





54th LCA Discussion Forum

ECOLOGICAL SCARCITY 2013 – NEW FEATURES AND ITS APPLICATION IN INDUSTRY

Thursday, December 5, 2013, 9h15, UVEK Aula, Ittigen-Berne

We kindly invite you to the 54th discussion forum on Life Cycle Assessment The official language during this event is English

Distance to target methods are one of the main families of life cycle impact assessment methods. They are based on politically and legally defined environmental goals. The ecological scarcity approach, first introduced in 1990, has evolved to an important pillar of environmental policy in administration and industry. Today, the 4th generation ecological scarcity method, applied on Switzerland is being launched.

In a first session, the application of ecological scarcity approach and its benefits for administration and industry are highlighted. In a second session the main elements of the 4th generation ecological scarcity method 2013 are presented. New elements of the method comprise among others abiotic resources, land use worldwide, noise, and a new approach to assess nuclear waste. Abiotic resources are assessed using consistently updated scarcity figures. Land use impact factors are now available for land occupation in 14 biomes worldwide addressing biodiversity impacts on flora and fauna. Noise impacts of road, rail and air traffic are assessed using a harmonised European approach. Nuclear wastes are characterised according to their radio toxicity.

The results of practical applications (e.g., LCA of paper, packaging, glasses and company LCAs) using the new ecofactors will be presented in the afternoon.

This discussion forum will address the following questions:

- What are the key motivations for administration and industry to use single score impact assessment approaches such as the ecological scarcity method?
- What are the key elements of the 4th generation ecological scarcity method 2013?
- How does the update affect the impact scores (in eco-points) of commonly used goods and services?
- What are the first lessons learned with the updated 4th generation ecological scarcity method 2013?
- How division of powers helps for developing life cycle impact assessment methods?

DF 54 will be available live and online through our live streaming solution.

The link will be available here: <u>http://www.lcaforum.ch/Forum/tabid/57/Default.aspx</u>

We look forward to meeting you in Ittigen-Berne!

Rolf Frischknecht







Final Programme

| Time | Title | Speaker |
|-------|---|--|
| 8.30 | Registration, Coffee and Croissants | |
| 9.15 | Welcome and introduction | Anders Gautschi, FOEN Gabi Hildesheimer, öbu |
| | The users' perspective: ecological scarcity in administration and industry | Chair: Peter Gerber |
| 9.30 | History and basic concept of the ecological scarcity method | Arthur Braunschweig, E2 MC |
| 9.50 | Green Economy: The role of LCA and ecological scarcity method in Swiss Policy making | Anders Gautschi, FOEN |
| 10.10 | Using the ecological scarcity method in resource and environmental management of the Swiss administration, RUMBA | Daniel Peter, Peter Consulting |
| 10.30 | Coffee break | |
| | The 4 th generation ecological scarcity method 2013 | Chair: Peter Gerber |
| 11.00 | Overview and main elements of the update and its implications | Rolf Frischknecht, treeze Ltd. |
| 11.30 | New approaches: global land use, abiotic resources and noise | Sybille Büsser, treeze Ltd. |
| 11.45 | Evaluation of the environmental impacts of bioaccumulating chemicals | Carla Aparecida Ng, ETHZ |
| 12.00 | Discussion | |
| 12.30 | Lunch break | |
| | Application of ecological scarcity 2013 in industry | Chair: Rolf Frischknecht |
| 13.35 | LCA of recycling paper | Emil Franov, Carbotech AG |
| 13.55 | Using ecological scarcity in industry: packaging decisions at Migros | Hanna Krayer, Migros Genossenschaftsbund |
| 14.15 | LCA of beverage packaging | Fredy Dinkel, Carbotech AG |
| 14.40 | Using ecological scarcity in companies: the McDonald's case | Arthur Braunschweig, E2 MC |
| 15.00 | Using ecological scarcity in industry: glasses manufacturer Knecht & Müller | Fredy Dinkel, Carbotech AG |
| 15.20 | Coffee break | |
| | Application of ecological scarcity 2013 in industry ff. | Chair: Rolf Frischknecht |
| 15.40 | Environmental impacts of buildings assessed with the ecological scarcity method | Viola John, Sustainable Construction, ETHZ |
| 16.00 | How to quantify regional weighting factors? Methodology and case studies from Vienna | Ulrich Kral, TU Wien |
| 16.15 | How to apply the regional characterization factors for water scarcity of the Swiss Ecological Scarcity method? A case study from Power stations of GDF-Suez | Sébastien Humbert, Quantis International Ltd. |
| | Plenary Discussion | Chair: Rolf Frischknecht |
| 16.30 | Input statement: Separation of Powers – a basic principle in developing life cycle impact assessment methods | Stephan Ahbe, SYRCON Wirtschaftsingenieure |
| | Plenary Discussion | |
| 16.50 | Wrap-up and farewell | Peter Gerber, FOEN |







1 Practical information

Accommodation

For the people spending the night in Berne, there are different accommodation facilities. Please refer to <u>www.berninfo.com</u> or <u>www.booking.com</u>.

Application form

To register to the 54th DF, please fill in the application form (word .doc) attached and send it back to the LCA Discussion Forum secretariat (<u>lcaforum@quantis-intl.com</u>). Please do not forget to indicate your affiliation and if you are a student or a PhD student (special fees, see application form). Program updates will be available on the website <u>www.lcaforum.ch</u>.

Invoice

Once the application form was sent to the LCA Discussion Forum secretariat (lcaforum@quantisintl.com) and the registration was confirmed, an invoice will be sent by email to all the participants. It is possible to pay by transfer payment or in cash in the morning of the forum at the reception desk, between 8:00 to 9:00 am.

Lunch

An organized lunch will be available at the UVEK. Please inform the conference organizers (<u>lcaforum@quantis-intl.com</u>) in advance if you prefer a vegetarian dish.

Location

The forum will take place in Ittigen at the DETEC Administration Centre (Mühlestrasse 2-6), which is located five minutes away (by foot) from the RBS railway station "Papiermühle".

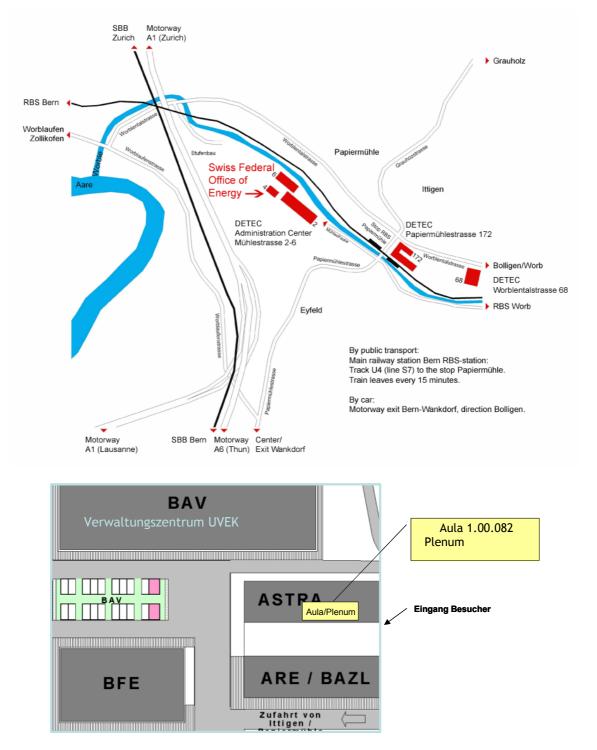
The best way to reach the venue place is to come by train. A train timetable is available at <u>www.sbb.ch</u>. Take the RBS train (Line S7) direction "Worb Dorf" at the station, Berne Central Station. Trains leave every 15 minutes (.00, .15, .30, .45) from platform 23 or 24. Get off at "Papiermühle" (2nd stop).

Cross the rails and follow the street "Mühlestrasse until the end of the street and walk straight on to the main entrance.









For further information, please contact either the LCA Discussion Forum secretariat (<u>lcaforum@quantis-intl.com</u>, <u>www.lcaforum.ch</u>, Denis Bochatay 0041 21 693 91 92) or Rolf Frischknecht (frischknecht@treeze.ch, 0041 44 940 61 91).