

# Session reflections LCM 2013

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During LCM 2013, the session chairs were asked to write a short summary of the session based on their spontaneous comments and remarks. This was optional and summaries were sent in for about half of the sessions. This document is a compilation of reflections based on the texts handed in by the chairs. The document is intended to provide *examples* of reflections from individual delegates during the conference and should not be seen as any official statements nor as a complete summary of the conference.

## **Roles and responsibilities**

One of the main themes of the conference was "Roles and responsibilities". The conference hosted a number of sessions that explored this theme through different perspectives and sectors.

### ***Sustainable product chains - The role and responsibility of retailers***

offered different perspectives on what retailers can do and the challenges they face, all emphasized the crucial role of retailers in reducing the impact of consumption of products. Highlighted challenges included conflicting interest within retailers, as well as within politics and among consumers (low price and health before environment). Another discussion was about certification schemes: Retailers do not find the eco-labeling standards unsatisfactory, but they have concerns about the level/ambition. As the level is set very high, the uptake among bulk-producers is likely to be low or even very low. The role of retailers in raising capacity among the suppliers was another area for discussion.

***Roles and responsibilities in the mobility sector*** had six very good presentations discussing different areas of the mobility sector. A focus topic was related to electric cars and their introduction to the market.

The chairs of the session *Trade associations – Drivers for LCM?* concluded that as pioneers of LCA since the 1990s or as recent actors of change within industries, trade associations play a more and more important role in promoting LCM. They provide industries with the opportunity to conduct LCAs that are representative of an entire sector, contribute to the awareness of companies on methodology and play a key role in collecting and making data and tools available. Through a multitude of examples in industries ranging from chemical to steel through coatings and hygiene products, the presentations illustrated the extent of the role of trade associations, from conducting LCA to building databases and tools, through many other activities in the field of sustainability to act on the insights brought by LCM. The various presentations provided examples from different industries and demonstrated that the question raised by the session title is rhetorical – trade associations are drivers for LCM in many different ways.

## **From communication to end of life**

From the session *The role of communication in LCM* it was concluded that there is a need for a better understanding on how to communicate life cycle thinking to a variety of stakeholders from a more corporate perspective. While some of the presentations in this session was still quite technical, future conferences could perhaps look more into communication from a corporate level, and how to address sustainability communication (channels and messages), both to internal stakeholders, value chain stakeholders, and other stakeholders (NGOs, the general public, investors, local communities, industry colleagues etc.).

In the session *LCA critical review*, several themes ran through the room, resulting in some convergence of opinion around areas like the need for quality and rigor. There was also a good debate on areas such as when CR is actually necessary and what role reviewers need to play. Overall, the chairs of the session were pleased with the outcome and concluded that: "The session on LCA Critical Review was fantastic. The speakers were

excellent and informative, the room was packed to overflowing, and the questions and discussion that was generated were of high caliber. From the questions and discussion it was apparent that numerous people in the room had experience on critical review panels."

***Chemical assessment*** was another session that reported on lively discussions and wide interest from the audience in the presented findings. In particular the exchange of experiences between practitioners seems to have given interesting perspectives and insights. The chairs conclude that the broad field of "chemicals assessment" seems to be far from settled, however there is maybe a shift in focus from methodological aspects like eco/toxicological characterization of particular substances/products (where the since long recognized methodological difficulties with data gaps and mismatched was again illustrated) to such things as the product/information handling relating to chemicals. The session mostly covered "technical" aspects while product chain management aspects were mostly untouched. An interesting development of LCA is to use it more for decision-making processes and early stage evaluations to steer research projects in the right directions as well as for supplier selection. However, it should be emphasized, that there are also trade-offs which need to be handled as well as the link between different evaluation systems like REACH or other regulations and LCA with their different approaches.

***Biodiversity and ecosystem services in LCM – methods and values*** was one of the sessions organized as a workshop. After four brief summaries about methodologies for biodiversity assessment, and attitudes towards quantification of biodiversity, the participants chose to discuss around the topics of data availability and data management, different kinds of indicators and tradeoffs. In brief, already identified challenges in the field were confirmed, but in addition to this some constructive ideas came up on e.g. development of a data base for biodiversity (including valuation of biodiversity). Recommendations included the importance of clearly formulating the purpose of LCA studies conducted and indicator(s) chosen.

The latter would most likely be multiple in most studies, including indicators at both species and landscape (ecosystem function) level. Notably, the discussions came to focus almost entirely on biodiversity per se rather than on ecosystem services, possibly due to the nature of the presentations.

Papers presented in the *End of life management* session ranged from management models to end of life “technology” models. From papers presented and question from the public, the chairs noted that among end of life management issues there is space for developments and insights since: rules system can affect the possibility of recycling and remanufacturing and, in general terms, the end of life chain; LCI data about end of life management are scarce and, again, there is space for LCI data development; models for end of life management “control” and monitoring can be improved and implemented more widely; the “end of life” management chain can vary very much from country to country and even in the same country according to each type of product and/or material.

## **LCA and LCM in public policy making**

Although policy issues are relevant in most areas of LCM, LCM 2013 also had two sessions specifically devoted to public policy-making: *Does research matter? The role of LCA and LCM tools in public policy-making* and *Application of life cycle approach in environmental policy*. Together, they gave a broad spectrum of the use of LCA in public policy, including the need and relevance of including life cycle perspectives in policymaking, how assessment methodology can be developed to provide better guidelines for policy-making, and the role of LCA in actual policy processes.

A general observation was that LCA/LCM in public policy provides new complementary perspectives and creates an important link between the environmental impact from today’s consumption and production activities.

Such knowledge is vital in order to develop effective policy instruments and not just shifting them to another region or another part of the life cycle.

There is still a gap between the *performed* LCA/LCA research and real implementation of the results in environmental policy making. In order to change that, there is a need for a long-term vision and commitment by policy makers. Stakeholder involvement and a systematic process dialogue towards a robust LCA approach/methodology/framework seem to be of high importance for a successful implementation.

By 2015, there should be a lot of interesting company experiences from the pilot tests of the EU PEF/OEF methodology that would be of high relevance to present and discuss at the next LCM conference in Bordeaux.

## **Labels and declarations**

Due to the wide interest and number of contributions in the area, LCM 2013 had a *track of sessions on current developments in life cycle based labeling and declarations* – consisting of one session focusing on labels and one on declarations followed by a common round table discussion.

The chairs of the labeling session were happy to see that Ecolabeling is now gaining room within research as an important tool for businesses, governments and consumers. The presentations in the session on labels included the observation that many big companies use ecolabels to give legitimacy whereas for smaller companies it is more about using the labels on the market for a competitive advantage. Other areas for presentations were, for example, the difficulties in assessing the environmental effects of type I ecolabels (because you have to consider both the direct and the indirect effects) and how type III and type I ecolabelling could be combined.

The concluding round table discussion consisted of discussions around a number of themes, such as the need for guidance for making informed comparisons using environmental declarations or carbon footprint of products, and how to move towards a better organized PCR landscape.

## **Production and design**

*Sustainable production* was one of the topics of the conference that attracted most submitted abstracts and the two sessions within this theme was very well visited. Presentations ranged from models to test LCM-strategies to implemented measures driving concrete environmental improvements. The session chairs observed an overall enthusiasm and interest for the topic on sustainable production where both fundamental and applied research seemed to be of equal interest to the audience. The discussions brought e.g. issues of LCA data generation, availability, data exchange and data quality. LCA tools and its usability also resonated among the audience.

*Ecodesign* was the theme of a workshop with a few introductory presentations and a concluding discussion. After an introduction to ecodesign including its definition, examples of companies promoting ecodesign, and challenges such as shared economy and rebound effects, a range of examples were given. Hultafors Group presented how they have been working step by step to integrate ecodesign in their design process, initiated by owners and CEO, and on customer requirements. The conclusion on their process so far was that: "They learned a lot, they work step by step, they like it!"

Ecodesign was also presented through examples of Spanish products showing the benefits of using for example recycled or recyclable materials and renewable energy, as well as how to work on the process, the functionality and the aesthetics of the solutions. Another example presented was the evolution towards a more 3D and CAD world, with the spread of the FAB LAB movement, launched by the MIT.

A survey (Eco-Leap preparatory study) from 2013 on drivers and barriers for ecodesign and how Swedish companies work with ecodesign today was the basis for the concluding discussion. The survey showed for example that academic articles available are only present in sustainability related journals, not in other research fields; that sustainability issues are more important today than five years ago; that customer requirements are the main driver for ecodesign; and that lack of competence was one major obstacle to ecodesign. The discussion showed that the findings are true not only for Sweden, but also in other countries. Examples of what (and by whom) can be done in order to improve included to work on cooperation with other research fields (and especially the "classical" design field, as many interactions arise in the IT field); to open the eyes for ecodesign in the society as a whole; include sustainability issues in all kind of educations. We can also all contribute by buying sustainable and, like the 3D printers revolution will offer us, to be all designers, and even more, ecodesigners!

## **LCA highlights**

One of the more experimental sessions of LCM 2013 was *LCA highlight* where LCA case studies were presented in condensed presentations, preferably using a "PechaKucha format". The ten presentations included in the session mainly covered LCA case studies for a wide range of applications such as packaging for food and cosmetics, construction materials, automotive components, biofuels, and waste water treatment technologies. The presenters and the case studies presented represented many different geographical areas, such as Japan, South Korea, Luxemburg, Germany, Italy, Spain, Sweden, Mexico and Brazil.

The session format 'PechaKucha' meant that the presenters were given 20 slides set to advance automatically after 20 seconds (6 minutes and 40 seconds in total). Presenters not comfortable with the presentation format were allowed to advance their slides manually. Three presenters chose to

use automatically advancing slides. The rest mainly used fewer slides (ca. 12) to allow for more time per slide.

In general, the discussions at the end of the session probably suffered somewhat from the relatively large heterogeneity of the studies presented. It might, however, also been the result of the fact that it is a bit hard for the audience to digest and recall the relatively large number of presentations given in little over an hour. A more focused theme and/or more time for discussions would probably have been beneficial for the format.

## **Challenges and opportunities of LCM and LCA for the industry**

Three sessions with different formats were specifically devoted to *Exploring challenges and opportunities of LCM and LCA for the industry*, an oral session with industry cases, a panel discussion and a round table session. The panel discussion, for example, included experiences from Unilever, Dupont, Barilla and Volkswagen and expressed that on different levels communication is a challenge, and this applies to internal and external communication. While a study is carried out, the need for communication between data providers and the LCA practitioner is underestimated. The panel discussion also highlighted that external communication goes far beyond printing a label proving a certification on a product. Attempts to educate the consumer about his influence on the environmental impact during the use phase have been one aspect.

## **Keynote speeches**

Eight keynotes speeches were given at LCM 2013. Below is a short take home message interpreted by the organizers ears.

### *Opening ceremony*

André Reichel: There are no sustainable products – think about how to create a more sustainable lifestyle

Karin Markides: To reach sustainability – collaborations are necessary

Emma Ihre: Sustainability reporting has been one way to implement sustainability into state-owned enterprises – the next step is to implement sustainability further in the Boards

André Veneman: Long term business success: Creating more value with fewer resources along the value chain will create new business opportunities

Annika Axelsson: Help consumers to make the right decision

Susanne Freidberg: LCA is not only a result, it's a learning process of hidden values

### *Closing ceremony*

Rob Jenkinsson: Life cycle management is key for business success

Teresa Fogelberg: Life cycle management will increase in importance in future sustainability reporting

## **Comments on formats**

Most session at LCM 2013 had a traditional oral setting with presentations of 12 minutes followed by 3 minutes of questions. This setting was altered with workshops, round tables and more experimental formats to stimulate and give room for more interaction, and to allow for the testing of new formats.

Some sessions had a concluding discussion by the end of the session, which mostly turned out to work very well. It was suggested that such “quick-fire discussion format” should be considered for future LCM conferences. The setting of a traditional oral session followed with a session with round table discussions around the same topic was also much appreciated and several delegates wanted to see more of this in the future.