



67th LCA Discussion Forum

TRACKING CURRENT AND FORECASTING FUTURE LAND-USE IMPACTS OF AGRICULTURAL VALUE CHAINS

Friday, 3 November 2017, ETH Zürich, Alumni Pavillon

We cordially invite you to the 67th Discussion Forum on Life Cycle Assessment
The official language of this event is English

Materials from renewable feedstocks may cause significant environmental impacts due to land use and land use change related to feedstock sourcing. Whilst these impacts are clearly spatially-dependent, spatially-resolved impact assessment is often hampered by lack of data, and in some cases, methods or models. In addition, the location and impacts of production are likely to change in the future, e.g. due to the consequences of climate change and due to sourcing trends in a growing economy and considering geopolitical conditions.

This discussion forum will focus on

- 1) Methods that can be used to track the current locations of crop production systems in complex supply chains to support spatially resolved impact assessment and
- 2) Methods and tools to predict future locations of crops in the context of megatrends such as climate change and increasing demand for agricultural raw materials.
- 3) Advances of methods for spatially resolved consideration of environmental impacts of land use change will also be covered in this LCA forum.

We look forward to meeting you in Zürich,

The Organizing Committee of the 67th LCA Discussion Forum



Radboud University



Agroscope

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Programme DF 67 «Tracking current and forecasting future land-use impacts of agricultural value chains»

Time	Approximate content of talks	Speaker [moderator]	Affiliation
8:30	Registration, coffee & croissants		
9:00	Welcome and introduction “Framework for the assessment of renewable raw materials”	Sarah Sim	Unilever, UK
Session 1	Tracking and inventorizing (current) land use and land use change <i>Methods that can be used to track the current locations of crop production systems in complex supply chains to support spatially resolved impact assessment.</i>	[Jens Lansche]	Agroscope, Switzerland
9:25	Implementation of LUC in ecoinvent	Juergen Reinhard	Quantis, Switzerland
9:50	Using land use & land cover datasets to assess variability in estimates of land use change and associated GHG emissions in selected regions of Indonesia	Sybrand van Beijma	Agrimetrics, UK
10:15	Quantifying land use impacts through Multi-Regional Input-Output tables	Dan Moran	NTNU, Norway
10:40	Transparency for Sustainable Economies (Trase): an innovative data-driven approach to mapping commodity supply chains: applications for sustainability assessments and LCA	Javier Godar (skype)	TRASE, Sweden
11:05	Discussion		
11:20	Coffee break		
Session 2	Forecasting (future) land use and land use change <i>Methods and tools to predict future locations of crops in the context of megatrends such as climate change and increasing demand for agricultural raw materials.</i>	[Henry King]	Unilever, UK
11:40	Modelling land use for global biodiversity assessments: discrete allocation at 10 arc-seconds	Aafke Schipper	PBL, The Netherlands
12:05	Interdisciplinary approaches – integrating social sciences, econometrics and geography to forecast spatial patterns of land use at local and global scales	Peter Verburg	Free University, The Netherlands
12:30	Land use change projections – linking economic constraints and constraints of the physical environment	David Leclere	IIASA, Austria
12:55	Discussion		
13:10	Lunch		

Time	Approximate content of talks	Speaker [moderator]	Affiliation
	Short presentations (incl. 5 minutes of Q&A after the final presentation)	[Sandra Marquardt]	Radboud University, The Netherlands
14:10	Recent developments in indirect Land-Use Change (iLUC) modelling	Michele De Rosa	2.-0 LCA Consultants, Denmark
14:20	Variability of Greenhouse Gas Footprints of Crude Palm Oil production in Indonesia	Wan Yee Lam	Radboud University, The Netherlands
14:30	Incorporating FAO trade and production database to estimate supply chain location information for agricultural products	Xun Liao	EPFL/Quantis, Switzerland
14:40	New Land Use Change Guidance	Sebastien Humbert	Quantis, Switzerland
14:55	Coffee break		
Session 3	Impacts <i>Advances of methods for spatially resolved consideration of environmental impacts of land use change.</i>	[Mark Huijbregts]	Radboud University, The Netherlands
15:15	Quantifying biodiversity impacts of land use change	Stefanie Hellweg	ETHZ, Switzerland
15:30	Assessing the global biodiversity impacts of land use	Tim Newbold	UCL, UK
15:55	Life Cycle Assessment Needs Predictive Spatial Modelling for Biodiversity and Ecosystem Services	Perrine Hamel	Natural Capital Project, US
16:20	Integrated modeling to assess land use change impacts on ecosystem service provision: prospects for LCIA	Benedetto Rugani	Luxembourg Institute of Science and Technology, Luxembourg
16:45	Discussion		
	Wrap-up, announcements & farewell		
17:00	Wrap-up should synthesize the day's topics focusing on: <ul style="list-style-type: none"> • Application and incorporation of new methods into the LCA framework – methods and challenges (what are the bottlenecks) • Uncertainties • Usefulness in the business contexts (including issues surrounding methodological complexity (linked to higher accuracy) vs practicality) 	Sarah Sim	Unilever, UK
17:15	Announcements and farewell	Stefanie Hellweg	ETHZ, Switzerland

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 self-explanatory. 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: lcaforum@ethz.ch

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

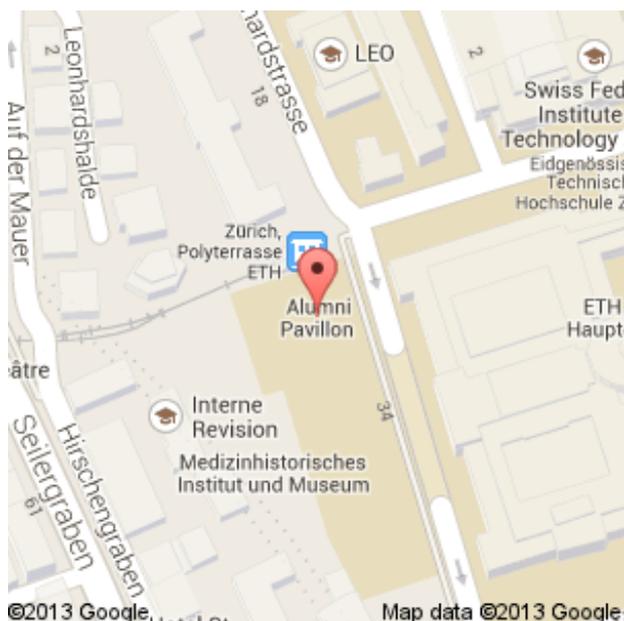
Lunch

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=205813047619347088253.0004e0af154b1fc2c1968&ie=UTF8&ll=47.376616,8.546441&spn=0.00287,0.006968&t=m&z=18&vpsrc=6&iwloc=0004e0af154df9d0190e4>



For further information, please contact Barbara Dold: lcaforum@ethz.ch