

72nd LCA Discussion Forum

Normalization and weighting: The forgotten theme in LCA

Monday, 9 September 2019, ETH Zürich, Alumni (GEP) Pavillon

We cordially invite you to the **72nd Discussion Forum on Life Cycle Assessment**
The official language of this event is English

To draw the right conclusions based on environmental indicators can be a challenging task due to the consideration of a broad variety of environmental impacts that show diverging results. Many LCA practitioners seek help in interpreting diverging results in different impact categories by applying single score LCIA methods. But the ISO standards do not support weighting for publishing comparative assertions in LCA. Nevertheless, the increasing need for unequivocal results lead to the development of single score impact assessment method.

This DF focuses on the present state of normalization and weighting in LCA. The statements in ISO 14040 are taken as one of the baselines, e.g. concerning internal and external normalization and hints on interpretation. The ongoing developments for the technical specification on this theme (ISO/TS 14074) are covered. Approaches broadening this view in ISO will be presented as well.

An overview on present schemes such as the European recommendations for LCIA and further developments within the EU Product Environmental Footprint (PEF) initiative will be provided. Another key question will be: How useful is the concept of the carrying capacity or the planetary boundaries for aggregating indicator scores?

A discussion of different normalization and weighting methods should shed more light on the uncertainties and differences of various approaches (e.g. transparency, completeness, applicability). The forum should launch further discussion about these issues to initiate also a revision of standards like ISO 14040/44/74 to better reflect the current state of the art in science and practical application.

In summary, the DF aims at a critical discussion and review of currently available methods for normalization and weighting to promote a better understanding of the complex topic and controversial debate in the scientific community. How ISO standards on weighting, normalization and grouping can be implemented in the future are identified. Research needs are formulated to foster progress in this field of LCA application.

This forum aims to provide a fertile ground for discussion between LCA researchers, practitioners and other people interested in the interpretation and development of normalization and weighting methods.

We look forward to meeting you in Zürich.

Niels Jungbluth (ESU-services GmbH) & Andreas Roesch (Agroscope)

Draft Programme (as of 30 August 2019, subject to changes):

Time	Working Title	Speaker [Chair]
8:45	Registration, coffee & croissants	
9:10	Welcome and introduction to the day	Christoph Meili, ESU-services
	Method	[Christoph Meili]
9:20	Normalization and weighting of sustainability indicators: current status and main challenges	Andreas Roesch, Agroscope
9:50	Normalization and weighting in ISO standards	Kurt Buxmann, SNV NK 174
10:20	Discussion	
10:30	Coffee break	
	Research	[Andreas Roesch]
11:00	Normalisation and weighting as applied in Product Environmental Footprint	Serenella Sala, EC JRC
11:30	The influence of normalization and weighting on results by different possibilities given in the ISO Standard	Niels Jungbluth, ESU-services
12:00	Discussion	
12:10	Short Presentations	[Andreas Roesch]
10'	Does the approach on weighting in the Swiss ecological scarcity method allow a consistent evaluation? Discuss Grouping as an influencing factor.	Christoph Meili, Niels Jungbluth, ESU-services
10'	Comparison of Swiss and European eco-factors	Arthur Braunschweig, E2 Mgmt.
10'	External normalization of LC(S)A results for outranking methods in MCDA	Christina Wulf
12:40	Lunch	
13:40	Development of normalization and weighting factors for G20 countries	Norihiro Itsubo (on video), Tokyo City University
14:10	Weighting in multi-criteria sustainability assessments: quantifying the uncertainty of expert judgements in the SMART Farm Tool	Michael Curran, FiBL
14:40	Consistent normalization approach based on a study-specific reference system	Arnaud Hélias, TU Berlin/Irstea
15:10	Discussion	
15:20	Coffee break	
	Politics	[Niels Jungbluth]
15:40	Are single score indicators preferable?	Alessandra Zamagni, ecoinnovazione
16:10	Relevance of a single score approach and planetary boundaries from the Swiss policy perspective	Josef Känzig, FOEN (BAFU)
16:40	Discussion	
	Wrap up, announcements and farewell	[Niels Jungbluth]
16:50	Announcement next DF	Rene Itten, ZHAW
16:55	Wrap up and announcements	Niels Jungbluth, ESU-services
17:00	Farewell	

Practical information

Registration

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

<https://www.converia.ethz.ch/frontend/index.php?sub=90>

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

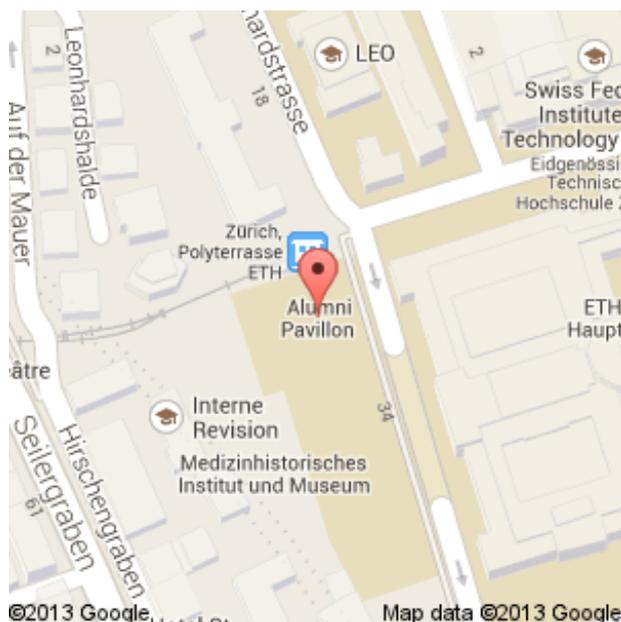
Lunch

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>



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