

## 63<sup>rd</sup> LCA Discussion Forum

## HOW CAN LCA SUPPORT THE CIRCULAR ECONOMY?

### Wednesday, 30 November 2016, ETH Zürich, Alumni Pavilion

We cordially invite you to the **63<sup>rd</sup> Discussion Forum on Life Cycle Assessment** The official language of this event is English

The concept of Circular Economy is gaining popularity in Europe and elsewhere. Both the recycling of waste and a (recycling friendly) eco-design are components of a Circular Economy. How can LCA support the creation of a Circular Economy? How can LCA be used to ensure a positive balance of efforts and benefits? How shall substituted materials and products be accounted for, who can claim the benefit, and how is resource quality taken into consideration? How can wastes and resources be managed to minimize their environmental impacts? How can products be designed in an eco-friendly manner to close material cycles?

The 3rd discussion forum this year will give the floor to representatives from industry, authorities, academics, and organisations to present new applications and approaches of LCA in combination with various other environmental assessment tools (e.g. MFA, LCA and/or mathematical optimization) to manage wastes and resources sustainably and to support decision-making towards a circular economy. A focus will be laid on factors relevant for the benefits of the circular economy, such as waste and resource quality aspects and their influence on the recycling system, as well as product quality. Finally, examples of LCA applications for eco-design, waste management and systemic analyses across sectors will be shown.

We look forward to meeting you in Zürich

M. Hayt

Melanie Haupt, ESD/ETH Zürich Organizing Committee

M. Julie

Mischa Zschokke, Carbotech AG









# Programme (as of 25<sup>th</sup> of November 2016):

| Time  | Approximate content of talks   | Speakers [Moderators]     |
|-------|--|---------------------------|
| 8:30  | Registration, coffee & croissants  |                           |
| 9:00  | Welcome and introduction   | Mischa Zschokke           |
|       | Circular Economy: Policy and Politics  | [Mischa Zschokke]         |
| 9:05  | Setting the scene – Circular Economy in Swiss legislation  | Anders Gautschi (BAFU)    |
| 9:25  | Accelerating Towards a Circular Economy  | Dale Walker (Ellen        |
|       |  | MacArthur Foundation)     |
| 09:50 | Circular Economy in the context of other sustainability  | Urs Schenker (Nestlé)     |
|       | concepts: how can it work in the food industry?  |                           |
| 10:10 | Coffee break   |                           |
|       | Research – How can LCA support the Circular Economy?   | [Melanie Haupt]           |
| 10:40 | Life-cycle costing of food waste prevention and importance of indirect effects   | Prof. Thomas Astrup (DTU) |
| 11:10 | Recycling and LCA: choices and results   | Cornelia Stettler         |
|       |  | (Carbotech AG)            |
| 11:40 | Recycling contaminants: chemicals in the paper product cycle   | David Laner (TU Vienna)   |
| 12:10 | Managing waste for an efficient and clean Circular Economy:  | Melanie Haupt             |
| 12.40 | indicators and tools   | (ETH Zürich)              |
| 12:40 | Lunch  |                           |
|       | Panel discussion   | [Melanie Haupt]           |
| 13:40 | <ul> <li>Questions to discuss:</li> <li>How can LCA be incorporated in the circular economy framework?</li> <li>How much circularity does economy need?</li> <li></li> </ul> |                           |
| 14:15 | Coffee break   |                           |
|       | Applying circular economy in practice – short presentations  | [Mischa Zschokke]         |
| 14:30 | Urban Mining for a Circular Economy  | Sonia Valdivia            |
|       |  | (World Resources Forum)   |
| 14:45 | Challenges in LCA modelling of multiple loops for aluminium cans   | Monia Niero (DTU)         |
| 15:00 | Recommendations about how to model substituted materials   | Lucia Rigamonti           |
|       | based on the LCA case study of the construction and demoli-  | (Politecnico di Milano)   |
|       | tion waste management in Lombardy  |                           |
| 15:15 | Industrial Symbiosis   | René Itten (ZHAW)         |
| 15:30 | Combination of LCA and Circular Economy: an industrial case  | Mélanie Guiton (LIST)     |
| 15:45 | Business models to support a Circular Economy  | Raphael Fasko (Rytec AG)  |
|       | Wrap-up, announcements & farewell  |                           |
| 16:00 | Wrap-up and announcements  | Melanie Haupt             |
| 16:10 | Farewell   |                           |







## **Practical information**

### Registration

To register for the 63<sup>rd</sup> DF, please use the following link:

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 email. Please click on "published events", then select "Discussion forum on life cycle assessment 2016" and then click "Anmelden". Afterwards, please follow the instructions.

Programme updates will be available at: <u>www.lcaforum.ch</u>

#### Lunch

Vouchers for lunch at the ETH restaurant will be provided to all participants. A vegetarian meal option is always on offer.

#### Location

The DF will take place in the Alumni (GEP) Pavillon, Swiss Federal Institute of Technology Zurich, 8001 Zurich.

https://maps.google.ch/maps/ms?msa=0&msid=205813047619347088253.0004e0af154b1fc2c1968 &ie=UTF8&II=47.376616,8.546441&spn=0.00287,0.006968&t=m&z=18&vpsrc=6&iwloc=0004e0af15 4df9d0190e4



For further information, please contact Barbara Dold: <a href="mailto:lcaforum@ethz.ch">lcaforum@ethz.ch</a>



