

## 64<sup>th</sup> LCA Discussion Forum

# Novel computational approaches in LCA

### Thursday, 30 March 2017, ETH Zürich, Alumni Pavilion

We cordially invite you to the **64<sup>th</sup> Discussion Forum on Life Cycle Assessment** The official language of this event is English

The basic structure of LCA computations is well established. However, the community of LCA software engineers is growing and more and more advanced analysis and assessment tools are being developed and used. The use, benefits, and potentials of such more advanced tools will be in the focus of this discussion forum. Examples include inventory calculations, integrated assessment, system modelling, database analysis, allocation choices, and spatial and temporal impact assessment. These advanced tools are usually developed for a single research project, and can be difficult to apply more broadly.

This discussion forum is intended to foster the exchange between and among software developers and potential users (LCA practitioners), both to guide future development towards a broader user base, and to allow software developers to benefit from each other. A special focus will be put on freely available tools and methodologies that are of interest to a large audience.

We look forward to meeting you in Zurich

Chris Mutel, PSI Gregor Wernet, ecoinvent

**Organizing Committee** 









## Programme DF 64 «Novel computational approaches in LCA»

| Time  | Approximate content of talks  | Speaker [Moderator]                |
|-------|---|------------------------------------|
| 8:30  | Registration, coffee & croissants (30 minutes)                        |                                    |
| 9:00  | Welcome and introduction  | Chris Mutel & Gregor Wernet        |
|       | Session 1 – Keynote presentations                                     |                                    |
| 9:05  | Ocelot  | Guillaume Bourgault (ecoinvent)    |
| 9:35  | Regionalized LCA in Brightway   | Chris Mutel (PSI)                  |
| 10:05 | On the feasibility and many uses of precalculating, storing           | Pascal Lesage (CIRAIG)             |
|       | and accessing Monte-Carlo samples in LCA                              |                                    |
| 10:35 | Summary and open discussion (10 minutes)                              | Gregor Wernet (ecoinvent)          |
| 10:45 | Coffee break (30 minutes)   |                                    |
|       | Session 2 – Regionalization, Big Data and data handling               |                                    |
| 11:15 | Linked life cycle data beyond ontologies (keynote)                    | Michael Srocka (GreenDelta)        |
| 11:45 | Geographic disaggregation of ecoinvent                                | Adrian Haas (ETH Zurich)           |
| 12:00 | Combining big data sources consistently                               | Gregor Wernet (ecoinvent)          |
| 12:15 | Coupling GIS and LCA for the regionalization of inventory and impacts | Antonino Marvuglia (LIST)          |
| 12:30 | Summary and open discussion (15 minutes)                              | Chris Mutel (PSI)                  |
| 12:45 | Lunch (1 hour 15 minutes)   |                                    |
|       | Session 3 – Advanced modelling and filling data gaps                  |                                    |
|       | (short presentations)   |                                    |
| 14:00 | Agent-based simulations to obtain a sector- and site-                 | Tomas Navarrete (LIST)             |
|       | specific inventory  |                                    |
| 14:15 | Integrating ecoinvent into an energy systems model                    | Kathrin Volkart (PSI)              |
| 14:30 | Integrating LCAs with scenarios for assessing technology              | Anders Arvesen (NTNU)              |
|       | change on a global level  |                                    |
| 14:45 | Anticipatory LCA  | Valentina Prado (CML)              |
| 15:00 | Estimating missing data   | Zoran Steinmann (Radboud<br>Univ.) |
| 15:15 | Summary and open discussion (25 minutes)                              | Gregor Wernet (ecoinvent)          |
| 15:40 | Coffee break (30 minutes)   |                                    |
| 16:10 | Direct exchange (20 minutes)  |                                    |
|       | Small break-out groups for each presenter and an oppor-               |                                    |
|       | tunity for interested practitioners to discuss their work in          |                                    |
|       | more detail. Presenters are expected to give practical                |                                    |
|       | guidance and tips to help practitioners apply their learn-            |                                    |
|       | ings in their own work.   |                                    |
| 16:30 | Dynamic LCA   | Greg Schively (CMU - remote)       |
| 16:45 | Using predictive models to bridge data gaps in the stage of LCI       | Rushend Song (UCSB - remote)       |
| 17:00 | Wrap up and announcements   |                                    |
| 17:15 | Farewell  |                                    |

Note: Each presentation will include significant time for direct questions and discussion. Each session will also conclude with a round of general discussion and opportunity for follow-up questions.









## **Practical information**

#### Registration

To register for the whole year or a single LCA Discussion Forum, please use the following link: https://www.converia.ethz.ch/frontend/index.php?sub=33

To register you need to create a profile, which is done in very few steps and is selfexplanatory. In case you are not able to pay by credit card, please send an e-mail to: 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.

For all questions regarding the registration process, please do not hesitate to contact: www.lcaforum.ch

Programme updates will be available at: www.lcaforum.ch

#### 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=205813047619347088253.0004e0af154b1f c2c1968&ie=UTF8&II=47.376616,8.546441&spn=0.00287,0.006968&t=m&z=18&vpsrc=6&iw loc=0004e0af154df9d0190e4



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





