

TO WHAT EXTEND LIFETIME INFLUENCES SUSTAINABILITY?

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Session description

In the context of life cycle management, lifetime of a product is often a key issue. It is common thinking that in general, the lifetime extension of a product means less environmental impacts. Several questions are then to be answered; is this common rule applicable to all product groups? Is there a limit and what are the key factors? As example, some LCA results show that baby diapers or paper tissues could have less impact compared to washable ones, or that it is preferable to often renew household appliances with better energy efficiency.

The other concern is the uncertainties in LCIA due to lifetime estimation. It is very difficult to assess the lifetime of products regardless of their application. It depends both on the product quality, the consumer behaviour and environmental factors such as the weather, the temperature, climate conditions etc. When considering the innovation in new products this question is even more crucial. So it is essential to propose applicable methods to optimize lifetime assessment in Life Cycle Management context.

The last issue concerns the impact of product lifetime on purchasing. Planned obsolescence of goods is associated with the linear economy. Extended products lifetime will results in different economical model. The LCA has to take this into account.

Keywords

Extended lifetime, durability, quality