts will be proven by producing prototypes of eco-designed textile floor coverings from the construction sector. The work will be completed by describing the methodology in a Code of Pratice which will be implemented in a customised, practical and intuitive software tool. The Ecodesign methodology will provide additionally a communication scheme for external communication based upon LCA results too. The transferability of the Ecodesign methodology for textile coverings to other sectors will be analysed using the example of trailer tarpaulins representing the transport sector.

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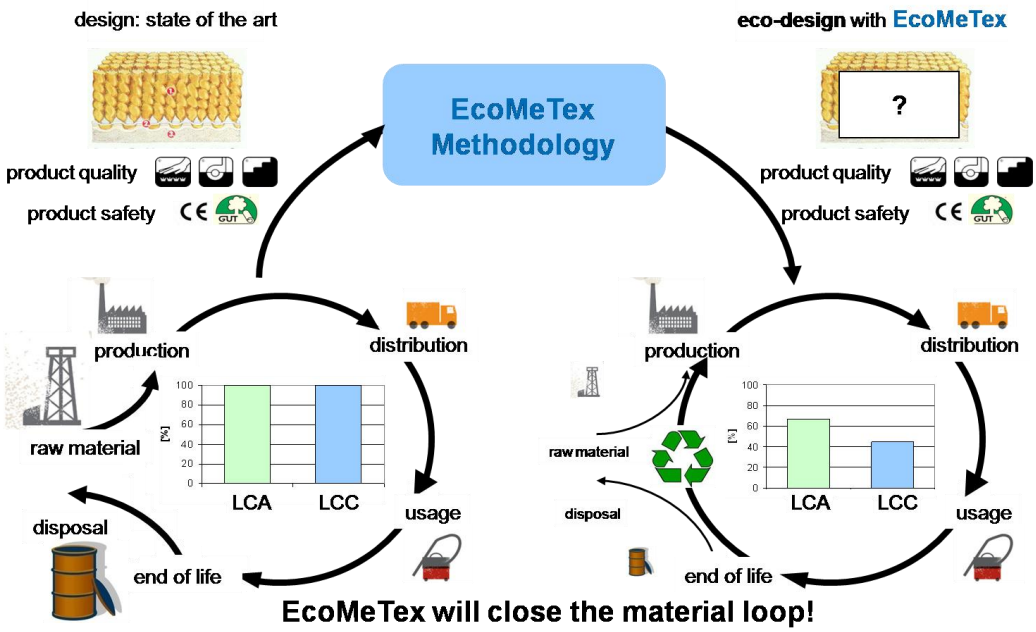

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