

Dealing with different standards in practical work: examples on biofuels

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56th LCA Discussion Symposium

ARE ENVIRONMENTAL DECLARATIONS OF PRODUCTS AND ORGANISATIONS THE WAY TO HARMONISE LCAS?

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Key questions

- What are the pros and cons harmonization?
- What are the challenges in the harmonisation process?
- Are comparative assertions, as defined by the ISO standard, easier to make?
- How to deal with the several dozen of standards in practical work?
- Is it realistic to aim for harmonization if companies strive for differentiation?
- Does consensus hold back new developments?

ESU-services Ltd.

- Founded in 1998 as an ETHZ spin-off
- 3 co-workers
- Long time experience since 1994 with life cycle assessment (LCA)
- Clients from industry, NGO, administration, universities
- Global LCA food database with more than 6'000 datasets

Our consulting services

- Full-scale Life Cycle Assessments (LCA)
- Tiered LCAs
- LCI data acquisition and management (data-on-demand)
- LCA project management
- Ecolabelling concepts
- Literature surveys
- Critical peer reviews
- LCA training & coaching
- Regional SimaPro Centre (LCA software)

Economic sectors covered

- Agriculture
- Food production and consumption
- Lifestyles
- Energy and electricity supply
- Renewables (photovoltaics, biofuels, etc.)
- Buildings and construction
- Mechanical engineering
- Information and communication technologies

Participation in Harmonization

- Biofuel LCA and legislation in Switzerland
- CEN TC 383 (Sustainability criteria for the production of biofuels and bioliquids for energy applications)
- ISO/DIS 13065 (Sustainability criteria for bioenergy)
- Peer review according to ISO 14040
- Product Life Cycle Accounting and Reporting Standard, Greenhouse Gas Protocol (GHGP by WRI, WBCSD)
- ENVIFOOD Protocol
- UNEP-SETAC (Nomenclature on Exchanges)

Harmonization experiences 1

- Legislative: Complex, influenced by stakeholders (e.g. default values in RED, market instrument), barriers by trade agreements, lack of scientific background
- Standardization (CEN, ISO): Time consuming, blockade due to consensus system, minimum agreements, no consensus on emerging issues such as indirect effects of bioenergy

Harmonization experiences 2

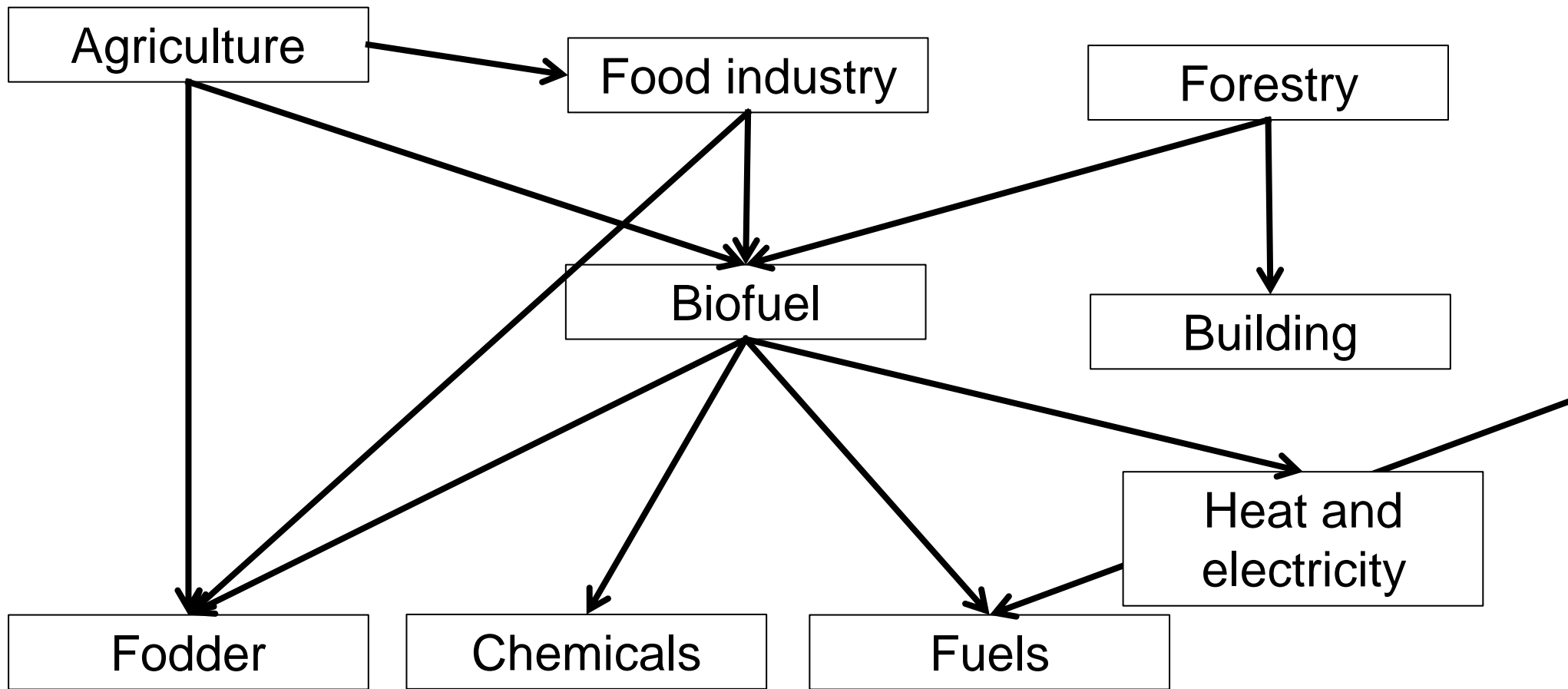
- Stakeholder initiative (GHGP, ENVIFOOD):
Efficient, pressure groups, limited reach
- Scientific (UNEP-SETAC): Consensus possible if
early planning, unfortunately reinvention of the
wheel in later processes

Main issues of harmonization

- Allocation (no perfect approach)
- Foreground data and background databases (commercial interests)
- Default values (nice but often nonsense)
- Cut-off criteria (fixed percentage)
- Impact assessment (cultural differences, ISO blockade on weighting)

➤ For some issues it seems to be impossible to achieve an agreement by all stakeholders

Sectors are not independent of each other



- Product Category Rules in one sector have an influence on other sectors
- PCR should be developed for one sector and followed by suppliers and customers

A family of standards might not be consistent

- ISO 14040 often used as a starting point
- Some modifications maybe due to other spirit in the group and different consensus finding
- CEN TC 383 → default values based on politics and not on scientific basis
- ISO 248 → much copying, some modifications
- How to ensure that changes in leading standards like 14040 will be implemented in other standards relying on this basis?

Economic stakeholders have own interests

- Database developers like to protect their way of modelling and data documentation
- Each type of allocation has winners and losers

Benefits by harmonization

- ILCD/ENVIFOOD recommendation helpful to simplify the discussion on LCIA
- Nomenclature for elementary flows was useful as long as stakeholders followed it
- Allocation approach developed by experts for the own production processes (e.g. IDF for dairies)

Summary

- LCA is a global tool covering a lot of economic sectors
- Standards should not be limited to single products in order to maintain the 100% rule and consistency
- Standard development needs to be democratized, taking into account minority positions
- Flood of new standards does not bring real benefits
- Common sense will remain a prerequisite to do LCA
- Comparisons of results from different studies will remain difficult

Recommendations

- Allocation rules should be defined within a sector and followed by all others
- Discussion on weighting needs to be open up and more research on this is necessary
- Recommendations for LCIA should be updated frequently

Time for discussion

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