

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

# ENVIRONMENTALLY-EXTENDED INPUT-OUTPUT-ANALYSIS AND LCA

15. September 2011, Ittigen (near Berne), Verwaltungszentrum des UVEK

We invite you to the **45<sup>th</sup> discussion forum on Life Cycle Assessment**  
This event will be held in English

Input-Output tables (IOT) are an economic methodology in order to investigate and analyse different production and consumption sectors in a given country or economic region. Such IOT can be extended with information on emissions and resource uses in order to analyse environmental impacts in relation to economic outputs or expenditures of production and consumption sectors. The instrument of environmentally-extended input-output-analysis (EE-IOA) thus allows the analysis of environmental impacts for whole countries better than life cycle assessment (LCA). By some researchers this type of analysis is also used as an alternative or supplement to LCA. Data from such an approach can be combined with LCA in hybrid-analysis in order to estimate the environmental impacts of inputs for which LCI data are missing.

So far environmentally extended input-output-analysis was rarely used in Switzerland mainly because of lack of data. A Swiss study has recently investigated the total environmental impacts of Swiss consumption and production with this approach (<http://www.esu-services.ch/projects/iaa/>). Within this project a hybrid-methodology was developed for assessing the imports by combining trade statistics and LCA data. This is of specific importance for a Swiss analysis because of the large dependency on trade with foreign countries. The inventory data are freely available in EcoSpold format and can thus be used by LCA practitioners (<http://www.lc-inventories.ch>). They cover all emissions and resources that are assessed with the ecological scarcity method 2006. The study shows that environmental impacts due to imports are more important than domestic impacts.

The forum will also discuss the economic background, uncertainties and possible improvement options of such an analysis. International speakers are invited and will provide a broader view on this approach. The application of EE-IOA data in different types of software will be explained in workshops.

We invite all LCA practitioners and other people interested in this approach and results from this study.

We look forward to meeting you in Berne!

Niels Jungbluth (ESU-services), Carsten Nathani (Rütter+Partner) & Josef Känzig (FOEN)

## 1 Programme

Time	Title	Speaker
8:30	Registration, Coffee and Croissants	
9:15	Welcome	Josef Känzig, Effizienzagentur Schweiz AG
	Environmental impacts of Swiss consumption and production	Josef Känzig
9:20	Measuring total environmental impacts of Swiss consumption – needs and expectations from a policy perspective	Loa Buchli, FOEN
9:35	Using input-output analysis for environmental analysis	Carsten Nathani, Rütter + Partner
10:00	Extending the IOA for investigating the environmental impacts of Swiss consumption and production	Niels Jungbluth, ESU-services Ltd.
10:30	Discussion	
10:50	<i>Coffee break</i>	
	Further research examples from Switzerland	
11:20	Life Cycle Assessment (LCA) on economic sectors of Jordan based on I/O analysis with an adapted version of the ecological scarcity method	Fredy Dinkel, Marc Bachmann, Carbotech
11:40	Use of IOA and combination of economic and environmental data in ecoinvent v3	Bo Weidema, ecoinvent Centre
12:00	Discussion	
	Short presentations	
12:10	Proposals can be sent in by participants until 2.9.2011 to <a href="mailto:jungbluth@esu-services.ch">jungbluth@esu-services.ch</a>	
12:30	<i>Lunch break</i>	
	Similar studies and approaches in other countries	Niels Jungbluth
13:30	Approach and results in the EXIOPOL and other European EE-IOA projects	Arnold Tukker, TNO
13:50	Environmental impact of production and consumption in the US economy	Sangwon Suh, University of California, Santa Barbara
14:10	Parallel Workshops with examples of using EE-IOA in practical work <i>incl. Coffee break</i>	
	Using Swiss EE-IOA data in SimaPro	Niels Jungbluth, ESU-services Ltd.
	Providing economic data for ecoinvent v3	Bo Weidema, ecoinvent
	Using EE-IOA data in EMIS	Fredy Dinkel, Carbotech
16:20	Feedback, wrap-up and farewell	Niels Jungbluth

## 2 Practical information

### § Accommodation

For the people spending the night in Berne, there are different accommodation facilities. Please refer to [www.berninfo.com](http://www.berninfo.com) or [www.booking.com](http://www.booking.com).

### § Application form

To register to the 45th DF, please fill in the application form (word .doc) attached and send it back to the LCA Discussion Forum secretariat ([lcaforum@quantis-intl.com](mailto:lcaforum@quantis-intl.com)). Please do not forget to indicate your affiliation and if you are a student or a PhD student (special fees, see application form). The program describing the DF 45 is also available on the website [www.lcainfo.ch](http://www.lcainfo.ch).

### § Invoice

Once the application form was sent to the LCA Discussion Forum secretariat ([lcaforum@quantis-intl.com](mailto:lcaforum@quantis-intl.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

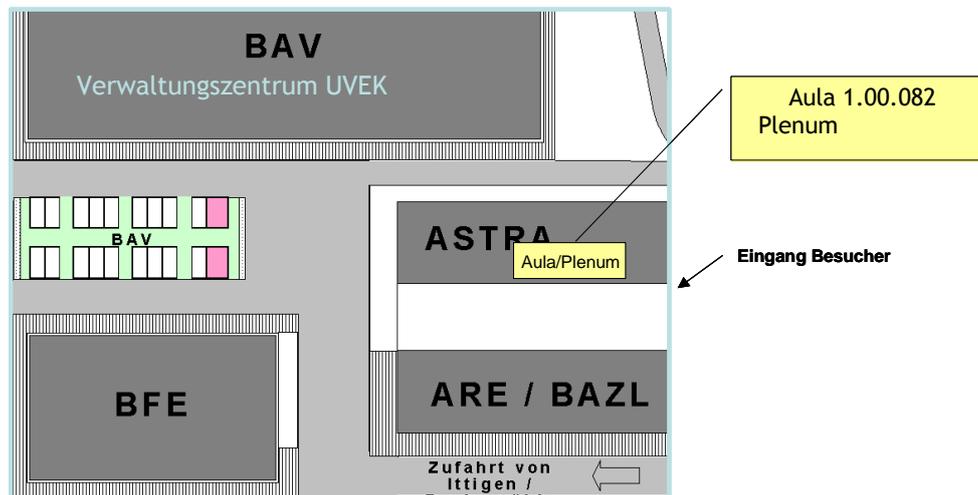
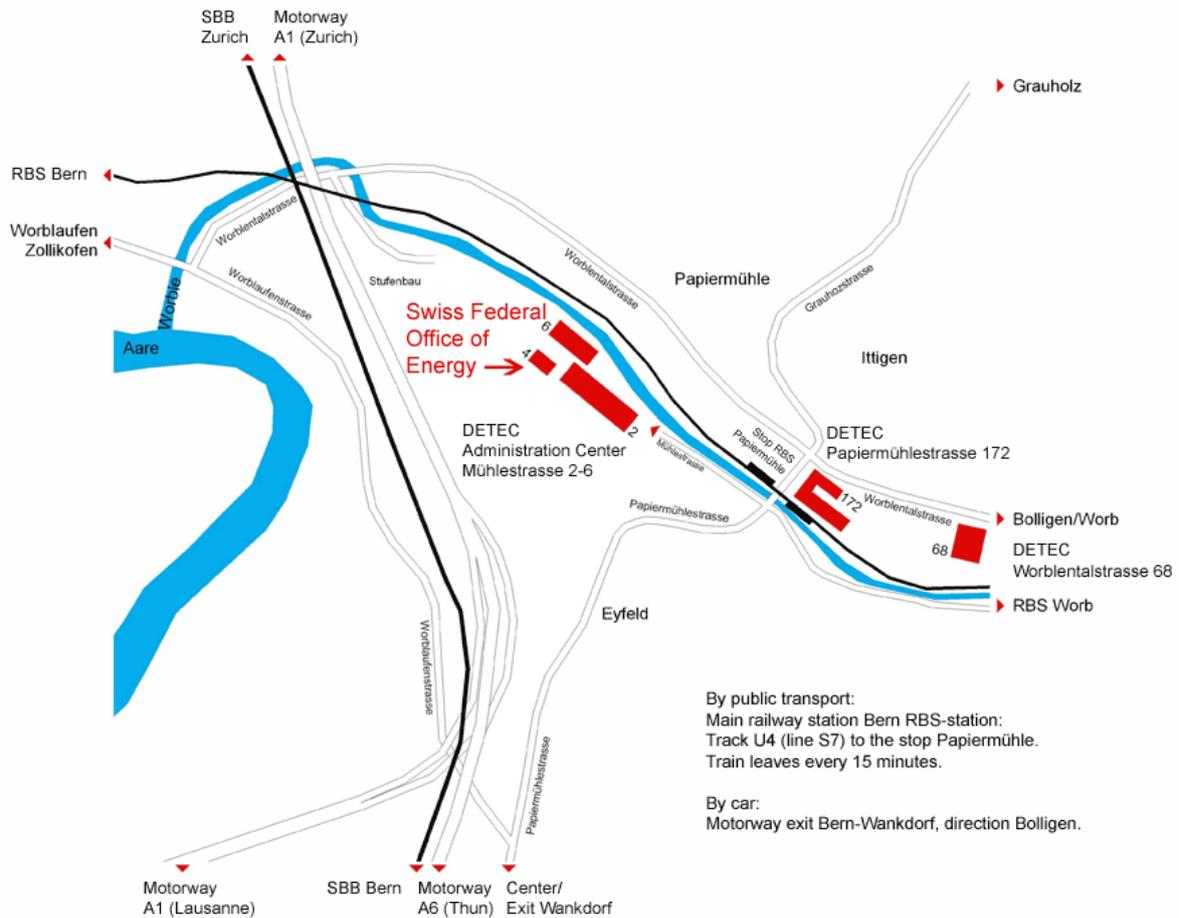
An organized lunch will be available at the UVEK for an additional 25 CHF per person. Please inform the conference organizers ([lcaforum@quantis-intl.com](mailto:lcaforum@quantis-intl.com)) in advance if you do not want lunch or if you are vegetarian. The payment of this lunch (only Swiss francs and no credit cards) will be possible in the morning of the forum at the reception desk, between 8:00 to 9:00 am.

### § 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 [www.sbb.ch](http://www.sbb.ch). 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" (2<sup>nd</sup> stop).

To reach the DETEC 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 ([lcaforum@quantis-intl.com](mailto:lcaforum@quantis-intl.com), [www.lcainfo.ch](http://www.lcainfo.ch), Carole Dubois 0041 78 757 23 87 ) or Niels Jungbluth ([jungbluth@esu-services.ch](mailto:jungbluth@esu-services.ch), 0041 44 940 61 32).