

## **How to provide LCA information of building materials in an efficient way**

**Marc Binder, Johannes Kreissig, Harald Florin; PE Europe GmbH,  
Germany**

**Anna Braune, Cecilia Makishi, LCE Department LBP University of  
Stuttgart, Germany**

On the road to sustainable development, the idea of life cycle thinking offers an ideal approach for a systematic environmental, social and economic evaluation of a product's performance considering its total life cycle. Construction activities, driven by high initial expenditures, a very long life cycle and a high socio-economic relevance, are a very important field of sustainability assessments. Since the environmental effects and the costs are determined to a high percentage in the design phase, early consideration are requisite for forward looking and responsible decision-makers. Strategies and methods that support to navigate the decision-makers towards more sustainable solutions are needed. As for the environmental aspects of sustainability, information derived from Life Cycle Assessment (LCA) offer a consolidated and comprehensive basis for the comparison of different options and the identification of improvement potentials. The environmental information used has to be up to date to be accepted by decision makers.

The presentation will contain of two parts:

1. Based on long-year experiences from LCA application in the building industry this presentation will introduce

- a way of efficiently modeling the production of building materials.

An efficient model has to work with input data already available within the company to avoid additional effort for data collection. With such a procedure the cost of providing environmental information is minimized.

- strategies for up-dating the environmental profiles.

Since the environmental reporting asks for up to date information representing the actual situation, systematic procedures for up dating the environmental profile of a company and its products is the basis for a long term success of LCA in a company.

- advantages of a template based system for communicating the information.

To fulfill the stakeholders' expectations, uniform well-defined formats for communication are a key issue.

2. Presentation of implementing the introduced approach in a company.