

Social assessment in Life Cycle Assessment

- on the agenda of the Swedish Life Cycle Center's Network Conference

2015-09-14, Stockholm



The Network Conference, arranged by the Technical Secretariat of the Swedish Life Cycle Center, took place at Tekniska Högskolans Studentkår (THS) Kåren in Stockholm on September 14. Around 40 life cycle experts attended, from a variety of organizations. The Swedish Life Cycle Center organizes two network conferences each year with the purpose of sharing results and knowledge about the life cycle perspective and to be a meeting place for life cycle experts and practitioners from the Center's partners.

The topic for this for the conference was social assessment in life cycle assessment and the Center's working group on Social LCA was used as support in the development of the agenda. Participants in this group were also part of the agenda.

The conference opened with some updates about the Center from the Director Sara Palander together with Elisabet Olofsson, Chairwoman of the Board and Anna Wikström Project manager.

The first presenter was Bernard Mazijn, invited guest speaker from Social Life Cycle Alliance (Global LC Alliance), who gave an introduction to Social LCA and the Guidelines for Social Life Cycle Assessment of Products. The guidelines were developed under the UNEP/SETAC life cycle initiative umbrella, but are today working from their own community, Social LC Alliance.

He highlighted the importance of collaborating with social scientists. Bernard also mentioned the importance to get to know your value chain and what is happening there to be able to



increase the awareness about companies' risks. Today social life cycle assessment has gained momentum and more case studies are being done. New initiatives are popping up, built on the guidelines.

Bernard's presentation was followed by a presentation by Sara Nilsson, Vattenfall, who presented how Vattenfall is working with Social LCA. The driving force for Vattenfall is to be a leader in working with a value chain perspective. Vattenfall started to investigate what indicators that were of importance for the company and early they understood that the data area is one of the most challenging part. Vattenfall published results from their first social study in their EPD for Hydropower as an appendix.



Sara Nilsson, Vattenfall and Bernard Mazijn, Social LC Alliance.

Elisabeth Ekener Petersen, researcher at KTH, gave a presentation on Outstanding issues to be addressed within the Social LCA research community. She gave her presentation from the Guideline perspective (Guidelines for Social Life Cycle Assessment of Products). Elisabeth built her presentation on seven issues:

Issue 1 – Bottom-up or Top-down process?

Issue 2 – Effectiveness

Issue 3 – Data availability and quality

Issue 4 – Impact assessment methodology

Issue 5 – Assessment of the use phase

Issue 6 – Presentation of results

Issue 7 – Context dependency

Rickard Arvidsson, researcher at Chalmers University of Technology, held a presentation about Life and death in Social LCA – an approach for holistic human health assessment. Rickard has together with two colleagues looked in to the area of precious metals and identified some products of interest to evaluate life and death from a product's use phase compare to its extraction and production phase. The products have been divided into the typology: health saver, health taker, health neutral and health exporter. The first studies have



been made on catalysts, air-bag and gold. The studies are dependent on different time perspective. In the end of his presentation he mentioned other product groups that might be of interest to look into, e.g. conflict minerals, weapons, medicines, seat belts, cotton textiles.



Rickard Arvidsson, Chalmers University of Technology and Elisabeth Ekener Petersen, KTH.

The presentations were followed by a group discussion, where the following four questions were discussed. Some findings and voices from the discussions can be found in italics below.

- 1. How can research, industry and policy work together for a proper positioning and development of Social Assessment in LCA? Give examples of actions within the Swedish Life Cycle Center!
 - The Center could be active in case studies and practical guidelines. And consider how PhD-students can be useful in this work. On company level internal training and top management commitment are essential keys to development of the area.
- 2. What should be assessed in social LCA? What is the "energy use and GWP of social LCA"?
 - To go from DALY to QUALY (quality adjusted life years). DALY is good for health impacts poverty. How to deal with, for example, a poor person that is better served by a social improvement in a linear model? A suggestion is to introduce a minimum level or the diminishing marginal utility for indicators.
- 3. What are the advantages and disadvantages of moving from environmental LCA to life cycle sustainability assessment?
 - Advantages: not shift burdens, E-LCA experts and knowledge, routines can be used to support the social parts, not only one perspective
 - Disadvantages: the immaturity of social LCA and the added complexity for decision making, could it lead to confusing too much information?
- 4. Should Social LCA methodology be kept general, simple and flexible to users' needs or should be detailed and specific according to different sectors in which it will be



implemented?

- Both general and detailed, streamlines, teach management to handle complexity, not cutting off stages of the life cycle, general and simple. We are in the beginning and therefor it is important to build up an interest and not scare people away, not make it too simplified became meaningless, it could be useful to have guides for specific sectors.
- "Keep it simple and flexible since we are in the start, and this approach would facilitate getting acceptance from management. It is also important not to scare people from start using it. At a certain point in the development process it will be needed to address sectors in a more specific way. Communication with simple and clear examples will be important all the time."

In the end of the day, a panel discussion was held with five practitioners and researchers from different organizations with different background in social LCA. Invited to be part of the panel were Ana Martha Coutino (AkzoNobel), Sara Nilsson (Vattenfall), Elisabeth Ekener Petersen (KTH), Rickard Arvidsson (Chalmers University of Technology) and Bernard Mazijn (Social LC Alliance).

The panel highlighted the importance of working within the Social LCA area. Sara mentioned the high value of get to know the supply chain better to be able to answer on the high external pressure on companies today. Both Elisabeth and Rickard expressed the value of handle all three pillars in decision making, it is easier to interlink social-economic part, but the environmental part needs to be there as well. At AkzoNobel the top managers were the driver for the company to start looking onto the Social LCA, as an answer to the increased interest externally. Bernard highlighted the importance to discuss this topic on a multidisciplinary level and demanded social scientist to be included in this discussion.



Moderator Sara Palander together with the panel





The SLC Network Conference ended with an after work.

Thanks to all who participated and has contributed to this day!

On September 15, the discussions from the SLC Network Conference continued within the working group on Social LCA together with Bernard Mazijn. Documentation will soon be available on SLC internal web site.

Next Network Conference is schedules to take place on February 11, in Gothenburg.

Material

All presentations from the conference are available at our <u>internal webpage</u> together with a list of participants (please note that this is only for partners in the Center).

Curious to learn more about social LCA? Here is a list of publications of interest within social assessment in LCA:

<u>Tracking down Social Impacts of Products with Social Life Cycle Assessment,</u> Elisabeth Ekener Petersen, KTH 2013

Handbook for Product Social Impact Assessment. PRé Sustainability 2013

Guidelines for Social Life Cycle Assessment of Products, UNEP 2009

Does the Production of an Airbag Injure more People than the Airbag Saves in Traffic? Henrikke Baumann*, Rickard Arvidsson, Hui Tong and Ying Wang, Chalmers 2013

Does a catalytic converter cause more loss of lives than it saves? - A human health life cycle assessment study. K M Nazmul Islam, Chalmers 2015

The Blood Wedding Ring, Assessing the Life Cycle Lives Lost in Gold Jewelry Production. Rasmus Parsmo, Chalmers, 2015