

LIFE-CYCLE ANALYSIS (LCA) AT A GLANCE

What is LCA?

LCA attempts to predict the environmental burden of a specific product, system or service from its creation to final disposal

LCA Benefits

- LCAs help prevent problem shifting
- Can help identify trade-offs between variables
- LCAs allow specific value/impact assessment

LCA Limitations

- LCAs rarely produce "winners" and losers" (rather, they point to options and trade-offs)
- Give us a snapshot fixed in place and time, and on a case-by-case basis
- Economic and social factors missing
- No consensus on interpretation of results

Current applications

Useful for assessing environmental impact when applied specifically to:

- Product/packaging - for individual systems and comparisons
- Options within a waste management strategy in a specific region or community

The role of LCAs in EU policy-making

It is highly speculative - and potentially economically and socially counter-productive - to use LCAs as the sole basis from which to extrapolate one optimum policy solution for managing waste throughout Europe, which is very diverse.

What about a 'hierarchy'?

A hierarchy of waste management options is not the answer to how to handle all forms of packaging, all packaging materials, in all areas of the EU. Nor does it consider combinations of options, social feasibility or economic costs.

The way forward

- LCAs can identify variables which point to improvements in product design and the environmentally effective management of waste once produced.
- But by their nature, they are not suited to support global policy decisions, and need to be combined with other tools before they can be used as a basis for sound, sustainable environmental policy.