

## **DF 68: LCA of key technologies for future electricity supply**

April 16, 2018, Zürich (in English)

In the recent past, many countries increased the share of renewable energy sources in the electricity mix substantially and will continue to do so in the future. Intermittently producing technologies such as photovoltaic or wind power plants are a challenge for electric utilities and ask for new concepts regarding grid operation, dispatching and storage. This forum will cover the full range from life cycle assessments of specific components such as photovoltaic panels, geothermal power stations and battery storage facilities to promising concepts of system integration in electricity networks such as smart grids.

Main focus will be on the environmental assessment of these future technologies, on the main environmental challenges faced and how LCA can support strategies based on these electric utilities in order to facilitate the energy turnaround to comply with the ambitious target of the Paris Agreement and the due phase out of nuclear power. During topical breakout sessions, you will have the opportunity to discuss trends and developments in electricity grids, battery storage and power plant technologies, and how life cycle assessment could be of help in evaluating and supporting the transition towards an environmentally benign future electricity network. This forum aims at facilitating discussions among different domain experts in view of creating new ideas.

## **DF 69: Regionalization in LCA: is it ready for mainstreaming?**

September 13, 2018, Zürich (in English)

Regionalization in LCA has been a research topic over the last decade, but implementation in practice has still been limited. Since the last DF on regionalization in 2009, recent developments at all ends (underlying data availability, inventory, LCIA methods, software implementation) have made lots of progress.

The topic has gained special importance due to the fact that UNEP-SETAC recommends regionalised LCIA methods for water use and land use; moreover, the LC-IMPACT and IMPACT World+ methodologies provide regional characterization factors CFs (LC-IMPACT CFs are fully available, while IMPACT WORLD+ is still in beta mode). Furthermore, the vast amount of regionalized LCI data provided by science has been made available in products such as the World Food Life cycle inventory Database (WFLDB) and ecoinvent is constantly enhancing regional detail.

While regionalized assessment is an additional effort, it can be the low hanging fruit for improving LCA studies with limited efforts. This DF will include presentations on availability of regionalized LCI data, LCIA, software implementation and case studies showcasing application of regionalized LCA in practice. The forum allocates ample time for discussing different approaches and identifying the most important needs to bridge scientific advances and practical implementation. The attendees are invited to sketch possible ways forward with regard to regionalized LCA.

## **DF 70: Social LCA – Challenges and solutions in application and implementation**

November 22, 2018, Zürich (in English)

Compared to environmental LCA, social life cycle assessment (S-LCA) is a young area with high potential for research and development. Besides new scientific findings and advances, e.g. regarding social life cycle inventories, impact assessment methods, assessment of positive impacts, databases etc., S-LCA has found its way into policy, industry and trade/ business.

The call for more socially acceptable products with reliable information on their social impacts is getting louder and cannot be ignored by governments and industry much longer. Especially in developing countries, the method is of high political interest. It is considered as a possibility to combat social inequality, unfair working conditions etc., and to promote more sustainable patterns of production and consumption. In developed countries, the claim for sustainable production, e.g. in the food sector, requires the consideration of social impacts in addition to the traditional environmental based LCA. Pioneer companies and organisations have already implemented specific approaches for the social LCA of their products.

The forum will cover both theoretical and practical approaches, presenting methodological progress and disseminating S-LCA applications. To begin with, the state-of-the-art of S-LCA and current research foci and progress will be outlined. The application of the method will be showcased by practical case studies for different economic sectors. Another block will expose concrete, individualized examples of the interpretation and implementation of S-LCA in businesses and policy. In this context, the challenges and obstacles actors along the value chains are facing are of special interest. The forum will offer ample time for fruitful discussions about the outlined and future steps.

## Fees

(lunch included, videos and documentation included)

### Annual pass (for all fora in 2018)

Standard fee: 700 CHF

### For a single forum

Standard fee: 300 CHF

Reduced fee: 90 CHF for PhD students and students

Online access: 150 CHF

## Registration

To register for the whole year or a single LCA Discussion Forum, please use the following link:

[www.registration.ethz.ch/eventolight/](http://www.registration.ethz.ch/eventolight/)

At the first instance you visit this website you will be asked to create an account. Afterwards, please login with the information that is sent to you by e-mail. Click "published events" and select "Discussion forum on life cycle assessment 2018" (events sorted in alphabetical order), then click "Anmelden" and follow the instructions. In case you are not able to pay by credit card, please send an e-mail to the following address:

[lcaforum@ethz.ch](mailto:lcaforum@ethz.ch)

with a short notice that you want to receive an invoice instead. Please provide the full invoice address as well as the chosen fee type.

## Call for short presentations

You work on a topic relevant to one of the Discussion Fora in 2018 and wish to present your findings?

An "Open floor" session for short presentations will be available in each forum. Please contact the LCA Discussion Forum secretariat – the sooner the better.

## Contact

For more information and to receive news on the LCA Discussion Forum, please contact the secretariat:

[lcaforum@ethz.ch](mailto:lcaforum@ethz.ch)

## Website

To download the full program and presentations and/or papers of past and future forums:

[www.LCAforum.ch](http://www.LCAforum.ch)

## Mission and organization

### Mission

The LCA Discussion Forum is a platform for an exchange between LCA practitioners working in industry, consulting companies, administrations and LCA scientists. Each LCA forum is dedicated to a specific topic of immediate interest related to

- experiences and challenges with LCA application in industry and administration
- scientific questions in life cycle inventory and life cycle impact assessment methodology development
- dissemination of new scientific findings and results of relevant LCA studies.

Internationally renowned speakers are invited according to the topic to present their work. Each forum offers an "open floor" session for short presentations. The LCA forum is dedicated to people interested in the field of LCA, working in Switzerland and abroad. Its content is defined by its board. Proposals are always welcome.

### Board of the Association

- Stefanie Hellweg, ETHZ/IFU (president)
- Arthur Braunschweig, E2 Management Consulting Ltd.
- Norbert Egli, Federal Office for the Environment (BAFU)
- Rolf Frischknecht, treeze Ltd.
- Gérard Gaillard, Agroscope
- Roland Hischier, Empa
- Rainer Zah, Quantis



# 2018

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