Propositions belonging to the PhD thesis

Development of life cycle assessment methodology:

a focus on co-product allocation

Allocatie in Milieugerichte Levenscyclusanalyse

by

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1. The complicated mathematical modelling that is involved in Life Cycle Assessment (LCA) methodology can obfuscate the use of unfounded assumptions upon which calculations are based.

2. The methodology for input and co-product allocation can significantly alter the results when modeling a single process but has little impact on the final outcome in product comparison when applied at the system level.

3. A 'demand product' from a process that produces several co-products is not easily ascertained in cases where one or more co-products may have, at one time, been considered waste, but are now marketable products, such as cow manure used as a fertilizer.

4. Too many reported LCA studies do not have a clearly stated objective; the commissioner of an LCA study must, from the outset, clearly define the intended goal of the study in order to synchronize the goal with the most appropriate methodology for data collection and impact assessment.

5. Measuring only one impact indicator, such as global warming, is as meaningful as using only a person's weight as in indicator of overall health.

6. Solutions for local environmental issues often cause negative environmental effects at the global level. They defy the concept 'Think globally, act locally', which should be amended to 'Think globally, act locally, especially when addressing local environmental issues'.

7. Global warming is a hot topic; scientists do not all agree that global climate change is a result of human activity, but until we are certain, the precautionary principle should be applied.

8. Reliable information on the environmental benefits as well as the harm related to products is neither a necessary, nor a sufficient condition for intelligent consumer decisions.

9. Current life cycle impact modelling should be modified to lead to more easily understood metrics rather than to relatively meaningless information; otherwise, economic value will continue to influence people's actions more than environmental indicators.

10. In a team environment, the responsibility for group's effectiveness is not on the leader's shoulders but is shared by the group as a whole.

11. The pessimist sees a glass half empty; the optimist sees a glass half full; the LCA practitioner sees that the glass is twice as big as it needs to be.