

Standardization of Life Cycle Assessment to Ensure Transparency in Product Labeling

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Businesses, consumers, government agencies and institutions are increasingly seeking to understand the full life-cycle environmental and human health impacts of products and services prior to purchasing, in order to make informed choices that have the greatest environmental benefits with the fewest trade-offs. Product labeling based in life cycle assessment (LCA) offer one of the best potential tools to satisfy this demand. As these labels come into vogue, it is vital that they report results from a universally accepted list of impact categories, and that they rely on comparable calculation methods. ISO 14040 provided the general framework, but the devil is in the details.

A new standard being developed under the American National Standards Institute (ANSI) process is tackling this challenge, and promises to make LCA-based product labels more comprehensive and consistent than ever before. This standard provides a common, comprehensive set of environmental impact indicators and calculation methods that ensure robust measurements adequate for decision-making.*

- The standard addresses all impacts germane to human health and the environment.
- The standard clarifies details of the iterative process required to ensure that data collection and analysis is properly focused and streamlined, building upon existing research and techniques developed by the Danish Ministry of the Environment and the European Commission Joint Research Committee.
- The category indicators have high environmental relevance, consistent with the requirements of ISO-14040 international standards.
- Calculation methods ensure that results accurately portray actual on-the-ground impacts rather than phantom impacts that do not reflect actual conditions.
- Contains guidelines for conducting LCA based on an iterative process which significantly streamlines data collection needs.

The standard incorporates methods developed and tested over the past 20 years. The standard has been developed under an open, multi-stakeholder committee process with members from industry, academia, and the environmental community, and has incorporated significant stakeholder input. It augments the international standards ISO 14044 and ISO 14025, providing not only the scientific underpinnings of credible LCAs, but also provides requirements for product labeling.